

## Indigenous water histories I: recovering oral histories, interpreting Indigenous perspectives, and revealing hybrid waterscapes

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This special issue attempts to shed new light on salient but neglected aspects of water history, “Indigenous water histories.” In this first of two journal issues dedicated to this topic, we present five articles that are pertinent to three themes that *Water History* has not entirely or substantially dealt with before: the use of oral history, the interpretation of indigenous perspectives, and the emphasis on the hybrid/divergent aspects of waterscapes. Readers, however, will see that these new themes are largely complementary to the most popular topics this journal has explored before, such as the histories of reclamation projects, water distribution, management, pollution, and politics.

Geographically, this collection offers a broad coverage of Indigenous water issues by encompassing cases from the United States (U.S.), Mesoamerica, eastern Timor Leste, and northern and western Australia. Valoree S. Gagnon traces the changes and continuity of *Ojibwe Gichigami* (Ojibwa’s Great Sea) water narratives and fishing rights among the Keweenaw Bay Indian Community in Michigan, the U.S. Teresa Cavazos Cohn and her coauthors discuss changes in riparian plants and landscapes in the Wind River watershed of Wyoming, the U.S., and the implications of these changes for the Eastern Shoshone and Northern Arapaho Tribes. The focus of these two articles on water history germane to fish and plants should be new for readers of *Water History*.

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This collection is also rich with cultural perspectives. Liana Jiménez Osorio and Emmanuel Posselt Santoyo introduce readers to the ancient but persistent “rain god” ceremonies in the region of Mixteca Alta of Oaxaca, Mexico. Sue Jackson and Marcus Barber illustrate the enduring Australian Aboriginal social struggles over dams and diversion projects in four case study areas: the Roper River in the Northern Territory, Pilbara and the Ord River in Western Australia, and the Gilbert River in Queensland. Lisa Palmer examines the historical dynamism of Indigenous waterscapes in Baucau, Timor Leste. The articles on Timor Leste and Oaxaca may remind some readers of the very first volume of *Water History*, which introduced Evy Johanne Håland’s article (2009) about ancient Greece’s water rituals at springs in caves.

Overall, the examination of all these disparate geographical areas and cultural perspectives will expand our historical and geographical understanding of physical/meta-physical interactions between people and water. It will also enhance readers’ knowledge about Indigenous water histories that have taken under the European colonization as well as Western forms of water laws and economic development schemes. In this introductory essay, we offer some of our interpretations about how these five articles use oral histories, interpret Indigenous perspectives, and reveal the complexity of waterscapes.

## Recovering oral history

One of the most distinctive aspects of these five articles is their substantial coverage of Indigenous perspectives through the use of oral histories and participatory observation. Although some history researchers have been dubious about the reliability of oral evidence and have relied mostly on documentary sources (Ray 2011; Miller 2011), the authors in this volume convincingly demonstrate that oral evidence does play crucial roles in exploring and better understanding Indigenous peoples’ perspectives on the histories of water and waterscapes.

Palmer shows that the process of conducting field research and collecting oral evidence are not so different from documentary investigation in libraries or archives. In her article of this collection, she calls this field research, “curating local history.” In eastern Timor Leste, the local authorities such as *lia na’in* (custodians of the words) and *bee na’in* (custodians of the water), as well as some important ceremonial sites and landscapes, are holders or custodians of the archives of local history; and it is up to local historians or traditional knowledge holders to carefully observe and interpret the meaning behind these unwritten rich sources of information. This point may remind some readers of what Keith H. Basso discussed about Apache people’s “place-making,” in which a shared human history is constructed and reconstructed by revealing and affirming cultural meanings to places in the southwestern part of the United States (Basso 1996).

By recounting the oral stories of Indigenous water relations, the authors of the five articles in this collection demonstrate a measure of discontinuity and disconnection with cultural practices involving water and traditional governance practices, some of which relate to consequences of colonialism. Jackson and Barber’s case study on the Ord River Irrigation Project exemplifies the destruction of culturally and economically significant sites, including graves and hunting grounds. The authors introduce oral testimonies of local Aboriginal people who recollect what happened after the inundation of their place in the 1960s and the 1970s.

Gagnon's case study on the Keweenaw community similarly illustrates Indigenous people's experience in the twentieth century regarding the treaty rights struggle for fish. This struggle met with a severe blow when the Michigan Supreme Court ruled in 1930 that the Keweenaw people were subject to the State's fishing regulations, convicting some Ojibwa fishermen as a result. In 1970, the Keweenaw people were successful in having the same court overturn this 1930 decision in favor of their treaty rights, but they soon faced chemical contamination of water and federal government's fish consumption advisories. The Ojibwa testimonies show that the imposition of these advisories meant another form of colonialism that marginalized Indigenous decision-making power over traditional fishing.

