Indigenous Water Justice

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INDIGENOUS WATER JUSTICE

by

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Indigenous Peoples are struggling for water justice across the globe. These struggles stem from centuries-long, ongoing colonial legacies and hold profound significance for Indigenous Peoples' socioeconomic development, cultural identity, and political autonomy and external relations within nation-states. Ultimately, Indigenous Peoples' right to self-determination is implicated. Growing out of a symposium hosted by the University of Colorado Law School and the Native American Rights Fund in June 2016, this Article expounds the concept of “indigenous water justice” and advocates for its realization in three major transboundary river basins: the Colorado (U.S./Mexico), Columbia (Canada/U.S.), and Murray-Darling (Australia). The Article begins with a novel conceptualization of indigenous water justice rooted in the historic United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)—specifically, UNDRIP’s foundational principle of self-determination. In turn, the Article offers overviews of the basins and narrative accounts of enduring water-justice struggles experienced by Indigenous Peoples therein. Finally, the Article synthesizes commonalities evident from the indigenous water-justice struggles by introducing and deconstructing the concept of “water colonialism.” Against this backdrop, the Article revisits UNDRIP to articulate principles and prescriptions aimed at prospectively realizing indigenous water justice in the basins and around the world.

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INTRODUCTION

"The world is watching what is happening[.][1] "If the [U.S.] chooses not to act in response to the alarming actions being manifested in North Dakota, their rhetoric within the halls of the [U.N. is] nothing more than empty, meaningless promises."

Members of the U.N. Permanent Forum on Indigenous Issues expressed these sentiments late 2016. The alarming, closely watched actions concerned the controversial Dakota Access Pipeline (DAPL). As for the empty, meaningless promises, they implicated a host of domestic and international human rights instruments,[4] but in no small measure the historic United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).[5] As articulated by the Permanent Forum, the United States and its political subdivisions had transgressed UNDRIP repeatedly in their dealings with the people of the Great Sioux Nation over DAPL.[6] The Mni Sose (Missouri) River’s sacred, sustaining waters—stored in Lake Oahe—were a central (albeit not ex-

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[6] Press Release, Mr. Alvaro Pop Ac, supra note 1; Report and Statement from Chief Edward John, supra note 2, at 7.
clusive) concern. “For indigenous peoples, water provides lifeways, subsistence, and has undeniable spiritual significance,” described Special Rapporteur Victoria Tauli-Corpuz in an end-of-mission statement. “In Lakota, they express this belief as Mni Wiconi: water is life.” Illuminating DAPL’s perpetuation of the Pick-Sloan Plan’s painful, protracted colonial legacy within the Missouri River Basin, the Special Rapporteur’s statement echoed the Permanent Forum’s earlier calls for full compliance with UNDRIP. Yet to no avail. Oil began flowing in DAPL nearly contemporaneously with the statement, and the project became fully operational shortly thereafter. Although the U.S. District Court for the District of Columbia subsequently held that the Army Corps of Engineers had violated the National Environmental Policy Act when granting permits for DAPL, the court nonetheless determined oil could flow through the pipeline while the agency was conducting ongoing environmental analyses.

DAPL illuminates the historical and contemporary phenomenon at the heart of this Article: Indigenous Peoples’ struggles for justice in relation to the essence of life—water. While the Missouri River Basin (Mni Sose) is conducive to rich and bitter inquiries into such struggles, our attention lies on three other major transboundary basins involving equally multifarious colonial legacies and power contests over water: (1) the Colorado River Basin in the United States and Mexico, (2) the Columbia River Basin in Canada and the United States, and (3) the Murray-Darling Basin in Australia. This framing stems from the gathering out of which the Article grows: an Indigenous Water Justice Symposium kindly hosted by the University of Colorado Law School and the Native American Rights Fund in June 2016. We have dedicated the Article to our indigenous colleagues who participated in this symposium, and our core thesis regarding the water-justice struggles faced by them as well as their families, ancestors, communities, and sovereign nations is basic. Domestic wa-

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7 Report and Statement from Chief Edward John, supra note 2, at 2, 7.
9 Id.; Press Release, Mr. Alvaro Pop Ac, supra note 1.
11 Id. at 112.
12 Id. at 112.
14 Indigenous Water Justice Symposium, UNIV. OF COLO. LAW SCH. (June 6, 2016), http://scholar.law.colorado.edu/indigenous-water-justice-symposium/.
Our inquiry rooted in this thesis unfolds in three Parts. Part I begins with a novel conceptualization of “indigenous water justice.” For authenticity and depth, it grows out of UNDRIP’s umbrella principle of self-determination, and water’s diverse, inherent connections to that principle, including key norms imposed by UNDRIP bearing on those connections. Part II then turns to place. It examines the Colorado, Columbia, and Murray-Darling basins as sites replete with contemporary and historical struggles for indigenous water justice. These struggles implicate a host of domestic laws, policies, and associated institutions pertinent to Indigenous Peoples’ socioeconomic development, cultural identity, and political autonomy and external relations. Colonialism is the taproot of these struggles and marks Part III’s entry point. It develops the concept of “water colonialism” to synthesize commonalities among the indigenous water-justice struggles that are characteristic of historical and ongoing colonial processes. With these shared colonial legacies as context, the Article ultimately takes a prescriptive turn, addressing the prospective realization of indigenous water justice. Our prescriptions focus at the domestic level and revolve around the broad topics of indigenous water rights and political partnership. Anchoring the prescriptions are principles derived from UNDRIP provisions examined in the discussion of water and self-determination. Overall, while mindful of the context-specific and non-exhaustive nature of our inquiry, its normative framework and prescriptions aim to prompt future scholarship, advocacy, and institutional reforms pertaining to the basins and elsewhere. UNDRIP again marks our point of departure.

I. INDIGENOUS WATER JUSTICE

In innumerable, unequivocal, and heart-wrenching ways, indigenous members of our communities and societies have suffered monumental injustices stemming from “colonization and dispossession of their lands, territories and resources.” This legacy is morally and politically repre-
hensible and must be broken. As expressed by UNDRIP, it is imperative in contemporary times to respond decisively to the "urgent need to respect and promote the inherent rights of indigenous peoples." Indigene- nous water justice is the concept espoused in this Article to advocate for these rights vis-à-vis water—again, the first medicine and essence of life.

Although indigenous water justice can be conceptualized in diverse ways, UNDRIP is our particular cornerstone. This Part sheds light on indigenous water justice as conceptualized around that authentic, visionary instrument. We begin with an overview of UNDRIP and its animating principle of self-determination. At that juncture, we turn to water and its multi-faceted connections to Indigenous Peoples' self-determination—more precisely, to the socioeconomic, cultural, and political dimensions associated with Indigenous Peoples' exercise of the right to self-determination. Water declarations from Indigenous Peoples reveal these connections, and a host of UNDRIP provisions are implicated by them. Taken together, these materials delineate important norms for conceiving of just relations between Indigenous Peoples, nation-states, and public and private entities therein surrounding water. Whereas this Part initially identifies the UNDRIP provisions embodying these norms, Part III subsequently revisits these provisions as bases for principles and prescriptions aimed at realizing indigenous water justice within the three basins under study and elsewhere. UNDRIP thus constitutes our normative backbone.

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17 UNDRIP, supra note 5, at pmbl.

18 For a description of water as the "first medicine" from Faith Spotted Eagle, see Jessica Ravitz, The Sacred Land at the Center of the Dakota Pipeline Dispute, CNN (Nov. 1, 2016), http://www.cnn.com/2016/11/01/us/standing-rock-sioux-sacred-land-dakota-pipeline/index.html. For a description of water as the "first medicine" from Faith Spotted Eagle, see Michael Yellow Bird, What We Want to Be Called: Indigenous Peoples’ Perspectives on Racial and Ethnic Identity Labels, 23 AMERICAN INDIAN Q. 1, 2 (1999).

A. UNDRIP & Self-Determination

Hailed as signifying a “world-wide change in the way that the countries of the world treat indigenous peoples[,]” the U.N. General Assembly’s adoption of UNDRIP over a decade ago (September 13, 2007) marked a “historic step” in the formation of a “new relationship between indigenous peoples and the states and societies within which they live and with which they co-exist . . . .” UNDRIP constitutes “the most important development concerning the recognition and protection of the basic rights and fundamental freedoms of the world’s indigenous peoples[,]” and “the most comprehensive and advanced of international instruments” in this domain. As described eloquently by former Special Rapporteur Rodolfo Stavenhagen, UNDRIP “opened the door to indigenous peoples as new world citizens” with attendant individual and collective rights that must be respected and promoted. Its provisions embody international customary law in key respects. And, taken as a whole, UNDRIP serves as a “new ‘manifesto’ for positive international and domestic political, legal, social and economic action,” arguably paving the way for a future international convention on Indigenous Peoples’ rights.

23 Claire Charters & Rodolfo Stavenhagen, The UN Declaration on the Rights of Indigenous Peoples: How It Came To Be and What It Heralds, in MAKING THE DECLARATION WORK: THE UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES 10, 10 (Claire Charters & Rodolfo Stavenhagen eds., 2009).
27 Stavenhagen, supra note 15, at 355-56.
It is impossible to canvass UNDRIP’s genesis here. It entailed “perhaps the longest and most complicated standard-setting activity the [U.N.] has ever embarked on.” Of course, “a few decades are not so much when you have been waiting 500 years.” Spurring the process in the 1970s were diverse efforts to draw attention to human rights problems facing Indigenous Peoples. Water conflicts were salient in this context. They included “fishing wars” associated with the landmark 1974 Boldt Decision in the Columbia River Basin, as well as the highly publicized Alta Dam controversy implicating the Sami people’s land rights in Norway from 1979 to 1982. The latter conflict contributed to the formation of a Working Group on Indigenous Populations in 1982 by the U.N. Sub-Commission on Prevention of Discrimination and Protection of Minorities. Select milestones in UNDRIP’s evolution over the next three decades included (1) the Working Group’s adoption and submission of a draft UNDRIP to the U.N. Commission on Human Rights in 1993 and 1994, respectively; (2) the Commission’s preparation of a revised draft UNDRIP and the U.N. Human Rights Council’s adoption and submission of that document to the U.N. General Assembly in 2006; and, eventually, (3) the General Assembly’s adoption of UNDRIP in final form on September 13, 2007. The U.N. Permanent Forum on Indigenous Issues notably came into being during this process (i.e., in 2000), serving to pro-

28 For an excellent chronology, see Augusto Willemsen Diaz, How Indigenous Peoples’ Rights Reached the UN, in MAKING THE DECLARATION WORK: THE UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES 16, 16 (Claire Charters & Rodolfo Stavenhagen eds., 2009).


31 Charters & Stavenhagen, supra note 23, at 10–11.


33 Jackson, supra note 19, at 16.


moté dialogue among Indigenous Peoples about UNDRIP and to facilitate its adoption. 36

Although 143 U.N. Member States voted in favor of UNDRIP in 2007, Australia, Canada, New Zealand, and the United States did not. 37 Given their colonial legacies and lobbying efforts during the foregoing process, this writing had been on the wall for a while. 38 After its adoption, Australia reversed course and endorsed UNDRIP in 2009, 39 with Canada, New Zealand, and the United States following suit in 2010. 40 These endorsements contained qualifications, however, 41 and major implementation issues loom. 42

One critical fact about UNDRIP’s formation and substance must be highlighted: Indigenous Peoples “played a pivotal role in the negotiations on its content.” 43 UNDRIP is expressed in the lexicon of international law, and reflects Indigenous Peoples’ goals as well as varied influence by nation-states, specialized agencies, and non-governmental organizations. 44 Nonetheless, UNDRIP “holds a special place within the [U.N.] system” based upon its having been shaped by the “primary beneficiaries—indigenous peoples—directly engaged in every stage of the

37 Anaya, supra note 35, at 994.
38 See Eide, supra note 34, at 39–40 (discussing lobbying against draft UNDRIP).
43 Charters & Stavenhagen, supra note 23, at 10.
44 Daes, supra note 22, at 74.
standard-setting process.” Indigenous Peoples succeeded in “[redefining] the terms of their survival in international law.” The authenticity and depth of this engagement and work product are the reason UNDRIP grounds our conceptualization of indigenous water justice.

Self-determination is UNDRIP’s foundational principle beneath our conceptualization. “As representatives of indigenous peoples from around the world advocated for the Declaration through the UN system for over two decades,” describes former Special Rapporteur James Anaya, “it became increasingly understood that self-determination is a foundational principle that anchors the constellation of indigenous peoples’ rights.”

This constellation relationship also can be thought of in terms of a “bundle of rights”—i.e., the idea that Indigenous Peoples’ right to self-determination encompasses constituent rights articulated throughout UNDRIP such as those pertaining to Indigenous Peoples’ lands, territories, and resources; cultural identity; and self-government and political participation. Article 3 of UNDRIP is the “centerpiece,” providing: “Indigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.” Articles 4 and 5 dovetail with this provision, as revealed below.

Self-determination is “widely acknowledged to be a principle of customary international law and even jus cogens, a peremptory norm.” Article 3 of UNDRIP mirrors Common Article 1 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the International Covenant on Civil and Political Rights (ICCPR), as well as Paragraph 2 of the U.N. Declaration on the Granting of Independence to Colonial Countries and Peoples. “All peoples have the right of self-

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45 Dorough, supra note 26, at 264.
46 Id.
49 Eide, supra note 34, at 45.
50 UNDRIP, supra note 5, at pmbl.
51 Anaya, supra note 47, at 184.
52 UNDRIP, supra note 5, at art. 3.
53 S. JAMES ANAYA, INDIGENOUS PEOPLES IN INTERNATIONAL LAW 97 (2nd ed. 2004).
determination” per these instruments, and Article 1 of UNDRIP makes clear Indigenous Peoples fall within this ambit. It proclaims: “Indigenous peoples have the right to the full enjoyment, as a collective or as individuals, of all human rights and fundamental freedoms” recognized in “international human rights law.” The emphasis on individual and collective human rights is distinct, the latter marking one of UNDRIP’s “new contributions to the international legal system.” Article 3’s extension of the right to self-determination to Indigenous Peoples as distinct peoples within nation-states likewise contrasts with the historical understanding of that right under Common Article 1 of the ICESCR and ICCPR as inhering in the whole people of a nation-state (i.e., in their choice of governmental form and leaders).

UNDRIP does not attempt to define “self-determination,” and no universal definition exists. Our starting point for this inquiry is a statement from former Special Rapporteur Anaya: “[T]he essential idea of self-determination is that human beings, individually and as groups, are equally entitled to be in control of their own destinies, and to live within governing institutional orders that are devised accordingly.” Article 3 comports with this conception, encompassing within self-determination Indigenous Peoples’ rights to “freely determine their political status and freely pursue their economic, social and cultural development.” Articles 4 and 5 are also consonant. While the former addresses the political dimension of self-determination—“the right to autonomy or self-government” in internal and local affairs—the latter covers the full gamut—“the right to maintain and strengthen . . . political, legal, economic, social and cultural institutions” as well as “to participate fully . . . in the political, economic, social and cultural life of the State.” This multi-dimensional character makes sense given the subject matter: Indigenous Peoples’ control over their destinies. UNDRIP is a remedial in-

55 ICESCR, supra note 54, at art. 1 (emphasis added).
56 UNDRIP, supra note 5, at art. 1.
57 Id.
58 Montes & Cisneros, supra note 21, at 159.
60 Id. at 13, 16.
61 Anaya, supra note 47, at 187.
62 UNDRIP, supra note 5, at pmbl.
63 Id. at art. 4. See also ANAYA, supra note 53, at 150 (“Self-government is the overarching political dimension of ongoing self-determination.”).
64 UNDRIP, supra note 5, at art. 5.
65 See ANAYA, supra note 53, at 106 (describing how “ongoing self-determination requires a governing order under which individuals and groups are able to make
instrument in this respect. It aims "to remedy the historical denial of the
right of self-determination and related human rights"\textsuperscript{66} to Indigenous
Peoples and to respect and promote those inherent rights.\textsuperscript{67}

\section*{B. Water is Life: Self-Determination & Water}

"We recognize, honor and respect water as sacred and sustains all
life. Our traditional knowledge, laws and ways of life teach us to be re-
ponsible in caring for this sacred gift that connects all life."\textsuperscript{68} This rever-
ent description of water from the Indigenous Peoples Kyoto Water Decla-
ration (Kyoto Declaration) mirrors statements by Indigenous Peoples
across the globe.\textsuperscript{69} Essentiality is a fundamental attribute within these
expressions. Indeed, water "sustains all life."\textsuperscript{70} Water’s essentiality, of
course, bears on all life forms—human beings and otherwise. Further, as
a sacred gift of sustenance, water inherently "connects all life."\textsuperscript{71} Many
implications flow from this complementary attribute, but it is unmistak-
ably relevant to normative rules developed by human beings regarding
water. Water places us in relation at all levels of social organization and is
as fundamental to cultural, economic, and social life as it is to biological
life.\textsuperscript{72} Indigenous Peoples’ political mobilization over water, historical
and contemporary, is wholly unsurprising given its essentiality and con-
nectivity.

