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Tribal Water Rights: Exploring Dam Construction in Indian Country

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Introduction – Tribal Environmental Public Health

The environment, particularly, land and water, play a powerful role in sustaining and supporting American Indian and Alaska Native communities in the United States. Not only is water essential to life and considered — by some Tribes — a sacred food in and of itself, but environmental water resources are necessary to maintain habitat for hunting and fishing. Many American Indian and Alaska Native communities incorporate locally caught traditional subsistence foods into their diets, and the loss of access to subsistence foods represents a risk factor for food security and nutrition status in indigenous populations.¹ Negative health outcomes, including obesity, diabetes and cancer, have accompanied declines in traditional food use in indigenous communities throughout the United States.²

This paper will outline the legal and policy framework related to Tribal water rights, with a particular focus on the environmental public health impacts of dam construction in Indian Country. The paper will spotlight three distinct projects — the Dalles Dam on the Columbia River, the Elwha River Dams on the Elwha River, and the Pick-Sloan Missouri River Basin Program — to highlight impacts related to health and well-being, water rights, and land use.

Tribal Water Rights – Legal Foundation

The primary legal foundation for Tribal water rights is the reserved rights doctrine, a doctrine established by the Supreme Court in *Winters v. United States* in 1908.³ The

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reserved rights doctrine holds that the United States, in reserving reservations lands for Tribes, also reserved by implication access to water to fulfill the purpose of the reservation.⁴ The Supreme Court has upheld this doctrine in subsequent cases stating that “[t]he Court in *Winters* concluded that the Government, when it created that Indian Reservation, intended to deal fairly with the Indians by reserving for them the waters without which their lands would have been useless.... We follow it now and agree that the United States did reserve the water rights for the Indians effective as of the time the Indian Reservations were created.”⁵

In addition to the *Winters* decision, some Tribal reserved water rights may be based on the Supreme Court’s decision in *United States v. Winans*, in which the Court protected the Yakima Nation’s 1859 treaty rights to hunt and fish off-reservation on the Columbia River.⁶

While Tribal water rights are based on federal law, state law is a factor in water rights adjudications due to allocation of water to Tribes vis-à-vis other state and private actors and the enactment of the McCarran Amendment.⁷ The McCarran Amendment allowed for the United States to be joined into state stream adjudication proceedings, waiving U.S. sovereign immunity, to determine water rights amongst multiple parties, including holders of federally reserved water rights.⁸ The Supreme Court held in 1971 that the federal government could be joined in state stream adjudications to represent its interest in reserved water rights.⁹ Tribes have the opportunity to rely on the federal government to represent their interests, intervene in adjudication proceedings directly, or negotiate their water rights outside of these proceedings.¹⁰

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In the western United States, the primary water allocation regime is the doctrine “prior appropriation,” where water claims are based on the seniority of the water rights — “first in time, first in right;” while in many eastern states, riparianism, a system based on land ownership, is the primary regime for water allocation.¹¹ The prior appropriation system is the only state system against which Indian reserved water rights have been adjudicated.¹² Federally reserved Indian reserved water rights can be asserted at any time, cannot be lost by nonuse, and are assigned priority dates based on the date for the establishment of reservation.¹³ Because of this, “Indian rights are generally prior and paramount to rights derived under state law.”¹⁴

Dam Construction and Tribal Environmental Public Health

Dams have played a major role in water and energy management on Tribal lands throughout the history of the United States, and constitute major sources of water for drinking, irrigation, and electricity. Dams have well-known environmental impacts on surrounding habitats, including inundation of the terrestrial environment upstream of the dam; impacts on

river temperature; changes in nutrient and toxin concentration along the river; and increasing erosion and sediment deposition.¹⁵

In several cases, the environmental impacts of dam projects have resulted either in the displacement of American Indian communities from their traditional lands or dramatic ecosystem changes which reduce or eliminate subsistence livelihoods and the availability of riparian and terrestrial wildlife as food sources.¹⁶ Decreasing reliance on traditional sources of food is related to increasing prevalence of food-related diseases, such as diabetes.¹⁷ Compulsory displacement typically has a negative effect on health outcomes in Tribal communities, particularly in vulnerable populations such as children and the elderly.¹⁸

The Dalles Dam on the Columbia River, the Elwha River Dams on the Elwha River, and the Pick-Sloan Missouri River Basin Program serve as examples of dams with significant impacts to tribal environmental public health.

The Dalles and Elwha Dams – Impacts to Tribal Hunting and Fishing Rights

The Columbia River basin has been home for several American Indian Tribes for thousands of years. Treaties were established in 1855 that reserved the rights to fish, hunt, pasture livestock, and erect temporary buildings along the river. When the Dalles Dam was introduced to the Columbia River eight miles downstream of Celilo Falls in 1957, the fisheries and land surrounding Celilo Falls were submerged in under a day. A cash settlement was negotiated with the Tribes to compensate for the loss of fishing sites, but the sites themselves have never been recovered and the Dalles Dam still stands.¹⁹

In contrast, the ongoing deconstruction of the Elwha River Dams represents the largest dam-removal project ever undertaken by the National Park Service of the United States.²⁰ Prior to the erection of the Elwha Dams, Elwha River housed large runs of 10 different species of salmon. After the dams' completion, the only significant runs of fish were produced in hatcheries located below the dams. In the 1980s, local agencies began re-evaluating the environmental impacts of the dams and considering options for facilitating fish passage.²¹

The first specific call for dam removal came in 1986, when the Elwha Tribe advocated for dam removal based on the spiritual value that the river held to the Tribe, the injustice of the original construction of the dams, and a belief that the salmon would return if the dams were removed. Its call was followed shortly after by advocacy by environmental groups and further research on the possible impacts of dam removal on salmon populations. The efforts eventually led to a 1992 act mandating the full restoration of the fisheries and ecosystem, which was found to necessitate removal of the dam.²²

The Pick-Sloan Missouri River Basin Program – Impacts to Tribal Land and Water Rights

The Pick-Sloan Missouri River Basin Program is the largest reservoir system in North America. Historically, it began as a combination of two plans and two departments: (1) the U.S. Army Corps of Engineers (headed by Brig. Gen. Lewis Pick), which emphasized flood control and navigation for barges and boats; and (2) the U.S. Bureau of Reclamation (headed

by William Sloan), which emphasized irrigation, hydroelectric power, fish and wildlife habitat, and recreation.