Another cause of discontinuity and disconnection were the changes in the riparian environment. Cohn's detailed survey of riparian plant changes in the Wind River watershed shows that riparian forests in the 170 km long study area experienced 18% decrease from the late 1940s to 2006. This result was confirmed by residents' observations. In Cohn's interviews, Arapaho and Shoshone people on the Wind River Reservation emphasized the noticeable decline of culturally and economically important plants, such as berry bushes and willows. These Indigenous people also noted a significant increase of invasive species, such as Russian olive. In northern Australia, Jackson and Barber found that the invasive species, such as water buffalo, cattle, and horses, disrupted much of Aboriginal traditional livelihoods. Significant ecological changes were some of the major causes of conflicts between Indigenous and non-Indigenous water users.

## Interpreting indigenous perspectives

What is important, then, to better observe and interpret an Indigenous water history is to clarify the entangled connections and relations between Indigenous peoples and waterscapes as well as the continuities and discontinuities of Indigenous peoples' knowledge and practices. As Fixico (2003) points out, these connections and relations are often far from linear or hierarchical, but rather are circular or multi-layered, and may include plants, animals, landscapes, and supernatural beings. King (2003) additionally emphasizes the cross-generational aspects of these connections as revealed through oral narratives.

The oral histories that are incorporated in the five articles of this volume similarly indicate umbilical connections between the Indigenous peoples and water. Gagnon demonstrates that the Keweenaw Bay Indian Community have persistently claimed their traditional authority to govern fishing activities and access to water. Their testimony declared that the protection of life of the water is the essence of survival for them physically and spiritually. The community's tribal water code explicitly recognizes water as lifeblood. In discussing case studies in Australia, Jackson and Barber similarly demonstrate that Aboriginal peoples of Australia regard waterscapes as living entities, and the development of a dam at Pilbara, for example, was regarded as an assault to the vitality of their ancestral grounds and history. Within these worldviews Indigenous peoples often describe themselves as custodians or stewards, representing the voice of non-human beings, including water and fish (Jacobs 1998).

Indigenous peoples in these articles also draw upon ancient and authoritative narrative sources to explain their historically rooted connections and relations to water. Some important water sources, such as springs, are manifestations of culturally significant ancient ancestral beings. Jackson and Barber introduce the idea of Aboriginal "Dreaming" that often illustrates how waterscapes took shape. The motif of giant rainbow serpents

widely appears in Aboriginal Dreamtime stories that pertain to the formation of waterscapes (Berndt and Berndt 1989). In a similar vein, Jiménez Osorio and Posselt Santoyo show the central roles *Vehe Davu* or “House of Rain God,” which are manifested in sacred rocks and caves, play in connecting Indigenous peoples to the ancient rain god. The Ojibwa people in the Keweenaw Bay community have the annual ceremony called “Breaking of the Water” to respect *Gichigami* or Great Spirit and open the fish harvesting season each spring.

In order to maintain these important connections to water, Indigenous peoples have established traditional stewardship through ceremonies and communal events. Palmer argues that water springs in Timor Leste are “ritual hubs and medium” for those local people to be connected to ancient authorities that govern water. Clan-based elders, *lia na'in*, and *bee na'in* have traditionally held responsibilities for carrying out sacred ceremonies. In the Mixteca region of Oaxaca, especially the Yuta Nduchi area, designated “wise ones” have organized rain god festivities. In Keweenaw Bay, Ojibwa women as the “Keepers of the Water” are the main participants of “Breaking of the Water,” and have played major roles in establishing connection to the spiritual and ancestral world. On the Canadian side, Ojibwa women in Ontario have played important roles in managing resources in water, such as growing wild rice by controlling access to harvesting sites and enhanced productivity (Moodie 1991).

Indeed, so-called hunter-gatherers have not been simply the passive harvesters of natural resources but quite active participants of environmental governance. Jackson and Barber show that Aboriginal people near the Elsey Station of the Northern Territory traditionally created a water storage dam, which, in the early twentieth century, was used also by ranchers and re-fashioned to serve environmental restoration purposes. Other studies of Indigenous uses of water have confirmed these types of management practices. For example, Indigenous peoples in other parts of Australia and other countries such as British Columbia, Canada, engineered structures to capture fish and other aquatic life (Harris 2001; Weir 2009).

Through painful experiences under colonialism and the marginalization of traditional systems of water governance, Indigenous peoples have attempted to institutionalize their efforts to protect their rights and regain traditional connections to water and its resources. One good example readers will see in this volume is Gagnon’s discussion about initiatives the Keweenaw Tribal Council has taken since the 1970s. In 1989, for example, the Council joined the Great Lakes Indian Fish and Wildlife Commission to collaboratively ensure the treaty rights with other tribes in Michigan, Wisconsin, and Minnesota. Similar kinds of regional inter-tribal Indigenous organizations emerged in the 1960s and the 1970s such as the Union of British Columbia Indian Chiefs, the Council of Energy Resource Tribes, and the Métis National Council. Tribes in the U.S. and Canada’s First Nations have collectively issued their water codes or statement, basically emphasizing the life-giving quality of water and Indigenous peoples’ responsibility for protecting it as stewards.