So too do these fundamental attributes throw into relief the integral
roles played by water in realizing the "foundational principle that
anchors the constellation of indigenous peoples’ rights"\textsuperscript{73} in UNDRIP:
self-determination. We explore these matters now. A predicate must be
mentioned at the outset: exercise of the right to self-determination pre-
supposes the existence of a right holder. Water, as a necessary element of
human life, bears in a grave and obvious way on Indigenous Peoples’ ex-
istence, collectively and individually, as a precondition for exercising the
right to self-determination.\textsuperscript{74} Shedding light on the diverse, potent ways

\textsuperscript{66} Anaya, \textit{supra} note 47, at 191.
\textsuperscript{67} UNDRIP, \textit{supra} note 5, at pmbl.
\textsuperscript{68} Indigenous Peoples Kyoto Water Declaration ¶ 2 (2003), http://www.cawater-
info.net/library/eng/kyoto_water_declaration.pdf [hereinafter Kyoto Declaration].
\textsuperscript{69} UNESCO, \textit{WATER AND INDIGENOUS PEOPLES} (R. Boelens et al. eds., 2006),
\textsuperscript{70} Kyoto Declaration, \textit{supra} note 68, at ¶ 2.
\textsuperscript{71} Id.
\textsuperscript{72} Franz Krause & Veronica Strang, \textit{Thinking Relationships Through Water}, 29 SOC’Y
\& NAT. RES. 693, 693 (2016).
\textsuperscript{73} Anaya, \textit{supra} note 47, at 184.
\textsuperscript{74} Water thus implicates Indigenous Peoples’ human right to life. ICESCR, \textit{supra}
note 54, at art. 6; ICCPR, \textit{supra} note 54, at art. 6.
in which water factors into Indigenous Peoples' destinies and control thereof (i.e., self-determination) is the task at hand. Article 3 of UNDRIP frames our approach—specifically, the intertwined socioeconomic, cultural, and political dimensions of self-determination alluded to above. While mindful that self-determination is a context-specific process for Indigenous Peoples, including the distinct roles played by water within these dimensions, we regard UNDRIP and Indigenous Peoples' water declarations as providing authentic, robust norms for indigenous water justice. The discussion that follows reflects this view. It simultaneously outlines (1) water's connections to Indigenous Peoples' self-determination, and (2) Indigenous Peoples' considered views in UNDRIP and water declarations on key subjects that bear on the relative justness of domestic water laws and policies toward such peoples (e.g., "constituent" rights to lands, territories, and resources; cultural identity; and self-government and political participation).

1. Of Bounty & Well-Being: Socioeconomic Self-Determination

As a baseline matter, water factors directly and diversely into the lives and livelihoods of Indigenous Peoples, holding wide-ranging significance for their health, economy, and social well-being. Water is inextricably linked to the economic and social dimensions of Indigenous Peoples' self-determination. It forms part of the physical basis for their existence.

Indigenous Peoples' water declarations draw myriad connections between water and socioeconomic self-determination. Two examples suffice. By virtue of their right to self-determination, the Kyoto Declaration articulates Indigenous Peoples' "right to freely exercise full authority and control of ... natural resources[,] including water." A similar but broader sentiment appears in the Garma International Indigenous Water Declaration (Garma Declaration). It emphasizes Indigenous Peoples' "inherent and human rights to water for basic human needs, sanitation, social, [and] economic" purposes. In both cases, water's relevance to Indigenous Peoples' economic development and social welfare is plain.

A host of UNDRIP provisions likewise come into play when considering water's connections to Indigenous Peoples' socioeconomic self-determination. Two UNDRIP provisions touching on health and economic development, respectively, are initially notable. Article 24 addresses the former. It articulates for Indigenous Peoples "an equal right to the enjoyment of the highest attainable standard of physical and mental

75 ANAYA, supra note 53, at 187.
77 Kyoto Declaration, supra note 68, at ¶ 3.
78 Id. at ¶ 9.
79 Garma Declaration, supra note 76, at 2.
obligating nation-states to take “necessary steps with a view to achieving progressively the full realization of this right.” Turning to the economic side, Article 20 likewise contains a far-reaching pronouncement relevant to water’s pivotal role for Indigenous Peoples’ development, including (but not exclusive to) agriculture. Indigenous Peoples have the right to maintain and develop their economic and social systems per this provision, and “to be secure in the enjoyment of their own means of subsistence and development.” The takeaway from both articles is straightforward: water bears unmistakably on Indigenous Peoples’ core social and economic rights.

UNDRIP’s lands, territories, and resources provisions echo this message. Implicating customary international law, three articles are illustrative. Article 26 provides Indigenous Peoples have the right to own, use, and develop “lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.” Nation-states are obliged to “give legal recognition and protection to these lands, territories and resources.” The economic orientation of this text mirrors Article 32, which articulates Indigenous Peoples’ rights “to determine and develop priorities and strategies for the development or use of their lands or territories and other resources.” A basic fact underlies these provisions: Indigenous Peoples “typically have looked to a secure land and natural resource base to ensure the economic viability and development of their communities.” Water fits squarely here. Article 29 further aims at economic development (water-related and otherwise), while also bearing on public health. It expresses Indigenous Peoples’ “right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources,” calling on states to “establish and implement assistance programmes for indigenous peoples for such conservation and protection . . . ”

In sum, deep and numerous connections exist between water and Indigenous Peoples’ socioeconomic self-determination—a point evident from the Kyoto and Garma declarations that implicates a host of 

80 UNDRIP, supra note 5, at art. 24.
81 Id.
82 See id. at art. 20.
83 Id.
84 See ILA Resolution, supra note 25, at ¶ 7 (discussing the obligation “to recognise, respect, safeguard, promote and fulfil the rights of indigenous peoples to their traditional lands, territories and resources”).
85 UNDRIP, supra note 5, at art. 26(2).
86 Id. at art. 26(3).
87 Id. at art. 32(1).
88 ANAYA, supra note 53, at 141.
89 UNDRIP, supra note 5, at art. 29(1).
UNDRIP provisions and counterparts in human rights law. In no uncertain terms, water plays a pivotal role in Indigenous Peoples’ realization of collective and individual aspirations for economic development, employment opportunities and conditions, standards of living (e.g., food and housing), and physical and mental health. These considerations inherently influence the justness of domestic water laws and policies.

2. Of Identity & Heritage: Cultural Self-Determination

"Self-determination includes the practice of our cultural and spiritual relationships with water . . ." This text from the Kyoto Declaration weaves water into a related nexus between Indigenous Peoples’ right to self-determination and a constituent right also constituting international custom: the right to cultural identity, including its preservation and transmission to future generations. The Garma and Kyoto declarations offer rich insights in this realm, and UNDRIP likewise contains several provisions of relevance.

The Kyoto and Garma declarations convey water’s cultural significance to Indigenous Peoples in profound ways. “Indigenous peoples obtain their spiritual and cultural identity ... from their lands and waters[,]” describes the Garma Declaration, reverberating text in the Kyoto Declaration regarding how Indigenous Peoples’ relationships with their lands, territories, and water are the fundamental “cultural and spiritual basis for [their] existence.” Reflected in these statements and others are recurring conceptions of water emphasizing its inherent ethical value and cosmological significance. As just one example, “[w]ater is a spirit that has a right to be treated as an ecological entity, with its own inherent right to exist.” Intergenerational stewardship obligations stem from these understandings of water’s nature and value. “We assert our role as caretakers with rights and responsibilities to defend and ensure the protection, availability and purity of water[,]” proclaims the Kyoto Declaration, further stating, “[w]e stand united to follow and implement our knowledge and traditional laws and exercise our right of self-determination to preserve water, and to preserve life.” Often appearing as unfortunate corollaries are accounts of the historical disregard afforded by nation-states and public and private entities therein to Indigenous

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90 Human rights pertaining to these socioeconomic factors are set forth in ICESCR, supra note 54, at Arts. 6, 7, 11, 12 (rights to work, just and favorable work conditions, adequate standard of living, freedom from hunger, and highest attainable standard of physical and mental health).
91 Kyoto Declaration, supra note 68, at ¶ 11.
92 ILA Resolution, supra note 25, at ¶ 6.
93 Garma Declaration, supra note 76, at 1.
94 Kyoto Declaration, supra note 68, at ¶ 3.
95 Garma Declaration, supra note 76, at 2.
96 Kyoto Declaration, supra note 68, at ¶ 3.
Peoples’ right to self-determination, cultural rights, traditional knowledge, and practices pertaining to water.97 In contaminating, diverting, and depleting water bodies, Indigenous Peoples’ identities and survival have been undermined.

UNDRIP is ripe with associated provisions. They emphasize not only the protection of Indigenous Peoples’ cultures, but also their revitalization and restoration, both generally and in the specific context of lands, territories, and resources.98

"Indigenous peoples and individuals have the right not to be subjected to forced assimilation or destruction of their culture."100 This admonition in Article 8 is unfettered and plainly adherent to water. It is bolstered by articles addressing Indigenous Peoples’ “right to practise and revitalize their cultural traditions and customs[,]” “right to the dignity and diversity of their cultures, traditions, histories and aspirations[,]” and “right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions.”

The foregoing grouping connects inextricably with UNDRIP’s lands, territories, and resources provisions.101 “[C]ontrol by indigenous peoples over developments affecting them and their lands, territories and resources will enable them to maintain and strengthen their institutions, cultures and traditions.”102 This premise from UNDRIP’s preamble informs Article 26’s focus on Indigenous Peoples’ “right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired.”103 Even more explicit in regard to water, culture, and spirituality is Article 25, which provides that Indigenous Peoples have “the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.”104

Much more could be said about the interplay between water and Indigenous Peoples’ intertwined rights to self-determination and cultural identity, including the firmament of international law underpinning the latter.105 The basic connection, however, is clear. Water is deeply embed-
ded within Indigenous Peoples’ socio-cultural life, and, in their exercise of the right to self-determination, Indigenous Peoples hold corresponding rights to conserve, restore, recreate, and transmit to future generations these traditions, values, and worldviews. The treatment of these rights bears directly on the justness of domestic water laws and policies.

3. Of Self-Governance & Participation: Political Self-Determination

Given the preceding socioeconomic and cultural connections, it is stating the obvious to say that water is a subject of keen importance to the governmental institutions, processes, and relations associated with Indigenous Peoples’ self-determination. “To recover and retain our connection to our waters, we have the right to make decisions about waters at all levels[,]” proclaims the Kyoto Declaration. There are twin aspects to this statement. One aspect focuses on Indigenous Peoples’ internal governmental autonomy over water, a subject implied earlier when discussing how Indigenous Peoples’ right to self-determination encompasses the “right to autonomy or self-government in matters relating to their internal and local affairs” per Article 4 of UNDRIP. The other aspect concerns Indigenous Peoples’ participation in water-related decision-making within nation-states’ broader political systems. Article 5 picks up here, emphasizing Indigenous Peoples’ “right to participate fully, if they so choose,” in the political life of the nation-state. Coupled with the Garma and Kyoto declarations, these UNDRIP provisions and others illuminate water’s relevance within this dimension.

The Garma and Kyoto declarations reflect the internal-external framing of political self-determination set forth in Articles 4 and 5 of UNDRIP. With regard to self-governance, the Kyoto Declaration describes how self-determination includes Indigenous Peoples’ “exercise of authority to govern, use, manage, regulate, recover, conserve, enhance and renew . . . water sources, without interference.” Put differently, Indigenous Peoples have a “right to access and control, regulate and use water for navigation, irrigation, harvesting, transportation and other beneficial purposes.” Equally relevant in regard to political participation are the Kyoto Declaration’s provisions addressing Indigenous Peoples’ rights to represent themselves through their own institutions; to require free, prior, and informed consent to all developments on their lands; and to participate in culturally appropriate consultations for “all decision-making activities and all matters” that may affect their inter-

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106 Kyoto Declaration, supra note 68, at ¶ 16.
107 UNDRIP, supra note 5, at art. 4.
108 Id. at art. 5.
109 Jackson, supra note 19, at 13–15.
110 Kyoto Declaration, supra note 68, at ¶ 11.
111 Garma Declaration, supra note 76, at 2.
A related expression appears in the Garma Declaration concerning how Indigenous Peoples must be fully involved in "source water and [watershed] protection planning and operational processes[,] including controlling Indigenous water licenses and fair allocation policies and practices." 13

In addition to mirroring Articles 4 and 5, the Kyoto and Garma declarations' statements resonate with counterpart UNDRIP provisions existent in this context. Article 18 is initially worth flagging. It addresses both aspects of Indigenous Peoples' political self-determination by recognizing their "right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions." 14 Article 26 further emphasizes Indigenous Peoples' self-governance by acknowledging their rights to "control" lands, territories, and resources they possess. 15 As for political participation, a host of articles are notable. Examples identified earlier include provisions requiring nation-states to consult and cooperate in good faith with Indigenous Peoples, through their own representative institutions, to obtain free, prior and informed consent before (1) "adopting and implementing legislative or administrative measures" that may affect the Indigenous Peoples, or (2) approving "any project affecting their lands or territories and other resources," including water projects. 16 Indigenous Peoples likewise have rights to participate in, and to influence the contours of, processes devised by nation-states "to recognize and adjudicate the rights of indigenous peoples pertaining to their lands, territories and resources." 17 Such processes must be "fair, independent, impartial, open and transparent." 18 It should be highlighted that these consultation, participation, and consent requirements constitute international customary law. 19

To summarize, water is a subject of critical import for Indigenous Peoples' governmental institutions. Stemming from it, Indigenous Peoples' lives, cultures, economies, and social well-being hinge on the autonomy afforded internal decisions and decision-making processes of these institutions, as well as on their external relations with other governmental entities in nation-states' overarching political systems. Although we wish to avoid generalizations, the Garma Declaration poignant-

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112 Kyoto Declaration, supra note 68, at ¶ 16.
113 Garma Declaration, supra note 76, at 2.
114 UNDRIP, supra note 5, at art. 18.
115 Id. at art. 26(2).
116 Id. at arts. 19, 32(2).
117 Id. at art. 27.
118 Id.
119 ILA Resolution, supra note 25, at ¶ 5.
ly describes the prevailing historical backdrop: nation-states “have introduced and enforced unlawful and unjust mechanisms” that have violated Indigenous Peoples’ rights “without consultation, consent or just compensation where required by law.”\(^{120}\) That these colonial practices raise water-justice concerns states the obvious.

Part III further elaborates on our conceptualization of indigenous water justice, addressing principles and prescriptions aimed at realizing indigenous water justice in the Colorado, Columbia, and Murray-Darling basins and elsewhere. Moving toward that material, we reiterate UNDRIP’s authenticity and centrality in our endeavor. Coupled with the water declarations, UNDRIP reveals pervasive connections between water and the socioeconomic, cultural, and political dimensions of Indigenous Peoples’ self-determination. It also expresses rich, clear norms indicative of how Indigenous Peoples conceive of just relations between themselves, nation-states, and public and private entities therein within these overlapping dimensions. With self-determination as a centerpiece,\(^{121}\) UNDRIP’s provisions bring to mind an array of water-justice topics. Examples include the existence and composition of indigenous water rights and the respect afforded indigenous governments’ internal autonomy over, and rights to external participation in, water management and planning. In accordance with Article 46, Indigenous Peoples’ rights pertaining to these matters—all of which repose in the right to self-determination—“constitute the minimum standards for the survival, dignity and well-being of the indigenous peoples of the world.”\(^{122}\) UNDRIP can thus be understood as both a guidebook and ruler for realizing and measuring indigenous water justice at the domestic level.

II. PLACE: WATERSCAPES, HOMELANDS & COLONIAL STATES

Now we turn to place—to three among myriad transboundary river basins where UNDRIP might be utilized as a guidebook and ruler in the manner just suggested. We proceed through the Colorado, Columbia, and Murray-Darling basins in that order, devoting each section partly to overviews of the basins’ key features, including Indigenous Peoples’ histories and geographies, and partly to the enduring struggles of these peoples for water justice. The struggles poignantly illustrate the connections drawn in Part I between water and the socioeconomic, cultural, and political dimensions of Indigenous Peoples’ self-determination. In an inseparable way, the struggles also illuminate enduring colonial legacies within Australia, Canada, and the United States that constitute Part III’s analytical and normative focus.

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\(^{120}\) Garma Declaration, supra note 76, at 1.

\(^{121}\) Anaya, supra note 47, at 184.

\(^{122}\) UNDRIP, supra note 5, at art. 43.
A. Colorado River Basin

Figuratively, there are two rivers in the Colorado River Basin. The first one is the watercourse that comes to life in the Colorado Rockies, sweeps through the magnificent Colorado Plateau, and with rare exceptions, dribbles to a dismal end in the sands of Mexico long before reaching the sea. The other river is composed of ink, written and influenced by a veritable army of lawyers, water managers, politicians, activists, academics, and—occasionally—the citizens of the basin. The former is the heart and soul of the American Southwest, the latter is called the “Law of the River.” Within this complex milieu, American Indian tribes have attempted over the past century to retain their identity, sovereignty, and culture by fighting for water rights, because in this sparsely-watered country, there is neither survival nor self-determination without water: “We are of water, and the water is of us. When water is threatened, all living things are threatened.”

1. Basin Overview

The Colorado River arises in its eponymous state in Rocky Mountain National Park, and joins its largest tributary, the Green River, in another national park—Canyonlands—in Utah. From there it flows generally southwest through some of the most sublime scenery on the planet, traversing Glen Canyon and its dam, Grand Canyon National Park, and the Navajo, Hualapai, and Havasupai Indian Reservations. Along that stretch it picks up two additional major tributaries, the San Juan River and the Little Colorado River, and eventually pours into Lake Mead behind Hoover Dam. Then, skirting Las Vegas, the river turns south and forms the boundary between Arizona and California. Along that boundary it passes five more Indian reservations, is occasionally joined by a much-diminished Gila River, and eventually crosses the border into Mexico to flow due south toward the Gulf of California. In historical times, the river’s delta was a spectacular desert oasis—the western version

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128 TECHNICAL REPORT C, supra note 123, at C-40 fig.C-17.