In 1944, Congress passed the Pick-Sloan Flood Control Act. While its purpose was to promote the flood control, navigation, energy development, and irrigation of water within the rivers of the United States through dam and levee construction and modifications, the Act authorized dam development along the Missouri River Basin and condemned Tribal lands for the development of the Oahe Dam and Reservoir.²³ The River Basin project called for almost 100 reservoirs to be built with hundreds of miles of levees and floodwalls throughout the basin. In total, the project built over 50 new dams and lakes throughout the basin.

When water systems like the Missouri River Basin are disrupted, Tribes are particularly vulnerable to environmental resource loss and relocation due to low-average socioeconomic conditions, a high proportion of people in rural areas practicing subsistence lifestyles, and political marginalization.²⁴ The resulting impacts of the Pick-Sloan River Basin project on Tribes underscores this vulnerability. Over 550 square miles of Tribal land in North Dakota, South Dakota, and Nebraska were destroyed. Approximately 900 Indian families were dislocated.

Opportunities exist to advance legal and policy interventions in this arena. In the early 1980s, Tribes whose reservations on the Missouri River had been adversely affected by flooding caused by the construction of the Pick-Sloan project dams began to seek additional compensation. Between 1996 and 2002, federal legislation established tribal recovery trust funds totaling over \$385 million in compensation for reservation infrastructure lost to federal dam projects.²⁵

Conclusion

As awareness increases of the potentially negative impacts of dams on Tribal lands, health, sovereignty, and riparian ecosystems, the public has called for dam removal in recent years. The environmental public health impacts of U.S. dams have been wide-ranging, particularly in cases resulting in compulsory Tribal relocation. For Tribes, areas of particular concern may be changes in traditional land use patterns, such as subsistence hunting and fishing, and loss of infrastructure and traditional lifestyle. Additional research may help to provide frameworks to evaluate both the full effects that dams have had in Indian Country, and the potential for legal and policy interventions to restore tribal environmental health.

References

1. Kuhnlein, HV.; Erasmus, B.; Spigelski, D. Indigenous Peoples' Food Systems and Well-Being: Interventions and Policies for Healthy Communities. Rome: ITA: FAO/CINE; 2012. at 19
2. Lynn K, et al. The Impacts of Climate Change on Tribal Traditional Foods. *Climatic Change*. 2013; 120(3):545–556.
3. Newton, NJ., editor. Cohen's Handbook of Federal Indian Law 1207. 12th. *Winters v. United States*; 2012. 207 U.S. 564 (1908)
4. *Arizona v. Colorado*. 1963 373 U.S 546, 600.
5. *Arizona v. Colorado*. 1963 373 U.S 546-600.

6. United State v. Winans. 1905 198 U.S. 371, 383.
7. Cohen's Handbook of Federal Indian Law, *supra*. See note 3, at 1209-1210
8. 43 U.S.C. § 666(a).
9. United States v. Dist. Court in & for Eagle. 1971 401 U.S. 520, 524.
10. See *Cohen's Handbook of Federal Indian Law*, *supra* note 3, at 1243.
11. *Id.*, at 1204-05.
12. *Id.*, at 1206.
13. *Id.*, at 1205-06.
14. *Id.*, at 1206.
15. McCartney M. Living with Dams: Managing the Environmental Impacts. *Water Policy*. 2009; 11(1):121–139.
16. McMichael C, Barnett J, McMichael AJ. An Ill Wind? Climate Change, Migration, and Health. *Environmental Health Perspectives*. 2012; 120(5):646–654. [PubMed: 22266739]
17. Lynn K, et al. The Impacts of Climate Change on Tribal Traditional Foods. *Climatic Change*. 2013; 120(3):545–556.
18. See McMichael et al., *supra* note 16.
19. Columbia Basin Native Fishery. Center for Columbia River History. (n.d.), *available at* <<http://www.ccrh.org/comm/river/index.php>> (last visited January 27, 2015)
20. Pohl M. Channel Bed Mobility Downstream from the Elwha Dams, Washington. *The Professional Geographer*. 2004; 56(3):422–431.
21. Gowan C, Stephenson K, Shabman L. The Role of Ecosystem Valuation in Environmental Decision Making: Hydropower Relicensing and Dam Removal on the Elwha River. *Ecological Economics*. 2006; 56(4):508–523.
22. *Id.*
23. Pick-Sloan Flood Control Act of 1944. Pub. L. No. 78-534, Sec. 1, 9, *available at* <<http://www.usbr.gov/power/legislation/flcdntra.pdf>> (last visited January 14, 2015)
24. Cozzetto K, et al. Climate Change Impacts on the Water Resources of American Indians and Alaska Natives in the U.S. *Climatic Change*. 2013; 120(3):569–584.
25. Reclamation Projects Authorization and Adjustment Act of 1992. Pub. L. No. 102-575, Sec. 3504(a)(2), 106 Stat. 4731, 4732.