## Revealing hybrid waterscapes

Another important theme of this collection lies in the discussion about the hybridity or heterogeneity of waterscapes. Here the authors in this volume seem to have somewhat different ideas about waterscapes. In discussing the changes in the Wind River watershed, Cohn and her coauthors define the waterscape as a divergent physical space that

experienced changes through such reclamation activities as storage dam, diversion, and channelization as well as ensuing altered water cycles. Jackson and Barber similarly focus on the rivershed environment as their waterscapes, but they place discussion within environmental, socio-political, and spiritual contexts. Palmer focuses on groundwater and recognizes the agency of subterranean water sources, such as springs, in her discussion about waterscape. Jiménez Osorio and Posselt Santoyo place the waterscape within a religious/ceremonial context. Gagnon's waterscape encompasses the fishing space in Lake Superior within cultural and legal contexts. These somewhat disparate definitions partly owe to how waterscapes are placed in their discussions. Some explore how waterscapes as agents have nurtured changes. Others examine how Indigenous peoples have endured changes within a waterscape.

Putting all these together in this Indigenous histories volume, we may additionally remind readers of what Langton (2002) defines in her earlier study about Indigenous waterscapes. She suggests that Indigenous waterscapes embody ancestral affiliations or kinship connections within physical, social, legal, and spiritual contexts. Although the authors in this volume do not solely focus on Indigenous waterscape, Palmer, Gagnon, Jiménez Osorio and Passelt Santoyo place it within a historical context of Indigenous–non-Indigenous relations. They also emphasize the agency and resilience of Indigenous waterscapes despite the centuries of emasculating colonial experience.

As to the discussion of hybridity or divergence, this journal issue may additionally pose the fundamental question that historians and others have debated for a long time. For example, scholars and the public in Australia, Canada, and the U.S. have defined and redefined the ideas of mosaic, hybridity, divergence, or melting pot in portraying the diversifying social outlook of these countries since the 1950s and 1960s when the notion of multiculturalism gained some importance. In a similar vein, whether or not a waterscape has taken shape as mosaic, hybrid, or melting pot can stimulate intriguing discussion about how water historians examine waterscapes. In this journal issue, Cohn and her coauthors use terms like the cultural-ecological mosaic and the “heterogeneous nature of change across space and time and across complex cultural geographies.” They focus on divergent aspects of a waterscape, in which the Eastern Shoshone, Northern Arapaho and Euro-Americans existed with different economic activities. Jackson and Barber use the term “hybrid socio-nature” to describe Indigenous water struggles in the face of economic, cultural and social changes and their ideological drivers. Here different players, such as Indigenous peoples, rivers, and non-Indigenous peoples, within waterscapes appear to have some interactions and shared experience. Gagnon also shows that the struggle for fish in the Keweenaw Bay community since the early twentieth century meant not only the diversification and assimilation of livelihood patterns, but also emerging/reemerging sense of sovereignty and sacredness of water. Thus, the Ojibwa's waterscape is influenced by the people's sense of responsibility as stewards of water.

Another important feature of hybridity or heterogeneity that emerge from the five articles in this volume is related to the composition of oral histories about waterscapes. Testimonies or recollections that are cited are not only focused on the physical changes in waterscapes. Within an Indigenous testimony about changes in waterscapes, readers can find stories about the consequences of colonialism and the observation of depleting resources that are interwoven with poignant expressions of cultural and emotional attachment. In the article by Barber and Jackson, for example, Indigenous people tell stories about how they used to hunt and gather in a specific waterscape. These stories are intermixed with their grievances of displacement and marginalization because of some reclamation projects. Readers can find similar statements by the Eastern Shoshone and

Northern Arapaho about their historical relations to the Wind River watershed and its plants. In the Indigenous stories Palmer and Jiménez Osorio and Posselt Santoyo introduce the reader to, the influence of Christian missionaries appear as either/both acculturated or/and destructive agent.

## Conclusion

For Indigenous people written about in this journal issue, waterscapes may embody living entities or “lifeblood,” ritual hubs and medium to the ancient mythic world, and/or sources of struggle for sovereignty and self-government. As they do not exclude non-Indigenous peoples or non-human life, their waterscape stories are not culturally or socially homogeneous but rather are heterogeneous. There are some shared experience among Indigenous peoples, the natural environment, and non-Indigenous peoples as hybrid, although Indigenous peoples do emphasize the distinctiveness about their connections to their land and waterscapes. In short, in order to better understand the history of Indigenous peoples’ relationships with water and waterscapes, one should consider the inclusive and dynamic aspects of traditional worldviews.

From reading these five articles, the editors of this issue hope that readers will experience another potentially expandable horizon for better understanding water histories. In historical studies at large, oral history has gained recognition since the 1990s, but this genre has not included much discussion about the relationship between Indigenous peoples and water. Participatory research has not yet gained much popularity in understanding water history, and here the authors in the five articles of this collection, including geographers, anthropologists, archaeologists, and environment policy specialists, have made valuable contributions. Moreover, the combination of oral histories and waterscape analyses can shed new light on not only Indigenous peoples’ roles but also intertwined relations between cultures, creatures, and other creations surrounding water.

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