129 Id.

130 Id.

131 Id.
of the Everglades. But today the river almost never reaches the sea, and the delta is largely a desiccated wasteland.

Along its more than 1,400-mile course through seven U.S. states and two Mexican states, the Colorado River does not flow through any major cities, yet its system provides water to Las Vegas, Phoenix, and Tucson inside the basin, and Albuquerque, Cheyenne, Denver, Los Angeles, Salt Lake City, San Diego, Santa Fe, and Tijuana outside the basin. And despite its relatively modest flow, the river is enormously important:

The Colorado River is the single most important water resource in the Southwestern United States and Northwestern Mexico—supplying water to an estimated 40 million people and over 5 million acres of irrigated agriculture.

Within the United States, the Colorado River also serves federally recognized Indian tribes in the 7 basin states, dozens of military installations, flows through 11 National Park Service units and supports unique riparian, environmental and recreational values. The region is visited by tens of millions of recreational visitors every year, adding to the economic importance of this unique and limited resource.

Though it provides economic sustenance to the entire region, the river is much more than that: "Lifeblood, life force, this river is the archetype for this region, the Colorado Plateau, which for many is America's true heart." The first impression one should get in reading these descriptions is that the Colorado River is a highly contested, over-developed river where current and future imbalances between water supplies and demands are precarious.

133 MacDonnell, supra note 124, at 5–6.
Figure 1. Colorado River Basin

Native American Lands Where Tribes Have Rights or Potential Rights to Colorado River Water

<table>
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<th>Reservation Name</th>
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<tr>
<td>6. Salt River Reservation</td>
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<td>7. Pajas (Pueblo) Reservation</td>
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<td>10. Navajo Nation Reservation</td>
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In the midst of all this are twenty-six Indian tribes on twenty-eight reservations (Figure 1).\(^\text{139}\) They got there first. Complex irrigation systems in the Colorado River Basin were not novelties built by Mormon pioneers or the Bureau of Reclamation, but rather by the Hohokam in what is now central Arizona.\(^\text{140}\) When the first Spanish conquistadors appeared in this region nearly 500 years ago,\(^\text{141}\) Indigenous Peoples had been living in the area for millennia.\(^\text{142}\)

2. Indigenous Water-Justice Struggles

The current state of water justice for Indigenous Peoples in the Colorado River Basin is best understood as a result of two conflicting but simultaneous trends: the fall and rise of American Indian power, and the rise and fall of federal water development.

Manifest Destiny dealt a hard hand to Indigenous Peoples. The fate of American Indians in the Colorado River Basin reflects the larger story of the clash between Indigenous Peoples and invading colonial forces. The nineteenth century could best be described as one of resistance, conquest, and internment. Reservations were created as tribes were militarily subdued, starting with the Gila River Indian Reservation in 1859.\(^\text{143}\) As a result, tribes were left destitute and forced to live on segments of land that, in most but not all cases, were small portions of former homelands.\(^\text{144}\) Often the most desirable portions of these homelands were excluded from reservations at the insistence of local Anglos.\(^\text{145}\) The U.S. Supreme Court acknowledged this pattern in the seminal case of Arizona v. California: “It can be said without overstatement that when the Indians...
were put on these reservations they were not considered to be located in the most desirable area of the Nation.\footnote{146}

The result was that tribes were politically powerless and surrounded by hostile Anglos with ample political resources. This relationship became so antagonistic that the U.S. Supreme Court noted in 1886 that, "[b]ecause of the local ill feeling, the people of the States where [Indians] are found are often their deadliest enemies."\footnote{147} These deadly enemies began moving into the Colorado River Basin in large numbers during the latter half of the nineteenth century, and at the century's turn were demanding federal assistance to irrigate desert lands. The government obliged and created the Reclamation Service in 1902 (later renamed the Bureau of Reclamation).\footnote{148} This genesis began a period of extensive water development in the basin, most of which was federally financed, that necessitated a water-allocation system among the basin's seven U.S. states. The 1922 Colorado River Compact was the initial instrument drafted for this purpose, \footnote{140} expeditiously dividing the basin into an Upper Basin and a Lower Basin, apportioning a quantified amount of water use to each sub-basin, and imposing important flow obligations.\footnote{150} Unfortunately, the Compact's apportionment scheme was based on overestimates of annual flows—a hydrological fallacy that has vexed the basin ever since.\footnote{151} However, the Compact offered the federal government the assurance it desired, and six years later Congress passed the Boulder Canyon Project Act of 1928,\footnote{152} ratifying the Compact and authorizing construction of Boulder (Hoover) Dam and the All-American Canal.\footnote{153}

The 1928 Act was the first in a series of enormous federal water infrastructure statutes that developed virtually the entire Lower Basin and much of the Upper Basin. The 1956 Colorado River Storage Project Act authorized Glen Canyon Dam, Flaming Gorge Dam, Navajo Dam, and the Curecanti (Aspinall) Unit.\footnote{154} And the 1968 Colorado River Basin Project Act prompted construction of the massive Central Arizona Project

\begin{footnotes}
\footnote{146} Arizona v. California, 373 U.S. 546, 598 (1963).
\footnote{147} United States v. Kagama, 118 U.S. 375, 384 (1886).
\footnote{150} \textit{Id.} at art. III(a)–(d).
\footnote{153} \textit{Id.} at §§ 1, 13(a).
\end{footnotes}
and several additional projects in the Upper Basin and Lower Basin.\textsuperscript{155} Other huge federal projects diverted water out of the Colorado River Basin to Denver and the Front Range, Albuquerque on the Rio Grande, and Salt Lake City in the Great Basin.\textsuperscript{156} And California built its own huge pipeline from the Lower Colorado River to the southern coastal plain.\textsuperscript{157} At this time, the U.S. paid more attention to Mexico than it did to sovereign Indian tribes, signing a treaty with that country in 1944 generally promising Colorado River deliveries of 1.5 million acre-feet annually.\textsuperscript{158}

During this period of intense water development, tribes had virtually no voice or input, and as a result, virtually no water. The Bureau of Indian Affairs (BIA) had a meager Indian irrigation program and started its first project along the Colorado River in 1867.\textsuperscript{159} But the program was so poorly funded, especially compared to non-Indian water development, that BIA insiders would joke: “We began our first irrigation project in 1867 and we’ve never finished one yet.”\textsuperscript{160} Other than an off-hand reference to what Herbert Hoover dismissively called the “wild Indian article,”\textsuperscript{161} Indians were a “forgotten people” when the 1922 Compact was negotiated.\textsuperscript{162} It “acknowledged the existence of Indian water rights but effectively ignored them.”\textsuperscript{163} The 1948 Upper Basin Compact also included this Indian disclaimer, and then apportioned water to the Upper Basin states but not to Upper Basin tribes.\textsuperscript{164} Thus, what came to be called the “Law of the River” generally coalesced during this period into a polit-

\begin{footnotesize}
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\item[161] Norris Hundley, Jr., \textit{Water and the West: The Colorado River Compact and the Politics of Water in the American West} 212 (2d ed. 2009); Colorado River Compact, supra note 149, at art. VII.
\item[162] Hundley, supra note 161, at 80.
\end{enumerate}
\end{footnotesize}
ical-legal framework for diverting water away from Indian reservations and to non-Indian farms, power plants, and cities, largely funded by the federal government and built by the Bureau of Reclamation.

But the invisibility of Indian tribes gradually began to change due to a series of victories at the national and basin-wide levels. In 1908, the U.S. Supreme Court decided the landmark case of *Winters*, holding that the creation of Indian reservations entailed implicit reservations of water necessary to fulfill the purposes for which reservations had been created (e.g., agriculture in *Winters*). These reserved water rights did not depend upon ongoing diversion and use, and their priority date was the reservation’s creation date—often senior to other appropriators and thus entitled to be satisfied first during shortages. This novel reserved rights doctrine became a “kind of Magna Carta for the Indian.” It was a stunning—and surprising—defeat for Anglo settlers. It is critical to remember that *Winters* was handed down during an era when most observers assumed, and some non-Indian westerners hoped, Indians were a vanishing race that would soon dissolve into the ether, leaving their lands and appurtenant water available for Anglos.

The momentous victory in *Winters* did not have an immediate effect in the Colorado River Basin, but it promised a brighter future. In 1924, all Indians were granted U.S. citizenship, and a decade later the Indian Reorganization Act gave federal imprimatur to Indian self-government, providing tribes with a political voice and measure of autonomy. These developments made it possible for tribes to begin asserting their political and legal views, especially on a subject as essential as water.

The next surge of victories came as a result of World War II. Returning Indian veterans demanded a voice in the political process; in many states and localities they could not even vote. At the national level, Indians formed the National Congress of American Indians (NCAI) in 1944. Indian veterans in New Mexico and Arizona, with the help of

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NCAI, sued successfully for the right to vote in 1948.\footnote{Harrison v. Laveen, 196 P.2d 456, 463 (Sup. Ct. Ariz. 1948); Trujillo v. Garley, statutory three-judge federal court, New Mexico (1948) (unreported). For case analyses, see Daniel McCool et al., Native Vote: American Indians, the Voting Rights Act, and the Right to Vote xi (2007).} Indians in Utah later won the right to vote in 1957—again, the result of a lawsuit.\footnote{Allen v. Merrell, 305 P.2d 490 (Sup. Ct. Utah 1956).}


In the meantime, basin tribes won a major victory in arguably the most important Colorado River judicial decision ever issued. In 1963, after a decade of litigation, the U.S. Supreme Court issued its Arizona v. California opinion.\footnote{Arizona v. California, 373 U.S. 546, 550 (1963).} The Court re-affirmed the Winters Doctrine and announced a standard for quantifying reserved rights associated with Indian reservations created, partly or wholly, for agriculture—the "practically irrigable acreage" (PIA) standard.\footnote{Id. at 600–01. See also Cohen's Handbook of Federal Indian Law 1184–85 (Nell Jessup Newton et al. eds., 5th ed. 2005) ("In general, water rights to support an agricultural purpose for reservations are quantified according to irrigable acres, while water rights for other purposes are quantified by other measures.").} Applying this standard, the Court authorized five tribes with reservations along the Lower Colorado River to divert approximately 950,000 acre-feet annually,\footnote{Arizona v. California, 547 U.S. 150, 169, 174, 181 (2006).} while indicating its use of the PIA standard "shall constitute the means of determining [the] quantity of [the] adjudicated water rights but shall not constitute a re-
striction of the usage of them to irrigation or other agricultural application.\textsuperscript{183} Arizona v. California did not, however, address reserved rights held by basin tribes beyond the five just noted, which left these important matters unresolved.

By the late 1970s, the political fortunes of American Indians and the federal water development program began a role reversal. President Carter issued his famous "hit list" of wasteful, pork barrel water projects in 1977.\textsuperscript{184} Western politicians howled, but then had to acquiesce to the advent of cost-sharing during the Reagan era. At the same time, the rising environmental movement began to challenge the wisdom of building dams and drying up rivers. The Bureau of Reclamation’s plans to build dams on the Green River in Echo Park (i.e., Dinosaur National Monument) and in the Grand Canyon were thwarted.\textsuperscript{185} It was becoming obvious to many that, with nearly 80,000 dams in place,\textsuperscript{186} the United States, and especially the Colorado River Basin, had run out of desirable dam sites. Following the rambunctious overreach of the Floyd Dominy era (Reclamation Commissioner from 1959 to 1969),\textsuperscript{187} the Bureau was beginning to look like an effete organization without a viable mission. Its last big construction project, the Animas-La Plata Project,\textsuperscript{188} was so absurdly cost-ineffective that even long-time supporters began to criticize the agency.\textsuperscript{189} And its long indifference to Indian water needs put it squarely in the cross-hairs of the boisterous and increasingly influential tribal community.

No longer could Indian tribes be ignored. They had won numerous victories in court in most of the major river basins in the American West,

\textsuperscript{183} Id. at 168.
\textsuperscript{186} This figure is drawn from the National Inventory of Dams compiled by the Army Corps of Engineers and accessible at National Inventory of Dams, U.S. ARMY CORPS OF ENG’RS, http://nid.usace.army.mil/cm_apex/f?p=838:12 (last visited May 15, 2018).
thanks to Winters and Arizona v. California.\textsuperscript{190} Their senior reserved rights claims, often for large amounts of water, posed serious threats to western states’ prior appropriation systems, including in the Colorado River Basin.\textsuperscript{191} Although states had gained jurisdiction to resolve these claims in general stream adjudications,\textsuperscript{192} the outcomes of these expensive, glacial proceedings were uncertain, including the prospect of substantial reserved rights awards. Similarly, the federal government was placed in a dilemma, squeezed between its federal trust responsibilities to tribes (e.g., assertion of reserved rights claims) and its long-established reclamation program tailored to non-tribal interests. And tribes, although empowered by recent victories, could neither view those victories as assurances of their fates in general stream adjudications, nor assume reserved rights awards themselves would bring wet water and funding for the infrastructure necessary to deliver it. Out of fear and desperation, many parties turned to negotiation as a solution.\textsuperscript{193}

Thus began the settlement era, with a modest agreement signed at Ak-Chin in central Arizona in 1978,\textsuperscript{194} and continuing with another eighty-eight settlements, agreements, and compacts.\textsuperscript{195} To date, twelve settlements, involving sixteen tribes, have been negotiated in the Colorado River Basin, allocating 2.9 million acre-feet in diversion rights to those tribes as well as their counterparts with adjudicated rights per Arizona v. California.\textsuperscript{196} That leaves a dozen tribes without water rights recognized and quantified via settlement or adjudication,\textsuperscript{197} and the amount of water that could potentially be claimed by these tribes is enormous. In 1992, ten basin tribes formed the Ten Tribes Partnership “for the purpose of strengthening tribal influence . . . to develop and protect tribal water resources.”\textsuperscript{198} These ten tribes already have rights to about twenty percent of the mainstream flow of the Colorado, with many possible additional claims.\textsuperscript{199} Of these tribes, the Navajos stand out for the potential size of

\begin{thebibliography}{99}
\bibitem{Worster} See Donald Worster, Rivers of Empire: Water, Aridity, and the Growth of the American West 298 (1985) (describing Winters doctrine as “potentially a bombshell that could blow the entire structure of western water rights to ruins.”).
\bibitem{supra notes} See supra notes 176–177 and accompanying text.
\bibitem{Mccool note} For a discussion of these dynamics, see McCool, supra note 190, at 32–36.
\bibitem{Native American Water Rights Settlement Project} For a document list and postings, see Native American Water Rights Settlement Project, UNIV. OF N.M. AM. INDIAN LAW CTR., http://digitalrepository.unm.edu/nawrs/.
\bibitem{Id.} Id. at C-38.
\bibitem{Id.} Id.
\end{thebibliography}
claims that are "[l]ooming in the distance." That tribe signed a settlement in 2010 for the New Mexico portion of the San Juan River, and another settlement with Utah on the lower San Juan River is pending in Congress. But that leaves the Arizona portion of the reservation—the largest part—with outstanding claims. In the final analysis, as acknowledged by the Bureau of Reclamation’s recent Basin Study, changes in water availability due to tribal water use and resolution of tribal water rights claims constitute a “critical uncertainty.”

One of the great ironies of history is that the settlement era has given the Bureau of Reclamation a new mission—just as its star appeared to be fading. In essence, although the damage inflicted by the agency during the first century of its existence cannot be undone, the Bureau has begun taking steps to make amends with Indian tribes. An initial example of this redemptive pattern is the use of Central Arizona Project water to facilitate tribal water rights settlements. Ten tribes in central and southern Arizona have fully or partially resolved their claims through such settlements, which account for nearly half of the project’s water. Another example is the Animas-La Plata Project mentioned above, which was politically moribund until it found new life as an Indian project.

Although it would be disingenuous at this juncture to suggest the Bureau of Reclamation affords basin tribes the same attention as non-tribal interests, progress is being made in this direction. The Bureau’s Basin Study is illustrative. It did not “fully account for tribal water demand[,]” “reflect the potential use of tribal water by others[,]” or “show the potential impact on Colorado River Basin water supply if a substantial amount of the presently unused or unquantified tribal water is used by the tribal water rights holders prior to 2060.” As a result, these def-

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200 Cordalis & Cordalis, supra note 163, at 362.
206 See McCool, supra note 190, at 87-99.
ciencies prompted a post-Basin Study agreement between the Ten Tribes Partnership and Department of the Interior for a separate tribal water study.\footnote{Id.} It is being collaboratively undertaken by the Bureau and Ten Tribes Partnership, and was originally slated for completion in 2015, then pushed back to 2017, and as of this date the actual release is unknown.\footnote{COLORADO RIVER BASIN TEN TRIBES PARTNERSHIP TRIBAL WATER STUDY, PLAN OF STUDY (2013), http://www.circleofblue.org/wp-content/uploads/2015/06/Reclamation_Colorado-River-Basin-Tribal-Water-Study-Plan-of-Study-Final.pdf [hereinafter TRIBAL STUDY].} All told, Colorado River Basin water management seems to be evolving (albeit very gradually) in terms of the visibility of tribes and their water rights.

A final, heartfelt point should be made about this hopeful yet incomplete evolution. It is implicit in the material above regarding negotiated settlements, the Ten Tribes Partnership, and the tribal study but deserves separate mention. Indigenous Peoples in the Colorado River Basin have thought long and hard about the complex, existential issues associated with water justice, and have advocated and labored tirelessly in regard to these issues. This dialogue, advocacy, and work undoubtedly will continue. When asked to define indigenous water justice, one Hopi woman replied in the plainest terms: “We’d like to have good, clean water.”\footnote{Interview with Marilyn Tewa, former Tribal Council member, Hopi Tribe (March 16, 2017) (on file with authors).} More elaborately, in discussions with colleagues from several tribes over the course of this project, they articulated the following principles—labeled the “Bluff Principles” for where they were finalized—as essential to any fair, equitable water policy.

1. Clean water for all peoples.
2. Honoring sacred sites and the religious beliefs of all peoples.
3. A holistic approach to water management that focuses on the ecosystem.
4. Educating the public on the value of water: water is life.
5. Using science to improve our understanding of water quality and quantity.
6. A focus on collaborative, inclusive policy-making.
7. A water regime free of racism and prejudice.
8. An ethic that emphasizes concern and caring for everyone, downstream and upstream.
9. A goal of stewardship; leave the Earth and its water systems better than we found them.
10. Equity and fairness should be a basic feature in all water allocation decisions.

11. Understand that traditional wisdom, especially from the Elders, is critical.

12. A sense of urgency; we must act now before the problems become overwhelming.

13. We must think of the welfare of future generations, not just for our own time.

14. Value water as a precious life-giving resource; we should not take it for granted.

15. Water is a gift provided by the Creator and should be sacred, shared, and loved.

16. Water policy-making should embody more spirituality and kindness, and less confrontation.

Echoing excerpts from the Kyoto and Garma declarations and UNDRIP in Part I, the Bluff Principles are just that—by nature, abstract and ultimate goals. When tribal water officials reviewed the principles, they were struck by the gap between such high-minded ideals and everyday challenges on the ground. The Navajo Nation's principal hydrologist explained: “There is a viewpoint that people have on what things should be, and then there's what things really are, and I live in that second world.” In a sense, the existence of this gap is evidence that indigenous water justice has not yet been achieved. Reducing the space between principle and reality thus might be regarded as the paramount struggle facing the Colorado River Basin as policymakers attempt to bend the Law of the River toward Indigenous Peoples' self-determination and water justice. This herculean task is not unique to this setting, of course, which brings us to the waterscape, homelands, and colonial legacy of the Columbia River Basin.

B. Columbia River Basin

1. Basin Overview

The Columbia River begins in the Rocky Mountains of British Columbia, Canada, at Columbia Lake and wetlands, and flows 1,200 miles

211 We express thanks and admiration to all of our indigenous colleagues who contributed to the drafting of these principles: Darphane Badback, Yolanda Badback, Stacia Bailie, Amanda Barrera, Delphina Carter, Forrest Cuch, Howard Dennis, Lorrie Muriel, Nora McDowell, and Marilyn Tewa. We are deeply indebted to John Weisheit and Owen Lammers for organizing two sessions with these wonderful people—the first in Moab, Utah in June 2016, and the second in Bluff, Utah in October 2016.

212 Interview with Jason John, Principal Hydrologist, Navajo Nation Department of Water Resources (March 15, 2017).
before it reaches the Pacific Ocean in a rich estuary near Astoria, Oregon (Figure 2). The basin includes ancestral lands of seventeen First Nations in Canada, and fifteen Native American tribes in the United States. It also includes portions of seven U.S. states and one Canadian province. With its headwaters in the Rocky Mountains, the river is fed by snow-dominated watersheds, giving it a hydrograph indicative of high spring runoff and a pre-climate change average annual flow of 200 million acre-feet. The river and its tributaries provide spawning grounds for thirteen runs of salmon and steelhead populations that have adapted to a highly dynamic environment over ten million years.

Indigenous Peoples have an ancient history in the Columbia River Basin. From oral and then written accounts, it is clear they had a special relation to the Columbia River and its iconic salmon prior to European contact. Salmon provided the primary protein source and formed the cornerstone of religion, culture, and economy. The lifecycles of the fisheries formed the basis for marking time. Indigenous Peoples took advantage of river morphology to harvest salmon. One of the oldest fishing villages in North America called Wy-am (Celilo Falls) was an economic and cultural mecca. Indigenous laws regulated fish harvest.

Initial contact between the basin’s Indigenous Peoples and Euro-Americans occurred on September 20, 1805. For at least three decades, contact focused on trade and did not alter Indigenous Peoples’ dominance in the region. This balance shifted as the migration of Euro-Americans transitioned to settlement. Commercial fishing with high-

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214 Michael C. Healey, Resilient Salmon, Resilient Fisheries for British Columbia, Canada, 14 ECOLOGY & SOCIETY 2, 6 (2009), https://www.ecologyandsociety.org/vol14/iss1/art2/.


220 Id. at 15, 40.
volume canneries began in 1866. The corresponding decline of the fishery led to the basin’s first hatchery in 1877. Settlement and agricultural development led to wholesale changes in upland cover and altered natural drainage systems.

By the mid-1800s, the influx of Euro-American settlers brought war and disease to the basin’s Indigenous Peoples. Negotiations concerning cessions of tribal territory were driven by railroad interests and the desire to expand settlement. Changes in the territorial sovereignty of the Nez Perce provide an illustration of the speed of change. Prior to 1855, the aboriginal territory of the Nez Perce was seventeen-million acres. In 1855, the Nez Perce ceded land to the United States, reducing their territory to roughly seven-million acres. In 1863, cessions reduced the territory to 750,000 acres, following the discovery of gold within the 1855 reservation. The 1893 allotment of the reservation under the Dawes Act, and subsequent opening to homesteading, reduced tribal trust land to roughly 113,000 acres. In sum, the reduction in land held exclusively for the tribe from seventeen-million acres to 113,000 acres occurred in a single generation. Although Indigenous Peoples survived in the Columbia River Basin, reduction in territory and decimation of populations from colonization led to reliance on assistance from the federal government for food and supplies.

During this period, the federal government used resources to stimulate innovation and growth in the western United States through legislation like the 1872 Mining Law and Homestead Act of 1862, which transferred federal lands into private ownership in exchange for nominal

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224 JOSEPHY, supra note 219, at 292.
225 Boldt Decision, supra note 32, at 352.
226 JOSEPHY, supra note 219, at 311, 324. From 1854 to 1855, Isaac I. Stevens, Governor of Washington Territory, negotiated treaties with eleven northwest tribes. Boldt Decision, supra note 32, at 330.
fees. The Army Corps of Engineers began transforming the Columbia River for navigation with locks at the Cascades (now Cascade Locks) beginning in 1896, with numerous dams to follow. The global economic crisis of the Great Depression and the ensuing poverty within the basin highlighted the fact that the rural, agricultural west could not sustain this level of wealth and productivity without external resources, including massive federal investment in water infrastructure.

Transformation of the Columbia River became part of the major federal public works projects under the New Deal, leading to construction of Bonneville Dam and later Grand Coulee Dam, which would provide for irrigation and flood control, inundate tribal lands, and block salmon from the upper Columbia Basin in Canada. Today, roughly 7.8 million acres of irrigated land depend on the basin’s water, and storage capacity on the river is twenty percent of the average annual flow. The Columbia River is one of the largest producers of hydropower in the world. The United States and Canada jointly operate the river under the Columbia River Treaty, which provides for coordination of numerous dams for hydropower production and flood control. Only one Native American entity holds a federal license for hydropower production in the basin: the Confederated Salish and Kootenai Tribes.

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253 See generally WHITE, supra note 221 (chronicling hydropower development in basin).
Figure 2. Columbia River Basin

This map was prepared by the Native American tribes and Canadian First Nations of the Columbia River Basin during review of the Columbia River Treaty. It is used with permission from the Columbia River Inter-Tribal Fish Commission. Legend on next page.
Tribal Nations in the United States*

1. Burns Paiute Tribe
2. Coeur d'Alene Tribe
3. Conf. Salish and Kootenai Tribes of the Flathead Nation
4. Conf. Tribes and Bands of the Yakama Nation
5. Conf. Tribes of the Colville Reservation
6. Conf. Tribes of the Umatilla Indian Res.
7. Conf. Tribes of the Warm Springs Res. of Oregon
8. Cowlitz Indian Tribe
9. Ft. McDermitt Paiute-Shoshone Tribes
10. Kalispel Tribe of Indians
11. Kootenai Tribe of Idaho
12. Nez Perce Tribe
15. Spokane Tribe of Indians

*management authorities and responsibilities affected by the Columbia River Treaty; does not include all tribes in the Columbia Basin

First Nations in Canada

Inside the Columbia Basin

1. 1k?k'ar'miw? (Lower Similkameen Indian Band)
2. 4n?l?t?k' (Musqueam Indian Band)
3. stqá?lt?k' (Wenatchee Nation)
4. suknaqínx (Musqueam Indian Band)
5. Swilx (Kwaw-kwaka'tsit)
6. Kenépiskt (Kwaw-kwaka'tsit)

Outside the Columbia Basin with Asserted Interests

1. spaxomandí (Quinault Indian Band)
2. Spok'óm (Spok'óm)
3. Sélkíák (Nisga'a)
4. Splatsin (Spats'ctul Nation)

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Map produced by the Columbia River Inter-Tribal Fish Commission. It indicates interests and boundaries. Map as of October 2019.
2. Indigenous Water-Justice Struggles

The Columbia River Basin presents a story of rising empowerment of Indigenous Peoples spurred by recognition of rights and subsequent capacity building by certain tribes in the U.S. portion of the basin, and current "spiraling-up" of that capacity as U.S. tribes and Canadian First Nations come together to gain a voice in transboundary management of the international river. It has not been an easy path, and the fact that capacity building has piggybacked on random events means that the extent of capacity remains highly disparate among the basin’s Indigenous Peoples.

The Columbia River Basin today is jurisdictionally complex with transboundary issues at the international, inter-indigenous, and interstate levels, complicating what it means to enjoy self-determination with respect to water. In the U.S. portion of the basin, efforts to assert Indigenous Peoples’ rights for access to and sovereignty over water have played out under federal law governing the interpretation of treaties, statutes, and executive orders pertaining to tribal lands and resources. Of greatest importance are efforts to gain recognition of water rights under the Winters doctrine, and massive increases in empowerment and governance capacity resulting from the assertion of treaty fishing rights. The material below describes these patterns and concludes by illustrating capacity building in the form of tribes rising to become co-managers of the basin fisheries.

In a 1905 case involving Columbia River Basin tribes, the U.S. Supreme Court held that the off-reservation treaty "right of taking fish at all usual and accustomed places, in common with the citizens of the Territory," implied a right of access across private land to exercise that right. The next logical extension of this precedent was the recognition of reserved rights to water if necessary to fulfill a treaty purpose—I.e., the Winters case underpinning the previously mentioned Winters doctrine. Fed-
eral and state courts have recognized reserved rights for various purposes under this doctrine, including agriculture, fisheries, and, more broadly, creation of homelands. Beyond the litigation context, recent decades also have seen a rise in negotiated settlements among tribes, states, and the federal government that involve creative solutions for tribal water development.

In the Columbia River Basin, Winters rights have been recognized through both litigation and settlement for agriculture (e.g., Nez Perce, Fort Hall). Rights to instream flows within the boundaries of Native American reservations have been recognized in both litigation and settlements. But by far the largest water rights issue yet to be resolved throughout most of the Columbia River Basin is the right to instream flows associated with off-reservation treaty fishing rights. As elaborated in Part III, the link between instream flow rights and recognition of treaty fishing rights outside reservation boundaries has significant implications for indigenous water justice. It also involves greater uncertainty, having yet to be addressed by any federal court. In the face of that uncertainty, the Nez Perce Tribe and State of Idaho agreed to instream flows on more than 200 stream reaches in Idaho, but also agreed that the state would hold the right. Basin tribes nonetheless have found a much more powerful legal tool in the combination of treaty fishing rights and the Endangered Species Act (ESA). Understanding the use of the ESA begins with understanding tribal empowerment in the wake of actions taken during the 1960s and 1970s.

Similar to the Colorado River Basin, in conjunction with the broader U.S. civil rights movement of the 1960s and 1970s, the American Indian Movement began to assert and test treaty rights, resulting in the Treaty text recognizing off-reservation fishing rights “in common with citizens of the Territory” being interpreted in a landmark judicial decision—i.e., the

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249 See Native American Water Rights Settlement Project, supra note 195.
250 Id.
251 See, e.g., Colville Confederated Tribes, 647 F.2d at 48.
Boldt Decision mentioned above in Part I in relation to UNDRIP’s genesis. The federal district court held that the text entitles Treaty Tribes to up to fifty percent of the harvestable fish that pass (or would pass absent harvest) “usual and accustomed” fishing places. To facilitate division and protection of tribal harvest, tribal governments subject to the suit (Nez Perce, Confederated Bands of the Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation, and Confederated Tribes of the Warm Springs Reservation) formed the Columbia River Inter-Tribal Fish Commission (CRITFC). CRITFC is a fisheries science and policy agency that is now a leader in co-management of salmonid fisheries.

Empowerment would come later to tribes whose fishing grounds lie in areas blocked from salmon runs by dams. Today, the five upper Columbia tribes in the United States have joined together on various resource issues of common concern to form the Upper Columbia United Tribes (UCUT), and the tribes on the Columbia’s largest tributary have organized as the Upper Snake River Tribes (USRT) for similar purposes.

While the assertion of treaty fishing rights led to capacity building among basin tribes, the salmon fishery continued to decline, leading tribes to turn to the ESA. The Shoshone-Bannock Tribes led with a petition for listing of sockeye in 1990. Following on the heels of this listing have been twelve additional salmonid listings and biological opinions concerning operation of the Federal Columbia River Power System. In this process, the Tribes have taken a leadership role in salmon recovery.

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25 See supra notes 31–32 and accompanying text.
25 Boldt Decision, supra note 32, at 685.
A tribute to the level and sophistication of this capacity building is illustrated by the major diplomatic effort of all fifteen tribes in the U.S. portion of the Columbia River Basin to develop the Common Views on the Future of the Columbia River Treaty in 2010. The regional recommendation to the U.S. Department of State adopted the tribal position calling for elevation of ecosystem function to a third prong of any modernized treaty between the United States and Canada. The capacity built by tribes through participation in the processes of recognition of treaty rights and regulatory jurisdiction, along with the production of knowledge and increased public awareness, prepared them for future opportunities.

Tribes have used the capacity built in the process of gaining recognition of water and fishing rights to assert tribal jurisdiction over water quality under the Clean Water Act (CWA). Approximately half of the basin tribes have approved water quality standards. In 1989, the EPA promulgated federal regulations for the Confederated Tribes of the Colville Reservation—the first tribal water quality standards approved since the 1987 CWA amendments—and provided for protection of “ceremonial and religious” water uses.

Parallel efforts have taken place at a slower pace in the Canadian portion of the Columbia River Basin. Canadian courts did not reject the doctrine of terra nullius (the land, on European discovery, belongs to no one) until 1973. The 1982 Constitution Act followed, recognizing the rights of First Nations, Inuit, and Metis to consultation concerning their interests in land and water. Recent court rulings have taken a broad

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265 Clean Water Act, 33 U.S.C. § 1377 (2016). This tribal jurisdictional authority is referred to as “treatment as a state” or “TAS.”


268 See BLACK’S LAW DICTIONARY 1512 (8th ed. 2004) (defining terra nullius as “[a] territory not belonging to any particular country”).


view of that right. First Nations in the basin also have begun the task of building governance capacity. In 1981, First Nations formed the Okanagan Nation Alliance, representing eight member communities responsible for protecting the land, resources, and quality of life of their citizens. Roughly a decade later, in the early 1990s, the Canadian Columbia River Intertribal Fisheries Commission (CCRFC) was formed to advise the Ktunaxa Nation Council and Secwepemc communities on salmon restoration.

In Canada, First Nation water rights cases have only recently emerged to challenge provincial water regimes (transferred from Canada to the Provinces in the 1930s) under prior appropriation to the exclusion of Indigenous Peoples and their governments. The water-justice issues are further exacerbated by the unique legal landscape where much of British Columbia, including that portion within the Columbia River Basin, is unceded territory in which few historical treaties have been entered with Indigenous Peoples. At the height of Columbia River Treaty negotiations, it was not coincidental that the Canadian government orchestrated the termination of the Sinixt First Nation in 1956. With the Sinixt labeled “extinct,” the government had erased its fiduciary responsibilities to these peoples and furthered the myth of terra nullius. A shift in the Canadian government’s intent to fulfill treaty obligations to protect indigenous water rights came with passage of the Federal Water Policy in 1987, including commitments to review, negotiate, and improve

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First Nation water issues in recognition of Indigenous Peoples’ unique interests in water.\textsuperscript{278}

The British Columbia Assembly of First Nations has argued there are five general sources of law for indigenous water rights: (1) Aboriginal Title, (2) Aboriginal Rights, (3) Treaty and Reserve Rights, (4) Contemporary Governance Arrangements, and (5) International Law.\textsuperscript{279} In a recent presentation by an Okanagan Nation Alliance representative, a view of indigenous water justice was articulated in which (1) the “consultation” requirement of the 1982 Constitution is equated with the concept of “prior informed consent” for actions affecting Indigenous Peoples’ lands and waters, and (2) self-determination is the measure of the role of Indigenous Peoples in international dialogue concerning those waters.\textsuperscript{280} Although not establishing a legal precedent, First Nations achieved recognition of Winters-type water rights via settlement in Alberta in 2002.\textsuperscript{281} In turn, the British Columbia Supreme Court held in 2011 that the Halalt First Nation has rights to groundwater on their reserve.\textsuperscript{282}

The most recent provincial legislation for water governance with far-reaching challenges for Indigenous Peoples in the basin is the 2016 Water Sustainability Act (WSA),\textsuperscript{283} which fails to provide a water use category for “cultural [and] spiritual uses,”\textsuperscript{284} and calls for “meaningful engagement” with First Nations without defining that term.\textsuperscript{285} The WSA has been met with variable responses from First Nations. Lower Similkameen Indian Band has stated that “meaningful engagement” for basin governance requires forming relationships that respect Indigenous Peoples’ rights protected under UNDRIP (Articles 25, 26, 29, and 32).\textsuperscript{286} The Okanagan

\begin{thebibliography}{99}
\item Jay Johnson, Okanagan Nation Alliance, Presentation at Columbia River Treaty Symposium, Northwest Indian College (Feb. 22, 2017).
\item Id. at 1.
\end{thebibliography}
Nation Alliance highlighted that increased population growth, competing water uses, and allocation strategies that do not value indigenous knowledge in decision-making processes are of dire concern for Syilx Peoples. In contrast, the Shuswap Nation applauded the British Columbia provincial government for working towards modernizing water legislation and hoped the process would support First Nations Peoples’ “responsibility to speak for the protection of water and the life that stems from it, for all our future generations.” Notably, all of the First Nations who offered feedback on the WSA articulated intentions to work towards collaborative water governance, provided (1) Indigenous Peoples’ rights and participation in equitable sovereign-to-sovereign decision-making processes are respected; and (2) water governance recognizes indigenous water-justice values of respect, reciprocity, stewardship, equity, and relationality. Specifically, the Shuswap Nation recounted water-justice principles given by their ancestors during the Memorial to Sir Wilfrid Laurier in 1910, where Secwepemc Chiefs stated:

We must, therefore, be the same as brothers to them, and live as one family. We will share equally in everything—half and half—in land, water and timber, etc. What is ours will be theirs, and what is theirs will be ours. We will help each other to be great and good.

Similar to U.S. tribal governments, First Nations in the Columbia River Basin have reconstituted traditional kinship networks to form diplomatic relationships. This pattern has resulted in water declarations to communicate Indigenous Peoples’ water governance paradigms. The Simpcw First Nation’s water declaration details the “nation’s rights to and responsibilities for water in their traditional territory[,]” stating:

As Secwepemc, we are collectively responsible to take care of our land and water, to uphold all of our responsibilities and follow our

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290 Letter from Nelson Leon, supra note 288, at 3.


292 Id. at 140.
Natural Laws, as was passed down to us from Tqelt Kukpi7 and our ancestors.

Therefore, we will not, under any condition, compromise the health of our water and our future generations.293

Echoing the Bluff Principles and Garma and Kyoto declarations discussed earlier,294 this emphasis on intergenerational water stewardship is a critical aspect of First Nations' water-justice values. In 2014, the Okanagan Nation Alliance issued the Syilx Nation Siwilxw Declaration.295 It states: "Our sacred siwilxw connects and sustains all life. We as the Syilx people have a duty and responsibility to ensure siwilxw can maintain all of its relationships, known and unknown, by showing due respect and humility."296 Qwengwent (humility) is a guiding legal principle for the protection of siwilxw (water) for Secwepemcw.297 The care for Secwepemcw's sacred waters is driven by connectivity, dependency, and respect. First Nation water-justice values for the Columbia River Basin are tied to ancestral knowledge of resource scarcity and not taking more than one needs to ensure sustainability.298

Similarly, totem poles are reclaimed299 water-justice tools that serve as declarations of Indigenous Peoples' rights in the Columbia River Basin and garner public support for nation-to-nation water governance. In 2016, Lummi tribal citizens carved and toured with a twenty-two-foot totem pole to raise awareness of the fossil-fuel industry's impact on Indigenous Peoples' lands and waters, including contributions to climate change.300 Existing and proposed oil and coal export terminals along the

294 See supra Parts I.B and II.A.2.
296 Id.
297 See id.
299 1884 amendments to the Indian Act made it illegal for Indigenous Peoples to give gifts and to hold potlatch, which are central to totem pole carving and raising ceremonies. The amendments were not repealed until 1951, but residential schools often abused indigenous children who attempted to carry on carving traditions. Stacey R. Jessiman, The Repatriation of the G'psgolox Totem Pole: A Study of its Context, Process, and Outcome, 18 INT'L J. CULT. PROP. 365, 368–89 (2011).
Columbia River threaten the river system’s health and Indigenous Peoples’ rights to protect a sacred relative. The fur trade transformed the basin centuries ago, and some have argued “oil is the new fur,” desecrating Indigenous Peoples’ waterscapes with little consideration of their rights. Thus, indigenous water justice must be rooted in government-to-government relationships, both in the Columbia River Basin as well as the basin where more indigenous nations reside than any other considered in this Article.

C. Murray-Darling Basin

1. Basin Overview

The Murray-Darling River Basin encompasses territories of forty autonomous indigenous nations that number approximately 15% of Australia’s indigenous population (Figure 3). Land tenures imposed since colonization have left indigenous nations in possession of less than 0.2% of the basin, signaling a higher level of dispossession than many other Australian regions.

The basin is Australia’s principal agricultural area, comprising one seventh of the continent, including four states (New South Wales, Victoria, Queensland, South Australia) and the Australian Capital Territory. It contains more than twenty major rivers linking twenty-three catchments, 25,000 wetlands, and important groundwater systems. One of its most remarkable features is the spatial and temporal variability in rainfall. Flows also vary greatly from one year to the next, and drought is a common feature. Most river systems in the basin are over-allocated to agriculture, and this overuse has contributed to their degradation.

For millennia, river valleys and their networks of waterways provided natural enclaves for Aboriginal societies. Not reliant on intensive agriculture, indigenous economies had little need for irrigation, although

505 See, e.g., TAYLOR & BIDDLE, supra note 302, at 8.
surface waters were controlled with fish traps, weirs, and small dams to improve harvests of certain species.\textsuperscript{306}

Aboriginal societies were organized into clans, local landowning groups whose membership was based on descent from a common ancestor, and broader language groups whose members spoke similar dialects.\textsuperscript{307} Group or joint property rights over land and water regulated access to territory, including rivers and waterholes, and natural resources.\textsuperscript{308} Over successive generations, the basin’s land and water systems were vested with religious and cultural significance. Complex mythical landscapes were constructed by ancestral beings around spiritually powerful water bodies like rock-holes and billabongs. Each language group maintained their own origin stories describing actions of creator beings, tying people’s identity to the river “in a potent, spiritual way.”\textsuperscript{309}

The centrality of river systems to the identity of many Aboriginal peoples is exemplified by group names that still today link people to place—e.g., Paakantji people take their name from Paaka, the Darling River.\textsuperscript{310} Shared languages enabled communication up and down the river, which served as a conduit for common ceremonial practices.\textsuperscript{311} It was also a ribbon of life for those peoples whose territories spanned the dry and harsh hinterland.

Notwithstanding the river system’s centrality for Aboriginal peoples of the Murray-Darling Basin prior to colonization, the customary systems by which they managed and governed water are not well documented. This dearth is attributable to the fact that these laws and customs were of little interest to colonists appropriating indigenous territories and justifying their actions by the doctrine of \textit{terra nullius}.\textsuperscript{312}

\begin{footnotes}
\item[306] Phillip Allen Clarke, \textit{Aboriginal Culture and the Riverine Environment}, in \textit{The Natural History of the Riverland and Murraylands} 142, 154 (J.T. Jennings ed., 2009).
\item[307] \textit{Id.} at 144.
\item[308] \textit{Id.} at 146–147.
\item[311] Clarke, \textit{supra} note 306, at 145.
\item[312] Black’s Law Dictionary, \textit{supra} note 268.
\end{footnotes}
Figure 3. Murray-Darling Basin

Some of Australia’s worst episodes of frontier bloodshed greatly reduced the Aboriginal population, as did disease and territorial dispossession. Expansion of pastoral settlement along waterways placed intense pressure on Aboriginal land uses, radically altering the country, and competition for land, and especially for water, precipitated conflict. Pressures intensified in the nineteenth and twentieth centuries as coercive legislation and policy regulated every aspect of Aboriginal life. Government efforts to stimulate crop-based agricultural production further eroded security of Aboriginal access to land. Increasingly, Aboriginal people had to adjust to making a livelihood from landscapes modified by rural development, and many were forced to the fringes of towns and compelled into reserves and camps. Although vulnerable to discrimination and marginalization in the rural economy, Aboriginal people nonetheless consistently asserted ownership over their territories.

Under Australia’s Constitution, land management, water resources, and irrigation development are responsibilities of state governments. An intergovernmental agreement signed by the states and Commonwealth in 1914 brought the Murray-Darling Basin into one management unit. Navigation and irrigation then preoccupied political leaders’ deliberations, with no thought given to the agreement’s implications for Aboriginal peoples. Water development was to benefit a Eurocentric notion of community: Colonial institutions expropriated land and water for the benefit of a white constituency. Common law riparian doctrine rendered Indigenous Peoples incapable of recognition as citizens or societies with needs for water or any entitlement to benefit from water use.

Over time, riparianism came to be viewed as an inappropriate institutional basis for water management. State laws enacted between 1880 and 1910 limited riparian rights by vesting rights to the use, flow, and control of water resources in the Crown (i.e., the states). Centralized systems were established for allocating water rights as statutory privileges (e.g., licenses and permits to take water), rather than as proprietary rights in the legal sense. Typically attached to land titles, these rights were made available “virtually on demand.” Again, Aboriginal peoples’
rights or interests in land or water were not referred to in policy debates underpinning this restructuring of water rights.\textsuperscript{322}

The period from 1918 through the 1970s involved significant government investment in irrigation infrastructure, including dams and other regulatory structures. Capacity gained by water agencies to store 103\% of annual runoff and to extract 87\% of divertible water\textsuperscript{323} effected physical changes to the basin's hydrology that, in combination with overuse of water resources, further eroded its ability to meet indigenous needs. The socioeconomic and psychosocial impacts were profound for Aboriginal peoples, resulting in widespread loss of control and inability to access and holistically manage customary estates, to exercise custodial authority, and to prevent further ecological degradation and economic impoverishment.\textsuperscript{324}

A succession of water policy reforms was made during the 1990s—all focusing on the Murray-Darling Basin—in response to serious problems of excessive extraction and declining water quality.\textsuperscript{325} These transformations centered on restructuring property rights, instituting the user-pays principle, and resetting the balance between irrigation and environmental water use. Land and water titles were separated to enable trading of entitlements on a scale such that the basin now has one of the world's largest water markets.\textsuperscript{326} In addition, statutory water planning was utilized to identify a consumptive pool for direct human use and a non-consumptive pool for environmental water, with the latter granted legal protection.\textsuperscript{327} Sustainable Diversion Limits were introduced in two stages: initially in 1995 when water use was capped across the basin, and subsequently when the Basin Plan of 2011 commenced a wind back of water extractions by about twenty-five percent.\textsuperscript{328} Governments also allocated more than $12 billion to purchasing entitlements and to investing in infrastructure projects to save water for the environment.\textsuperscript{329} Water man-

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\textsuperscript{322} Sue Jackson, \textit{Enduring and Persistent Injustices in Water Access in Australia}, in \textsc{Natural Resources and Environmental Justice: Australian Perspectives} 121, 126 (Anna Lukasiewicz et al. eds., 2017).


\textsuperscript{325} Marshall & Alexandra, \textit{supra} note 304, at 681.


\textsuperscript{327} Marshall & Alexandra, \textit{supra} note 304, at 697.

\textsuperscript{328} Id. at 679.

agement coordination is now the responsibility of the Murray-Darling Basin Authority (MDBA) established under the Water Act 2007.330

2. Indigenous Water-Justice Struggles

Since colonization, state systems of water governance have pursued priorities and needs of the non-indigenous settler society, failing to recognize rights, interests, and capacities of Indigenous Peoples, no matter the systems’ character: British-born riparianism, state administered, or neoliberal. Recent national acknowledgement of indigenous “cultural values,”331 stemming from a thirty-year era of legal recognition of native-title rights and heritage protections, has seen the emergence of very limited, narrowly prescribed, and externally defined spaces for Indigenous Peoples to influence decisions about water use and management. As policy makers and water managers call for consultation, participation, and multi-cultural inclusion, the state continues to maintain authority to delimit indigenous access to the economic and political benefits of water. Its commodification and marketing, undertaken in the absence of restorative mechanisms to increase indigenous water entitlements, has arguably ushered new types of dispossession.332 It is against these neo-colonial maneuvers that Indigenous Peoples struggle for water justice, not least the need for well-defined property rights. For the reasons outlined below, the pursuit of native title in the Murray-Darling Basin has not satisfied indigenous demands. In response, advocates are having relatively greater success influencing water law, including entitlement systems, policy and planning processes, scientific assessments, and other management techniques, although these avenues are also greatly limited in their capacity to deliver water justice as conceptualized around UNDRIP.

The neoliberal water reform era described above coincided with the High Court of Australia’s Mabo decision in 1992,333 and the Australian Parliament’s passage of the Native Title Act 1993.334 Following Mabo, Australian courts recognize that there were legal systems in place prior to European occupation, that Indigenous Peoples’ rights to land survived colonization, and that a form of native title can exist where it has not


334 Native Title Act 1993 (Cth) s 110 (Austl.).
been extinguished. The law of native title now commonly recognizes indigenous rights to take and use water for personal, social, domestic, and cultural purposes. It also confirms the Crown’s right to use and control the flow of water and gives statutory protection to water licenses granted to non-Aboriginal landholders prior to 1975, the date at which the Commonwealth's Racial Discrimination Act took effect. A native-title right to take and use water for commercial purposes has yet to be recognized. Native title holders were initially afforded a procedural “right to negotiate” over high-impact developments. However, legislative amendments watered down this right to mere consultation, while at the same time validating “future acts” (e.g., dam construction and public water works) and licenses regulating the management of water.

Despite the historical coincidence of native-title jurisprudence, the initial water reforms made “no reference to native title or any other form of indigenous water rights,” and it was not until 2004 that national water policy recognized indigenous rights and interests—a point elaborated below. Thus, indigenous representatives were prevented from influencing the rules governing access to water. The decoupling of land and water ownership was an important issue likely to affect those groups who had yet to claim their land under statutory processes. For instance, one-third of the Murray-Darling Basin is subject to native-title application.

This first attempt to acknowledge indigenous interests in water in national policy occurred in 2004 with the National Water Initiative (NWI). Government parties agreed that water entitlement and planning frameworks should recognize indigenous needs in relation to access and management. To that end, Indigenous Peoples are to be included

335 See Sean Brennan et al., The Idea of Native Title as a Vehicle for Change and Indigenous Empowerment, in NATIVE TITLE FROM MABO TO AKIBA: A VEHICLE FOR CHANGE AND EMPOWERMENT 6–7 (Sean Brennan et al. eds., 2015).
337 McAvoy, supra note 332, at 7.
338 Tan & Jackson, supra note 316, at 141.
339 Id. at 143.
340 Id. at 141.
342 Tan & Jackson, supra note 316, at 133.
345 Tan & Jackson, supra note 316, at 133.
in water planning processes, and water plans are to incorporate their objectives. Although the NWI contains clauses designed to improve indigenous access, these provisions are discretionary and rely on interpretations of native title constraining the commercial scope of this newly recognized property right. There is no “explicit obligation” in the NWI “to advance Indigenous peoples’ economic standing.” Implementation of the NWI gives low priority to indigenous needs in over-allocated catchments, and its goals are prejudiced by delay and difficulties in native-title determinations. Not surprisingly, it is rare for water plans to specifically address indigenous water requirements.

National Water Commission reviews observe a general failure to increase allocations to Indigenous Peoples or to achieve indigenous objectives in water plans.

More recently, the Water Act 2007 has brought some “fairly limited opportunities” for Aboriginal people according to Monica Morgan, a Yorta Yorta leader. Its provisions require that the MDBA consult widely when developing, amending, and reviewing the Basin Plan, including with Aboriginal communities, and mandate that the MDBA consider Aboriginal uses of basin water. The Social Justice Commissioner, a position held by an indigenous person, and many others have criticized the Water Act 2007 for failing to adequately provide for Indigenous Peoples, arguing that it should have a distinct category allowing for “Indigenous cultural water use” and commercial access entitlements.

The devastating environmental consequences of water regulation and excessive extraction, combined with the lack of legal recognition of indigenous rights and interests, have mobilized indigenous water rights...

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546 Id. at 133.
547 Id. at 134.
548 Jackson & Morrison, supra note 344, at 24.
549 Tan & Jackson, supra note 316, at 148.
552 Morgan, supra note 303, at 465.
advocates over the past two decades. The most dramatic changes to the basin’s rivers have occurred during the past fifty years, a period argued to be within the lifetimes of the current generation of Aboriginal elders. Efforts by Aboriginal people to redress the crisis facing the basin have shown remarkable consistency in their position that “the primary policy objective must be to restore natural flows and cycles to the river system.” Barkindji leader Badger Bates describes his people’s struggle:

The Darling River is our ngamaka—our mother. It is Barka and we are Barkandji wiimpatja—Darling River people. We depend on our river for everything—our identity, our food, our stories, our family history, our language, our rules, everything. Without it we are nothing. Our Barkandji native title gave us recognition but not much else. . . . Now we only get water if there is too much water upstream for the farmers upstream to use or store. Over the last 15 years our river has been drying up, more often than not. I am 69 years of age and this is a new thing, and it is not natural.

Numerous Aboriginal groups have mobilized to pursue strategies that will enable traditional owners to exercise custodial rights, fulfill cultural responsibilities, pursue social and economic interests, and protect culturally sensitive sites and burial grounds from alterations to water levels. Some institutional processes have been adapted in response to indigenous demands, and tentative steps have been taken towards establishing water entitlements for indigenous purposes. It is those efforts and their underpinning justice concepts that we now examine.

Indigenous Peoples consistently emphasize an ongoing sense of custodial responsibility based upon systems of customary law that dictate a substantive role for traditional landowners in land and water management and resource regulation, and hence a particularly unique interest in environmental governance. Yet, environmental water governance structures do not acknowledge indigenous place-based responsibilities to water territories, as members of various nations have repeatedly told researchers. As stated by a Ngemba leader from New South Wales: “[T]o

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355 WEIR, supra note 309, at 181.
356 Morgan, supra note 303, at 458.
359 MORGAN ET AL., supra note 324, at 6.
understand those places, [and those] stories you need to keep company [with the landscape]. If you don’t know about a place then there is less responsibility, nothing to do to heed to the repercussions.\(^{361}\)

The vision which guides current indigenous action seeks to restore the vivid human and non-human relationships that inspire and validate cultural practice and reproduction. It is dependent upon the life-giving capability of water: “Water justice to me means my survival and recognizing my rights to free-flowing water. Water justice to Barkindji people means the same thing! It’s our lifeline!”\(^{362}\)

It is a vision that contrasts with water managers’ technical preoccupation with a scientifically determined and reified flow regime that fails to accommodate indigenous cosmologies and epistemologies. Scientific flow assessments in Australia have made little attempt to understand the pattern and significance of indigenous relationships to the flow ecology, nor indeed the wider sociocultural context that informs the development of values, beliefs, and ideas about the environment.\(^{363}\) In discussions about priorities for environmental water, Indigenous Peoples do not subscribe to the universal approaches characteristic of conservation policy, instead stressing local connections and measures of significance (e.g., sacred and conception sites). Numerous groups report environmental water has not been directed to features that they consider of greatest significance or value or at the appropriate time.\(^{364}\)

Western modes of resource management also prioritize utilitarian values over relational ones.\(^{365}\) In contrast, Indigenous Peoples aspire to maintain and reaffirm relationships with country (customary land and waterscapes) predicated on belonging; to fulfill intergenerational and collective responsibilities; to revive, apply, and teach traditional knowledge, practices, and skills to younger generations; and to pursue

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\(^{362}\) Interview with Barkandji Traditional Owner (Feb. 15, 2017) (on file with authors).


\(^{365}\) Krause & Strang, supra note 72, at 635.
livelihoods that may rely on access to water and/or bountiful aquatic ecosytems (e.g., fishing, hunting and gathering, tourism).

To gain access to and control of water, indigenous advocates have closely examined policy options developed to acquire water for the environment. Cognizant of the native-title regime's failings in restoring land and water rights to "First Nations," indigenous representatives argue instruments that deliver water to the environment could serve as models for redressing the historical neglect of indigenous water rights and transparently inequitable distribution of water. Considerable effort is being made in "developing water entitlements to protect culture" (i.e., "cultural flows") as tradeable entitlements under indigenous communities' control. Cultural flows are defined as "water entitlements that [would be] legally and beneficially owned by the Indigenous Nations of a sufficient and adequate quantity and quality to improve the spiritual, cultural, environmental, social and economic conditions of those Indigenous Nations." This concept has gained immediate but limited traction in the Murray-Darling Basin. The MDBA has allocated funds to explore new institutions to define and apply "cultural flows," to determine requisite volumes or flow regimes, and to measure social, economic, and health benefits.

With the Murray-Darling Basin's water resources fully allocated to users with a history of access and entitlement, Aboriginal people describe themselves as water poor, for they are greatly constrained in their ability to gain from the water economy. Aboriginal representatives explicitly refer to unjust patterns of access based upon prior appropriations and historical accumulation of water rights by non-indigenous landowners, and they seek economic outcomes from water use and management. Darren Perry, former Chairperson of an alliance of indigenous nations—the Murray Lower Darling Rivers Indigenous Nations (MLDRIN)—has drawn attention to the lamentable fact that Aboriginal people are estimated to


\[367\] SAVANNAH ORG., supra note 366, at 2.


\[369\] SAVANNAH ORG., supra note 366, at 5.
hold only 0.08% of the basin’s Sustainable Diversion Limit. In a submission to the review of the Water Act 2007, the Northern Basin Aboriginal Nations (NBAN) called for the Basin Plan and subsidiary Water Resource Plans to “[f]acilitate Aboriginal Peoples’ ownership of a fair and equitable proportion of commercial and environmental water licenses[,]” proposing measures aimed at remedying the economic injustice felt by Aboriginal people.

An early native-title defeat for the Yorta Yorta of the Murray River precipitated a strategic response that has had wide-ranging effects on Aboriginal peoples’ representation in the basin. MLDIN was established in response to the High Court’s Yorta Yorta judgment, which concluded that Yorta Yorta native-title rights and interests had not been continuously maintained through the experience of colonization. After their first loss in 1999, the Yorta Yorta called together traditional owner groups with country along the Murray River. They resolved to develop a stronger voice in policy and management responses to the severely degraded river. It was agreed an umbrella body was needed to represent traditional owners and to provide a platform to engage with government. The model proposed included a board of delegates with representation from each traditional owner group. In 2001, MLDIN held its inaugural meeting. A decade later, an alliance of twenty-two indigenous nations from the northern basin (again, NBAN) was formed to ensure their perspectives were reflected in water governance.

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373 Id.
374 Id. at 186.
375 Id.
376 Id at 186–87.
377 Id. at 187.
378 Id.
scribes itself as an “independent self-determining organisation with a primary focus on cultural and natural resource management.”

Much of the work of these alliances has focused on increasing traditional owners’ involvement in natural resource management and environmental planning, particularly ecological restoration projects, and they continue to lobby for indigenous water allocations, often referred to as “cultural flows,” as noted above. The alliances engage with state and federal government ministers and agencies, NGOs, and the agricultural sector, and they are regarded as valuable consultative bodies for policymakers and water managers. Their formation has resulted in a strong partnership between indigenous nations and the MDBA, formalized through a Memorandum of Understanding acknowledging the political authority asserted by the nations and various internal MDBA policies and plans. The MDBA has provided funding for the past fifteen years to enable employment of a coordinator for MLDRIN and NBAN meetings, indigenous facilitators to engage traditional owner groups at key wetland sites, resources to map values and relationships of significance, and experimentation in design and deployment of environmental health assessment tools and social surveys. Self-determination has been invoked as the source of MLDRIN’s political authority and informed consent underpins the alliance’s relationship with the MDBA. According to Yorta Yorta leader Monica Morgan, informed consent ensures that:

Indigenous people understand the consequences and outcomes that may result from our contributions and decisions regarding cultural knowledge, values, and perspectives. We want traditional knowledge recognised for the contribution it can make to looking after the rivers, but we are equally concerned to clarify and protect our rights to our own intellectual property.

Since passage of the Water Act 2007, the roles of MLDRIN and NBAN have expanded to advise the MDBA on the extent to which state water resource plans engage with traditional owner groups. Community con-

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100 Weir & Ross, supra note 372, at 187.
101 Id. at 188.
103 Weir & Ross, supra note 372, at 189.
104 Morgan, supra note 303, at 464.
105 Id.
control stands out as an important aspect of Indigenous Peoples' self-determination that translates well in practical efforts confederations like MLDRIN and NBAN are taking to govern and manage water. Their efforts to undertake waterway assessments and other research on cultural values with Aboriginal people throughout the basin represent an important step towards community control in water governance. Innovations involving self-determination are also being pursued at a more localized scale, with the work of the Ngarrindjeri Regional Authority of the Coorong, Lower Lakes, and Murray Mouth region being a clear example of community control of water governance. Ultimately, it is these progressive developments in the Murray-Darling Basin that bring to a close our survey of indigenous water-justice struggles in this basin and its counterparts, triggering the need for synthesis, prescription, and a return to UNDRIP.

III. DECOLONIZING WATER

How do we make sense of the enduring water-justice struggles faced by Indigenous Peoples in the Colorado, Columbia, and Murray-Darling basins? What commonalities exist among these struggles, and what principles and prescriptions oriented toward indigenous water justice should enlighten the path forward? These questions mark the edge of our inquiry. They call for analytical and normative discourse. In regard to the former, the concept of water colonialism is introduced below to weave the basins' histories around a coherent narrative that illuminates definitional elements of the struggles. This concept reflects the fundamental truth that indigenous water justice inherently cannot be pursued on a blank slate in contemporary times, but rather must be understood within the context of Australia's, Canada's, and the United States' deeply rooted colonial legacies. Viewed from this vantage point, we regard UNDRIP as a valuable anti-colonial tool. The discussion accordingly revisits UNDRIP for normative purposes after deconstructing water colonialism. Specifically, we consider principles rooted in UNDRIP's provisions as grounding points for legal and policy prescriptions aimed at realizing indigenous water justice in the basins and around the world.

A. Water Colonialism: A Living Legacy

1. “Water Colonialism”

Perhaps the plainest commonality among the Colorado, Columbia, and Murray-Darling basins consists of the geopolitical lines superimposed on them within the respective nation-states. In two instances, the Colum-

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S. HEMMING & D. RIGNEY, GYDER INST. FOR WATER RESEARCH, INDIGENOUS ENGAGEMENT IN ENVIRONMENTAL WATER PLANNING, RESEARCH AND MANAGEMENT: INNOVATIONS IN SOUTH AUSTRALIA'S MURRAY-DARLING BASIN REGION 4-5 (2014).
bia and Colorado, these lines render the basins international, while across the board they are inter-indigenous and interstate. This modern geopolitical perspective subsumes an inherently temporal one. It speaks volumes about state-building agendas in Australia, Canada, and the United States over the past several centuries, and aggressive colonial processes through which the continents’ landscapes changed from exclusive indigenous territory. Water institutions have been instrumental to these processes. As revealed in Part II, it would be difficult to overstate the formative roles played by water laws, policies, and associated institutions in shaping the nation-states, and concomitantly manifesting unequal relationships into which Indigenous Peoples have been forced. Contrasting markedly with UNDRIP’s renunciation of discrimination against Indigenous Peoples, the basins’ overlapping histories convey a much different narrative regarding the water institutions’ state-building functions. Simply put, the basins share a legacy of “water colonialism.”

2. Deconstruction

Yet what constitutes “water colonialism”? Like “indigenous water justice,” the construct undoubtedly can be conceptualized in multiple ways. We consider it a “living” legacy in the Colorado, Columbia, and Murray-Darling basins, with constituent elements profoundly evident in both the past and present, as well as hugely formative of the future. While making no claim to exhaustive treatment, we survey these elements below.

a. Institutional Discrimination

Institutional discrimination has been, and continues to be, a core element of water colonialism in the basins. As gleaned from Part II, development of the basins’ respective water institutions—again, embedded within broader state-building agendas premised on cultural and racial superiority—generally occurred with little or no regard for Indigenous Peoples. Such discrimination can be seen in relation to water laws and policies (e.g., the Colorado River Compact’s “Wild Indian” article) as well as water projects (e.g., Dalles Dam’s inundation of the Celilo Falls tribal fishery).

Given their origins, the water institutions’ existence and composition predictably are skewed in two key ways. On one hand, prevailing colonial

390 UNDRIP, supra note 5, at pmbl. ("[I]ndigenous peoples, in the exercise of their rights, should be free from discrimination of any kind.").
391 Peter Jackson & Jane M. Jacobs, Editorial, 14 SOCIETY & SPACE 1, 3 (1996) (discussing the value of postcolonial studies for understanding “complex ways that the past inheres in the present”).
392 Colorado River Compact, supra note 149, at art. VII; HUNDLEY, supra note 161, at 211–12.
values and worldviews pertaining to water ("hydro-imaginar[ies]")—rather than those of Indigenous Peoples—have by and large spurred the institutions’ geneses and informed their makeup. The institutions embody these values and worldviews and thus are normatively skewed. In turn, functioning to realize the embodied values and worldviews on the basins’ landscapes and waterscapes, the water institutions have caused material skewing. Riverine landscapes have been substantially altered to a point where restoration to former conditions may not be possible, and, even if possible, aspects of institutional inertia addressed below pose major hurdles. The bottom line from a historical perspective is that colonial entities (governments, corporations, communities, etc.) have been primary recipients of the institutions’ material benefits, while Indigenous Peoples often have been subject to inequitable allocation rules, distorted funding and resource arrangements, and non-representation within water governance bodies and processes.

b. Inertia & Scarcity

None of the foregoing is a dead letter. Far from being static and downscaled, the basins’ water institutions have amassed considerable inertia over the past century—an element that speaks volumes about water colonialism’s contemporary character. This inertia exists in at least two forms. Part of it is inward-looking and concerns institutional accumulation. Put simply, the basin’s water institutions have spawned more of their own. This pattern can be seen with transboundary allocation instruments—e.g., the Upper Colorado River Basin Compact as progeny of the Colorado River Compact—as well as large-scale water infrastructure—e.g., incremental development of Columbia River Basin hydropower facilities. Institutions of both varieties have become more numerous, complex, and networked. An intertwined but outward-looking aspect of institutional inertia concerns stakeholder dependence and entrenchment, which involve quantitative and qualitative dimensions. The former concerns the scale of human populations whose interests have become linked to the water institutions (e.g., thirty-five to forty million people

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394 Sue Jackson & Marcus Barber, Historical and Contemporary Waterscapes of North Australia—Indigenous Attitudes to Dams and Water Diversions, 8 WATER HIST. 385, 395 (2016).

395 Jackson, supra note 322, at 130.


397 See McCool, supra note 160, at xiv–xix (providing comparative analysis of federal funding for Indian versus non-Indian irrigation programs during twentieth century).

398 Upper Colorado River Basin Compact, supra note 164; Colorado River Compact, supra note 149.

399 See WHITE, supra note 221, at 212 (chronicling hydropower development in basin).
have come to rely on the Colorado River Basin for municipal water). As for the latter, it speaks to how water allocated by the institutions implicates overlapping and reinforcing cultural, economic, environmental, political, and social values. Recent water policy reforms in the Murray-Darling Basin vividly illustrate this multi-dimensionality.

Scarcity is a related element of water colonialism implicit from the hefty contemporary reliance on the basins’ water institutions. In the course of operating as state-building instruments—i.e., as a reflection of the prevailing colonial values and worldviews they were devised to realize—the institutions have exacerbated conditions of resource scarcity in the basins and created formidable adaptation challenges as discussed below. Such scarcity pertains not only to water itself (e.g., over-allocation in the Colorado and Murray-Darling basins), but also to species and ecosystems (e.g., Columbia River Basin salmon runs). In both respects, the cultural, ecological, economic, and social changes experienced by Indigenous Peoples have been profound. Looking forward, climate change’s projected impacts portend even greater scarcity, including, but certainly not exclusively, in relation to water supplies.

c. Temporality, Adaptivity & Capacity

The temporal sequence evident from the material above marks a freestanding element of water colonialism. Its practical significance cannot be overstated for prospective reforms aimed at indigenous water justice. Among the basins’ water institutions are instruments on which Indigenous Peoples have relied, and continue to rely, in water-justice struggles. Reserved rights founded on Winters are a classic example for Colorado and Columbia basin tribes. The temporal difficulty is that, although these rights were secured by treaties or other agreements generally forged decades before foundational components of the basins’ water institutions appeared, the rights unfortunately were not asserted and recognized until after those components had originated and far-reaching dependencies and exclusions had taken hold. Consider Arizona v. California’s recognition in 1963 of the Colorado River Indian Reservation’s 1865 reserved right vis-à-vis the Colorado River Compact’s drafting in

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400 U.S. BUREAU OF RECLAMATION, supra note 134, at 1.
401 See generally Marshall & Alexandra, supra note 304, at 685.
402 See supra Parts II.A.1 and II.B.1.
1922 and Hoover Dam’s completion in 1936. Also worth reiterating are
the dozen tribal reserved rights claims in that basin still unaddressed.

The bottom line is that instruments oriented toward the basins’ Indigenous Peoples have relegated them to the status of late entrants, seeking and occasionally gaining footholds decades after foundational predecessors and water development have solidified.

And that raises the topic of adaptivity—an element of water colonialism critically important to attempts to transcend the legacy. Stated broadly, given the skewed nature and inertia of the basins’ water institutions, as well as the conditions of scarcity they have exacerbated, how capable are existing institutions of accommodating Indigenous Peoples’ needs and values, and what room is there for novel institutions to wrest back some control of water? This accommodation dynamic implicates considerations of flexibility versus rigidity in institutional design and adheres to water institutions across the board—e.g., allocation schemes, governance structures, and physical infrastructure. What adaptations might be required for existing or future institutions within these categories to promote water justice for Indigenous Peoples? This question calls for contextual responses, of course, but its existence and salience are the takeaway here. Water colonialism tees up institutional adaptivity as a crucial element posing stakes of the highest order—namely, Indigenous Peoples’ enjoyment of water justice and the diverse, rich water-related aspects of self-determination examined in Part I.

Yet approaching water-justice challenges facing the basins’ Indigenous Peoples as opportunities, and formulating and implementing measures to adapt water institutions to a post-colonial order, requires an indispensable ingredient: capacity. Rather than fostering Indigenous Peoples’ capacity, however, colonial legacies in Australia, Canada, and the United States—water colonialism and otherwise—have had the opposite effect. They have diminished it. This pattern can be gleaned throughout Part II’s narratives, including in relation to population size, natural resource base, health, hydrological and other essential knowledge, and political organization. These impacts have affected Indigenous Peoples in diverse ways—their ability to access water and more broadly—but colonialism’s multifarious, structural nature makes sense of

407 TECHNICAL REPORT C, supra note 123, at C-38.
408 See Jackson, supra note 322, at 122–23 (discussing and critiquing temporality dynamic).
409 An additional example comes from the Murray-Darling Basin, where water resources were classified as fully developed and in need of policies of retraction at the exact moment Australia recognized the existence of native title, and theoretically at least, a right to water. See supra Part II.C.2.
410 See supra Part I.B.
the overall pervasiveness and intensity.\textsuperscript{411} Diminished capacity is the final element of water colonialism to be deconstructed, and we transition from it on a tone of optimism inspired by the Indigenous Water Justice Symposium. What is needed in the path ahead is a "spiraling up\textsuperscript{412}" of Indigenous Peoples' capacity. The basins' indigenous confederations are a metaphorical lighthouse in this regard. And so is UNDRIP,\textsuperscript{413} which we now revisit.

B. Realizing Indigenous Water Justice: Principles & Prescriptions

Precisely how to realize indigenous water justice in the Colorado, Columbia, and Murray-Darling basins is, of course, a matter requiring much care and thought properly directed by Indigenous Peoples. The material below humbly aims to prompt dialogue and action. It revisits UNDRIP provisions introduced in Part I’s discussion of water and self-determination. As suggested there, these provisions embody a host of water-justice principles that reflect Indigenous Peoples’ input across three decades. Just as the right to self-determination serves as UNDRIP’s “umbrella principle,”\textsuperscript{414} so too do the water-justice principles serve as hubs for domestic water law and policy prescriptions. Our coverage of these principles and prescriptions is framed around two topics: (1) indigenous water rights, and (2) political partnership. Underpinning the whole discussion are our core views that UNDRIP constitutes an authentic, rich guide for overcoming water colonialism and promoting Indigenous Peoples’ water-related self-determination (i.e., indigenous water justice), and that Australia, Canada, and the United States should honor their endorsements of UNDRIP and dutifully implement it.

1. Indigenous Water Rights

We begin with the multi-faceted topic of indigenous water rights. UNDRIP articulates Indigenous Peoples’ rights to control, develop, own, and use water they possess by reason of traditional use or ownership or other means of acquisition.\textsuperscript{415} Nation-states bear reciprocal obligations (1) to afford “legal recognition and protection” to such water, and (2) to establish and implement “fair, independent, impartial, open and transparent” processes to recognize and adjudicate Indigenous Peoples’ legal rights pertaining to the water.\textsuperscript{416} Equally salient are Indigenous Peoples’

\textsuperscript{411} See, e.g., Jackson, supra note 322, at 129 (discussing structural nature of colonialism and justice).
\textsuperscript{412} Emory & Flora, supra note 242, at 19.
\textsuperscript{413} UNDRIP, supra note 5, at pmbl. (welcoming Indigenous Peoples' organizing for "political, economic, social and cultural enhancement" and to "end all forms of discrimination and oppression").
\textsuperscript{414} Stavenhagen, supra note 15, at 365.
\textsuperscript{415} UNDRIP, supra note 5, at art. 26(2).
\textsuperscript{416} Id. at arts. 26(3), 27.
rights to "recognition, observance and enforcement of treaties [and] agreements"—as they implicate Indigenous Peoples' legal rights to water—and to have nation-states "honour and respect" such instruments. These threshold principles of indigenous water justice inform several key, though certainly not exhaustive, prescriptions.

a. Delineation & Composition

We begin with a baseline: indigenous water rights should be delineated under domestic laws and policies. In the Colorado, Columbia, and Murray-Darling basins, the respective laws and policies of Australia, Canada, and the United States should distinctly recognize Indigenous Peoples' sovereign water rights. Further, these water rights should be composed equitably with regard to the types and amounts of water use permitted, both of which attributes should be informed by the history of particular Indigenous Peoples and their prospective needs for self-determination. We are mindful of the allocational implications of these prescriptions, including the prospect of reallocating water secured by indigenous water rights from parties that historically have relied upon it. It is unjust under the foregoing principles, however, to marginalize Indigenous Peoples by wholly depriving them of water rights, or by delineating water rights whose composition renders them meaningless for practical purposes.

Applied to the Colorado River Basin, perhaps the top priority stemming from these prescriptions concerns the dozen tribes whose sovereign water rights have yet to be delineated. As alluded to above, demand for water secured by these rights constitutes "a factor impacting Basin-wide water availability" according to the Bureau of Reclamation. The Arizona v. California Decree and twelve negotiated settlements formed to date clearly evidence that indigenous water rights exist under U.S. law. This latent existence should become a reality for the dozen tribes, at least insofar as they wish it to be. With regard to composition, the negotiated settlements offer valuable precedents, as they reveal tribes tailoring their water rights to allow for diversified water uses and livelihoods conducive to contemporary homelands.

Similar to the Colorado River Basin, the U.S. portion of the Columbia River Basin illustrates the delineation of indigenous water rights through both litigation and settlement. These pathways have resolved many existent rights, and those remaining should proceed similarly with one key caveat: state court adjudications of reserved rights under the

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417 Id. at art. 37(1).
418 Id. at C-38.
420 See supra Part II.A.2.
McCarran Amendment described above\textsuperscript{421} have not resulted in uniform treatment of tribes. This inequity warrants critical analysis and one of two ultimate outcomes: (1) reversal of the interpretation of the Amendment as extending to tribal reserved rights,\textsuperscript{422} or (2) elimination of the Amendment altogether.\textsuperscript{423} An additional legal issue related to off-reservation treaty fishing rights will be tabled until the discussion below on cultural and spiritual water uses.

As for First Nations in the Canadian portion of the Columbia River Basin, they face major delineation challenges. The federal and provincial governments have regarded native-title claims as just that—claims.\textsuperscript{424} Although recognized in 1973 as having survived European settlement,\textsuperscript{425} with such recognition and a consultation requirement set forth in the 1982 Constitution,\textsuperscript{426} the Canadian government continues to resist delineation of First Nations' water rights.\textsuperscript{427} Federal engagement in government-to-government relations with First Nations is essential. These processes should be informed by recent rulings determining: (1) consultation is integral, even before the scope of Native Title is delineated, and (2) the scope is circumscribed by Aboriginal understanding and practice of continuous use rather than by western notions.\textsuperscript{428}

Turning to the Murray-Darling Basin, and reiterating that Aboriginal peoples again are estimated to hold only 0.08% of the Sustainable Diversion Limit,\textsuperscript{429} two prescriptions are most notable. The first prescription relates to native-title and commercial resource rights. The 2013 High Court decision \textit{Akiba v Commonwealth}\textsuperscript{430} informed a recommendation by the Australian Law Reform Commission to amend the Native Title Act to...
reflect the concept of a widely framed right, capable of exercise for commercial or non-commercial purposes. This recommendation should be heeded. As for the second prescription, it concerns a policy model for acquiring indigenous water rights. Given agricultural over-allocation in the basin, we see promise in an Aboriginal Water Trust model advanced by indigenous leaders over a decade ago. It contemplates governments purchasing water entitlements from willing sellers and establishing a trust run by Aboriginal representatives to manage the entitlements for environmental or agricultural use. The composition of the basin’s existing water buy-back programs for environmental benefit bolsters this trust approach, which foreseeably would facilitate Aboriginal people making water-use choices.

b. Cultural & Spiritual Water Uses

Water is a source of identity and reverence—indeed, a living relation—within Indigenous Peoples’ cultural and spiritual traditions. These connections are elucidated in the preceding material. By UNDRIP’s terms, Indigenous Peoples possess several rights, including: (1) “the right to practise and revitalize” water-related cultural traditions and customs; (2) “the right to maintain and strengthen” spiritual relationships with water and to uphold intergenerational stewardship responsibilities; and (3) “the right not to be subjected to forced assimilation or destruction” with regard to water-related aspects of culture. Nation-states again bear reciprocal obligations. Our basic prescription per these provisions echoes the discussion above in a distinct way. Domestic laws and policies should enable Indigenous Peoples to hold water rights protective of the types of water uses associated with cultural and spiritual traditions (e.g., instream flows) and composed equitably in terms of permitted amounts of use and related features.

Looking at the Colorado River Basin through this lens, basin tribes often hold a much more inclusive view of what constitutes water use as it bears on water rights. Contrasting with the predominant non-tribal focus on commerce and commodification, tribes very well may regard water for sacred purposes, cultural preservation, and instream flows as more important. As explained by the Director of the Navajo Nation Human Rights Commission: “The Navajo world and cosmology are the funda-
mental basis for Navajo human rights. It extends not just to water, but to everything in nature. On this basis, the physical and metaphysical aspects of water use need to be appreciated cross-culturally by policymakers and water managers, with both treated as legitimate in domestic laws and policies. To this end, negotiated settlements should continue to be utilized to enable tribes to define and secure cultural and spiritual flows. The Zuni settlement in the Little Colorado River Basin is exemplary, providing water specifically for sacred purposes at the Zuni Heaven Reservation.

Two points should be made regarding cultural and spiritual water uses in the U.S. portion of the Columbia River Basin. First, notwithstanding the progress made with indigenous water rights described above, this trajectory has not extended to recognition of instream flows associated with off-reservation treaty fishing rights. Salmon are a sacred First Food and play an elemental role in the oral histories and spiritual lives of the basin’s Indigenous Peoples. It is a marked failure on the path to indigenous water justice that no court has been willing to hold that decimation of traditional off-reservation treaty fishing sites by dewatering violates those treaty rights. Second, as canvassed earlier, tribes in the U.S. portion of the basin have made laudable progress developing water quality standards under the CWA to protect ceremonial and religious uses. Federal assistance to continue these efforts, and to ensure adequate state standards for waters associated with tribal fisheries, should be increased.

In the Canadian portion of the Columbia River Basin, recognition of native title provides an avenue for negotiation of water rights that have not been delineated, especially those of cultural and spiritual concern for First Nations. In this way, the Tsilhqot’in decision has spurred evolution of domestic law at the global level, whereby Indigenous Peoples can leverage unreasonable delays in recognition of native title for negotiated settlements. Relevant to such negotiations, it should be highlighted that the Okanagan Nation Alliance developed a Critical Path Process for Columbia River Treaty renegotiations, wherein the federal government are observers, and the British Columbia provincial government has commit-

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438 Interview with Leonard Gorman, Executive Director, Navajo Nation Human Rights Commission (March 15, 2017).
441 Zuni Indian Tribe Agreement, supra note 439, at 3.
442 Pearson, supra note 215, at 71.
ted to principles of restoring salmon passage and valuing the meaningful ecosystem functions of all species. Future consideration of native title must consider these principles and counterparts through government-to-government negotiations among First Nations and the federal government.

With respect to the Murray-Darling Basin, two reforms to domestic laws and policies are warranted in this domain. First, greater attention needs to be paid to safeguarding Aboriginal peoples’ cultural and spiritual values when water development decisions are made with implications for indigenous water rights—e.g., dams, irrigation expansion—particularly impairment risks for native title. The Native Title Act should be amended to include water development and water-license issuance under the future acts regime so as to trigger the right to negotiate. Second, the importance of Indigenous Peoples’ worldviews and environmental philosophies need to be elevated in the very substantial allocation programs and scientific processes mandating direction of water to the environment. Experimentation with new forms of, and arrangements for, water management by Indigenous Peoples—e.g., concepts like “cultural flows”—illuminates the pressing need for mainstream water management to address Indigenous Peoples’ water-related cultural and spiritual aspirations.

c. Alienability & Water Marketing

Another fundamental feature of indigenous water rights involving the preceding principles is alienability. It is, of course, pivotal for water markets. On this subject, one of the most prominent themes we have encountered in our research is the tension among Indigenous Peoples between the concept of marketing water versus the sacredness of water that defies any attempts to price it and to alienate it from indigenous lands. While mindful and respectful of this divide, our view is that domestic laws and policies should allow Indigenous Peoples to engage in water marketing if they choose to do so. Further, Indigenous Peoples should be able to influence the rules governing water markets, especially safeguards.


446 Id. (counterparts include deeper fisheries mitigation, resolution of industrial-reservoir ongoing impacts, consistent processes from the Tsilhqot’in decision, and meaningful economic benefits).


448 See generally Finn & Jackson, supra note 363, at 1233.

449 SAVANNAH ORG., supra note 366, at 2.

The Colorado River Basin exemplifies the divide just noted. On one hand, many tribal members do not view water as a commodity that can be traded for financial gain. As described by one Hopi leader: “Our society is based on religion and water; we pray to the clouds, seas, rivers, lakes—any body of water, we pray to it. The prayer is not just for humans but for every living thing. Water should be free for everyone, not quantified, not given to certain cities.” Even water-marketing proponents are sensitive to this position. On the other hand, the Ten Tribes Partnership has emphasized the voluntary nature of water marketing and its perceived value in enabling tribes to utilize water rights to benefit members. Intertwined with these considerations is the view that the ability to engage in water marketing is fundamental to tribal sovereignty. Negotiated settlements have emerged in recent decades as vehicles for enabling basin tribes to engage in water marketing—albeit subject to conspicuous geographic limitations. Overall, this liberalization of tribal water rights should continue in our view, although fully subject to the autonomy of individual tribes.

As for the Columbia River Basin, the absence of water scarcity throughout much of the basin has kept tribal water marketing from being a basin-wide issue. However, on arid tributaries of the Snake and Yakima Rivers, where irrigated agriculture dominates, active water markets do exist and may become more important as climate change unfolds, based upon projections of increased water scarcity in these parts of the basin. For example, the Fort Hall Reservation of the Shoshone-Bannock Tribes participates in a water market along the Snake River that is operated through water banks. In the Canadian portion of the basin,

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451 Interview with Howard Dennis, Hopi Tribal Member (March 16, 2017).
454 Id.; Bovee et al., supra note 452, at 4.
455 COLORADO RIVER RESEARCH GROUP, TRIBES AND WATER IN THE COLORADO RIVER BASIN 4 (June 2016), http://scholar.law.colorado.edu/cgi/viewcontent.cgi?article=1177&context=books_reports_studies.
456 McCool, supra note 190, at 175 (“The loss of interstate marketing rights may well be the greatest tribal ‘give’ in the give-and-take process of negotiation.”).
457 See generally Barbara Cosens et al., The Columbia River Treaty and the Dynamics of Transboundary Water Negotiations in a Changing Environment: How Might Climate Change Alter the Game?, in WATER POLICY AND PLANNING IN A VARIABLE AND CHANGING CLIMATE: INSIGHTS FROM THE WESTERN UNITED STATES 194 (Kathleen Miller et al. eds., 2016).
alienability of water should be a consideration in future native-title negotiations.

Aboriginal people in the Murray-Darling Basin may find water marketing a promising pathway, but yet again substantial impediments exist under the native-title regime. For two reasons, the basin’s Aboriginal people have gained little satisfaction from native-title adjudications that should have confirmed their status as prior water users. First, significant evidentiary hurdles arise in proving the existence of native-title rights to land and water. Second, even if successful in proving the existence of such rights, rights holders are constrained in the uses to which the water is put, because a native-title right to take and use water for commercial purposes, including for trade, has not been recognized. Some Aboriginal groups hold water entitlements under state laws, and there is evidence from New South Wales that where Aboriginal landowners possess water entitlements obtained with land purchases, considerable interest exists in water trades for commercial, social, and environmental outcomes. The Nari Nari Tribal Council is a case in point. It trades high-security allocations to a neighboring farmer, and the payment received is put toward biodiversity conservation. A market-based pathway to re-balance water distributions will require state funding for water purchases. Without legal reforms to the native-title regime, however, such a course would leave intact threshold constraints on marketing and commercial gain posed by current restrictions on native title.

d. Infrastructure: Wet Water & Shared Benefits

A final thread growing out of the principles of indigenous water justice framing this material relates to water infrastructure. We offer two broad prescriptions. First, domestic water laws and policies should provide infrastructure funding to ensure that the indigenous water rights delineated and composed equitably on paper actually provide water to Indigenous Peoples holding those rights. Second, in situations where infrastructure (e.g., hydropower facilities) has adversely affected indigenous water rights (e.g., loss of fishing grounds), Indigenous Peoples should be able to share in the benefits provided by the infrastructure.

As alluded to in Part II, an ostensible “right” to water in the Colorado River Basin is often predicated on the existence of infrastructure that enables diversion and use. The settlement era gave rise to two contrasting terms in this vein: “wet water” versus “paper water.” While the former involves water that can actually be used under a water right, the latter consists of water ostensibly supplied by a water right that in reality cannot be

459 Jackson & Langton, supra note 358, at 112.
460 Id. at 112.
461 Id. at 117.
462 Id. at 117–19.
utilized. Realizing indigenous water justice in the basin will require an emphasis on wet water and infrastructure funding for water deliveries, water quality enhancements, and ecological restoration.

As just one illustration, forty percent of Navajos living on the reservation do not have access to piped drinking water or a sewage disposal system, and the estimated cost of building a water delivery system to all homes on the reservation is $600 million. In light of its trust responsibility, we suggest the federal government should cover infrastructure costs in such situations. Part of our rationale stems from the massive federal outlays historically expended on water projects in the basin primarily or exclusively benefiting non-tribal parties. In line with the temporality discussion above, the federal government authorized and built those projects in circumstances where recognition and quantification of tribal water rights were matters largely unaddressed. Times have changed, and will continue to change, in this respect, with more tribal water rights being delineated and more tribes eager to exercise those rights. It would be egregiously unjust in this posture for the federal government to withhold funding for the very instruments needed by tribes to finally enjoy wet water. Yet again, we highlight negotiated settlements as vehicles for providing federal funding for tribal infrastructure. Such funding should continue to account for damages caused by the trustee’s failure to protect tribal water rights over the course of water development—a federal policy since 1990.

Although water rights settlements in the U.S. portion of the Columbia River Basin have included funding for infrastructure, including water treatment and distribution systems (Nez Perce), benefit sharing from infrastructure that has damaged tribal water rights, such as instream flows necessary for treaty fishing grounds, has not yet been a consideration. This situation needs to change. Despite the fact that dams have drowned usual and accustomed fishing grounds like Celilo Falls, tribes do not currently share in the benefits or employment of the resulting hydro-power production. As alluded to earlier, the lone exception is the Confederated Salish and Kootenai Tribes of the Flathead Nation, which

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463 McCool, supra note 190, at 101.
464 Interview with Jason John, supra note 212.
465 Id.
466 McCool, supra note 190, at 54, 61.
468 MEDIATOR’S TERM SHEET, supra note 253, at 1.
made a successful bid for a hydropower license on a dam that flooded sacred ground. Benefit sharing similarly should be a priority in any U.S.-Canadian renegotiations of the Columbia River Treaty.

A similar perspective applies to the Canadian portion of the Columbia River Basin, where the Okanagan Nation has not surrendered its title, rights, or interests over large tracts of land. “Aboriginal title includes the vesting of full and beneficial economic interest in the land” to the group that holds it, and consent is required under Tsilhqot’in for the Crown or industry to use that land. First Nations have not consented to the current Columbia River Treaty, and although they have felt irreversible negative impacts, no benefits have flowed to compensate them for losses. First Nations are calling for treaty renegotiations to be rooted in consent and collaboration to address “habitat loss, flooded lands, and the blocking of salmon.” Overall, this concept of benefit sharing associated with delineation of new rights, and conferral of compensation for damaged rights, should be a consideration in any future negotiations involving indigenous water rights in Canada.

Turning to the Murray-Darling Basin, although infrastructure efficiency has been integral to rebalancing water use and the goal of a Sustainable Diversion Limit, little attention has been paid to two salient priorities: (1) evaluating infrastructure needs of those Aboriginal people holding water entitlements, and how these needs might differ if commercial rights to water were secured, and (2) formulating practical responses to meet the particular infrastructure needs. These priorities reflect water-justice gaps that should be addressed. Those few Aboriginal landowners who are eligible to apply for very small volumes of water under legislation in New South Wales, for example, are unable to utilize that water and direct it to preferred wetland sites due to a lack of infrastructure—i.e., pumps and pipes. To meet these needs, water authori-
ties should consider assisting Aboriginal people to share in common infrastructure such as mobile pumps. Interest in new organizational responses to infrastructural problems such as this one highlights the emerging capacity among Indigenous Peoples for problem solving and collaboration in water governance. That is the critical area we consider next.

2. Political Partnership

With respect to procedural and participatory principles of indigenous water justice, a basic statement rooted in UNDRIP summarizes: Indigenous Peoples should be capacitated and possess a seat at the table in regard to water governance. As detailed earlier, UNDRIP recognizes Indigenous Peoples’ right to autonomy over water-related internal matters—"as well as ways and means for financing their autonomous functions"—and likewise obligates nation-states to establish and implement assistance programs for Indigenous Peoples for water-related conservation and environmental protection."\(^\text{477}\) UNDRIP also articulates Indigenous Peoples’ broad participatory rights and nation-states’ obligations pertaining to consultation, cooperation, and free, prior, and informed consent.\(^\text{478}\) These obligations adhere to water projects and water-related "legislative or administrative measures" that may affect Indigenous Peoples.\(^\text{479}\) Political partnership is a foundational concept reflected in these provisions. Indigenous Peoples should be regarded as partners within the broader political systems of nation-states like Australia, Canada, and the United States. Our non-exhaustive prescriptions below reflect this relationship.

a. Autonomy & Capacity

There is an obvious inward-looking dimension to the foregoing principles and concept of partnership. Per this orientation, our overarching legal and policy prescription is straightforward: Indigenous Peoples should enjoy autonomy over internal water management as desired, and nation-states should provide Indigenous Peoples with capacity-building funding and resources. The level of funding and resources should reflect both the complexity of water governance as well as the previously discussed colonial diminution of indigenous capacity.\(^\text{480}\)

Colorado River Basin tribes have enhanced their autonomy over and capacity for water governance in a variety of ways in recent decades, and federal funding and resources should enable continuation of this pattern in line with the preceding principles and prescriptions. Several examples are illustrative. Recall from Part II the Ten Tribes Partnership’s genesis in

\(^{477}\) UNDRIP, supra note 5, at arts. 4, 29(1).

\(^{478}\) Id. at arts. 5, 18, 19, 32(2).

\(^{479}\) Id. at arts. 19, 32(2).

\(^{480}\) See, e.g., Jackson, supra note 322, at 122, 129–30.
It was motivated by a desire "to assist member tribes to develop and protect tribal water resources and to address technical, legal, economic and practical issues related to the management and operation of the Colorado River." Similarly devised is a Tribal Water Systems program developed by the Inter-Tribal Council of Arizona in 1983. It aims to "[b]uild Tribal capacity in operating, maintaining, and managing sustainable drinking water and wastewater systems"—to improve compliance with the CWA and Safe Drinking Water Act—and harnesses expertise from several federal agencies. The ongoing tribal study by the Ten Tribes Partnership and Bureau of Reclamation reflects an analogous arrangement. And basin tribes' development of water codes also must be highlighted (e.g., Navajo Nation's code). All told, federal funding and resources should continue to facilitate these types of autonomy and capacity-oriented efforts.

While more must be done in the Columbia River Basin, the historical results of capacity building among Indigenous Peoples there are themselves a statement to the critical role of autonomy and capacity in self-determination. Autonomy over internal management and allocation of water generally has been part of delineating reserved rights through settlements or litigation in the U.S. portion of the basin. It also will need to be considered in future native-title negotiations in Canada. Settlements have funded development of tribal water agencies and codes (Fort Hall, Nez Perce, Warm Springs) as well as a joint tribal-state management entity. Development of governance capacity, however, has received considerably less attention. The greatest success has been with treaty fishing rights in the United States. Judicial recognition of those rights, coupled with mitigation funds from ESA listing of salmon and steelhead species, has resulted in substantial capacity building among tribes whose rights were recognized. While the same level of capacity does not exist in Canada, the Okanagan Nation Alliance is widely known for their fisheries

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481 Ten Tribes Partnership, supra note 198.
482 Id.
484 Id.
485 TRIBAL STUDY, supra note 209, at 2.
487 See generally Native American Water Rights Settlement Project, supra note 195 (listing settlements).
489 See generally Cosens & Chaffin, supra note 241 (discussing capacity building).
science, and cross-border capacity building among Indigenous Peoples has begun. Overall, this pattern shows how delineation of rights alone is insufficient to guarantee their exercise among Indigenous Peoples whose capacity has been diminished over generations from colonization. Facilitating capacity building to overcome that disadvantage is an essential task for the U.S. and Canadian governments.

The Murray-Darling Basin experience likewise reveals the crucial need for autonomy and capacity as prerequisites to effective and equitable water governance in settler states. Indigenous Peoples involved in the formation of MLDRIN and NBAN—the indigenous confederations identified above—engaged in processes enhancing their capacity to assert rights, to develop policy positions, and to resolve intracommunity issues, rather than having states determine terms of engagement flowing from the imposition of policy frameworks. The Echuca Declaration, for example, reflects the positions developed and endorsed by MLDRIN when the landmark Water Act 2007 was passed. The declaration defined the notion of “cultural flows,” attracting much interest in Australia’s water sector and beyond, and catalyzing dialogue about implementation tools. The declaration calls for the federal and state governments to “identify funding and non-monetary mechanisms for the allocation of the water entitlements to the Indigenous Nations,” and to “[s]eek the consent of the Indigenous Nations in respect of any proposed restriction on cultural flow outcomes.” Ultimately, the MDBA’s sustained commitment to resource Aboriginal organizations to formulate policies, to articulate policy views, and to increase technical capacity will need to increase in quantum if these confederations are to continue to build platforms for collaborative engagement.

b. Consultation, Cooperation & Consent

Moving from the internal realm to the broader political systems of nation-states, Indigenous Peoples should be able to participate as equal partners in decision-making bodies and processes addressing water management and planning. Nation-states should fulfill obligations articulated in UNDRIP to consult and cooperate with, and to obtain free, prior, and informed consent from, Indigenous Peoples regarding water projects and water-related legislative and administrative measures that may affect them. In this vein, it should be highlighted that by UNDRIP’s express text, meaningful consultation with Indigenous Peoples cannot be equated

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491 See SAVANNAH ORG., supra note 366, at 1, 5; Perry, supra note 370; Letter from Cheryl Buchanan, supra note 371.
492 SAVANNAH ORG., supra note 366, at 1.
493 Id. at 2.
494 Id. at 4.
literally with conferral of free, prior, and informed consent from Indigenous Peoples. The distinction between these two concepts deserves consideration beyond the scope of this Article. As an incremental, pragmatic matter, however, nation-states emphasizing meaningful consultation as a pathway for arriving at “free, prior and informed consent”\textsuperscript{495}—or, alternatively, as a substantive surrogate for it\textsuperscript{496}—need to give due attention to the procedural integrity and implementation consistency of governing domestic laws and policies.\textsuperscript{497} Overall, these general prescriptions are interconnected with their predecessors regarding autonomy and capacity, as the extent to which Indigenous Peoples possess such attributes inherently bears on the quality of their engagement in consultative, cooperative, and consent-oriented processes. In both respects, indigenous confederations have proven to be valuable institutions.

Forging the proper governance relationship between tribes and federal, state, and local governments in the Colorado River Basin has been a long struggle, with the federal government formally developing the concept of tribal consultation in recent years.\textsuperscript{498} Resolving the complex and often contentious water management issues in the basin will require that tribes be treated as equal partners at the negotiating table and active participants in decision-making processes. This parity of representation has yet to be achieved due to the Law of the River’s colonial legacy—i.e., heavily skewed prioritization of non-tribal interests. That said, the Ten Tribes Partnership’s formation and activities reflect a trend that many, including the authors of this Article, hope and expect will escalate—namely, increased tribal confederation and engagement to strengthen tribal influence over Colorado River management.\textsuperscript{499} Basin tribes’ involvement (albeit limited) in developing the 2007 Interim Guidelines is also notable in this area.\textsuperscript{500} So, too, are tribes’ diverse, persistent efforts to

\textsuperscript{495} See UNDRIP, supra note 5, at arts. 19, 32(2) (calling for good-faith consultation and cooperation “in order to obtain free, prior and informed consent”).

\textsuperscript{496} See, e.g., ADVISORY COUNCIL ON HISTORIC PRES., supra note 41, at 5 (construing free, prior, and informed consent provisions as calling for “meaningful consultation with tribal leaders, but not necessarily the agreement of those leaders, before the actions addressed in those consultations are taken.”).

\textsuperscript{497} See End of Mission Statement, supra note 8, at 3, 7 (discussing issues of procedural integrity and implementation consistency in relation to U.S. domestic laws and policies).


\textsuperscript{499} Ten Tribes Partnership, supra note 198; Tribal Leaders Water Policy Council, INTER TRIBAL COUNCIL OF ARIZ., http://itcaonline.com/?page_id=3076.

negotiate and implement water rights settlements. Prospective mobilization, empowerment, and participatory inclusion of these sorts are a linchpin for realizing indigenous water justice in the basin.

A similar perspective applies to the Columbia River Basin. Regarding the Columbia River Treaty, the position of U.S. tribes and Canadian First Nations is that Indigenous Peoples' governments must have a seat at the table in negotiation and implementation of any new or modified instrument. It remains to be seen if this aspiration will be realized—hopefully so—but its articulation alone reflects, procedurally and substantively, a compelling precedent. Also worth reiterating with respect to mobilization, empowerment, and participation are the indigenous confederations that have emerged on both sides of the international border: CCRIF, CRITFC, Okanagan Nation Alliance, UCUT, and USRT. CRITFC, in particular, represents the pinnacle of participation in fisheries co-management by tribal governments at the domestic level. Considered one of the most sophisticated fishery science and policy entities in the basin, it is difficult to imagine any major decision being made without CRITFC at the table. This status is not shared by other indigenous confederations at present, but such a prospective rise also reflects the path of indigenous water justice within this basin.

In the Murray-Darling Basin, MLDRIN and NBAN—again, indigenous confederations together representing forty-six Aboriginal Nations—cannot go unmentioned from a mobilization, empowerment, and participatory standpoint. Yet much work remains. First, Australian water laws should be amended to afford Aboriginal people a right to participation in decision-making bodies such as water management committees and advisory groups. Second, as suggested earlier, the Native Title Act should be amended so that water development projects, and regulatory actions pertaining to water, trigger the right to negotiate held by native-title parties. Finally, Indigenous Peoples' participation in water management should be facilitated by establishing indigenous water management units within state water agencies, as has been done in two states of the basin. Secure, long-term funding should be afforded these entities to promote effective representation of Indigenous Peoples' interests.

501 See Worster, supra note 191, at 298; Mission and History, supra note 172; Mccool, supra note 190, at 25–44.
502 Common Views, supra note 263.
503 See supra Part II.B.2.
504 Welcome to the Northern Basin Aboriginal Nations, supra note 379.
505 Tan & Jackson, supra note 316, at 134–35.
506 Negotiation, supra note 447.
507 Katherine Selena Taylor et al., Australian Indigenous Water Policy and the Impacts of the Ever-Changing Political Cycle, 19 Australasian J. Water Resources L. & Pol'y 132, 140 (2017). Due to a lack of federal funding, New South Wales recently closed down its Aboriginal Water unit, absorbing staff into the mainstream water department. Id.
It is ultimately this external dimension of political partnership—Indigenous Peoples’ mobilization, empowerment, and participation within nation-states’ broader political systems—that concludes our discussion of principles and prescriptions aimed at realizing indigenous water justice. Rooted in UNDRIP’s provisions, the dense, interlaced material above pertains to the three basins under consideration and elsewhere, and prompts the need for summation.

IV. CONCLUSION

“What matters far more than words—what matters far more than any resolution or declaration—are actions to match those words.” President Barack Obama made this remark upon announcing the United States’ support for UNDRIP at the second White House Tribal Nations Conference in 2010—a position reversal shedding the country’s then loneholdout status. In its action-oriented nature, the remark echoes a perspective conveyed one year prior by former Special Rapporteur Stavenhagen: “[h]ow to make the Declaration work is the challenge that we now face.” The implementation of laws is one of the principle stumbling blocks in the long, painful process of getting human rights to work for people,” described Dr. Stavenhagen presciently, and “[t]his will be no different regarding the implementation of the Declaration.” Water is, of course, only one subject to which these comments adhere. But its essentiality and connectivity, for human beings and all life forms, make it a fundamental grounding point. It is this particular space to which this Article has sought to contribute.

Our precise focus has been on indigenous water justice—or, put differently, on UNDRIP’s implementation in domestic water law and policy. Water holds deep, pervasive significance for Indigenous Peoples’ self-determination—i.e., to the overlapping socioeconomic, cultural, and political dimensions associated with the exercise of that right as a peremptory norm of international law. Stemming from the right to self-determination, UNDRIP’s provisions governing Indigenous Peoples’ rights to lands, territories, and resources, cultural identity, and self-governance and political participation establish authentic, robust norms that bear directly on Indigenous Peoples’ struggles for justice in relation

This occurrence bolsters our prescription regarding secure, long-term funding for such entities.

509 Id.  
510 Stavenhagen, supra note 15, at 355 (emphasis omitted).  
511 Id. at 367.  
512 ANAYA, supra note 53, at 97.
to water. Although not unique in their common legacies of water colonialism, the Colorado, Columbia, and Murray-Darling basins have been recurring sites for such struggles commensurate with state-building processes over the past several centuries. As described earlier, UNDRIP is a valuable anti-colonial tool moving forward. Its provisions anchor water-justice principles, and derivative prescriptions for Australian, Canadian, and U.S. water laws and policies, that should inform prospective approaches to (1) indigenous water rights (i.e., their existence, composition, solicitude for cultural and spiritual traditions, alienability, and relation with infrastructure), and (2) political partnership (i.e., Indigenous Peoples' water-related autonomy, capacity, and external relations). Our commentary on these topics is non-exhaustive, dialogue-promoting, and undergirded by our basic thesis: domestic water laws and policies should evolve to achieve indigenous water justice.

That sounds our closing note. At the foundation of the preceding discussion in its entirety lies an intergenerational re-constitutive process aptly labeled "belated State-building." That is what the realization of indigenous water justice—and thus the exercise of Indigenous Peoples’ right to self-determination vis-à-vis water—ultimately entails: "construction of a new relationship between indigenous peoples and the State under terms of mutual respect, encouraging peace, development, coexistence and common values." Decolonizing water obviously constitutes only one proverbial tributary of this expansive river system—and a tributary whose flow rate and meandering channel may at times render a haven the words of Martin Luther King, Jr.: “the arc of the moral universe is long, but it bends toward justice.” These words light the path we commend to our fellow human beings. Perhaps no richer account of it can be offered than articulated by Oren Lyons, a Faithkeeper of the Turtle Clan of the Seneca Nations, in relation to the Haudenosaunee (Iroquois Confederacy):

We must look back and recognize those that sacrificed for us seven generations ago so that we may have what we have today. . . . We must look forward and keep firm the standards they set for us, and continue to fight for the seventh generation coming. Our work represents peace for them. When they read and experience this Declaration on the Rights of the World’s Indigenous Peoples and experience their right to self-determination, in the full sense of the word,

514 Montes & Cisneros, supra note 21, at 156.
equal to all under law, they will think kindly of us and sing songs about us, because they will know that we loved them."