Indigeneity in the Air

The Highs and Lows of Asserting Tribal Airspace Sovereignty

by

Shelly Lynn Knight

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Myla Vicenti Carpio, Chair
David Martínez
James Riding In

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ABSTRACT

Advancements in marine and aerospace technology drive legal reform in admiralty and air law. The increased accessibility and affordability of these technologies demand and motivate lawmakers and federal agencies to anticipate potential threats to peoples' rights and resources in the seas and skies. Given the recent applications of unmanned aircraft in the public and private sectors, developments in aircraft and air law are rapidly becoming more relevant to American Indian and Alaska Native tribes. In anticipation of legal reform, tribal nations are taking steps to assert, expand, and secure their air rights before agencies or the courts attempt to divest their sovereign authority. An analysis of two case studies through a lens of water and federal Indian law locates spaces in American jurisprudence that have the legal foundation and structural capacity to support a greater presence of Indigeneity in airspace. Research findings from these studies answer the following inquiries about tribal airspace sovereignty: *where does Indigeneity reside in the US national airspace system and domestic air law, how are tribal air rights strengthened or weakened by American jurisprudence, what strategies do tribes employ to exercise their sovereignty in airspace, and how are tribes planning for future developments in aircraft and air law?* Answers lead to proof of how meaningful consultation through collaborative rulemaking produces far greater mutual benefits than burdens for federal agencies and tribes, and much more. Most importantly, these discoveries celebrate a diverse and accumulative strategic legacy of strengthening and expanding tribal sovereignty in the face of imminent threats and possibilities in tribal airspace.

DEDICATION

For Chester, Barb "Granny," and Bruce. I cherish your family's extension of kinship to me and for sharing your knowledge and traditions with me. For my dad, who has been my greatest mentor and champion in life. And for my husband, for his love, friendship, and unyielding support as we pursue graduate studies together. This thesis would not have been possible without all of my families and friends. Thank you all for shaping and guiding me along this beautiful path!

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"The Enlightened Teachers"

We gather our minds to greet and thank the enlightened Teachers who have come to help throughout the ages. When we forget how to live in harmony, they remind us of the way we were instructed to live as people. With one mind, we send greetings and thanks to these caring Teachers.

Now our minds are one.

"Shonkwaia'tison Raonkwe'ta'shón:'a"

Enska tsi entewahwe'nón:ni ne onkwa'nikón:ra tánon' teniethinonhwerá:ton ne tsi niká:ien ne ronateríhonte ne ahonten'nikón:raren ne tsi kahwatsiraké:ron ne tóhsa' thé:nen ne akieróntshera ahonataweiá:ten. Ne tsionkhiiehiahráhkhwa tsi ní:ioht tsi rawé:ren ne taiontawén:rie ne onkwehshón:'a. Entewahwe'nón:ni ne onkwa'nikón:ra tánon' teniethinonhwerá:ton ne Shonkwaia'tíson Raonkwe'ta'shón:'a.

Éhto niiohtónha'k ne onkwa'nikón:ra.[1]

1. *Thanksgiving Address: Greetings to the Natural World*, trans. John Stokes, Kanawahienton (David Benedict), and Rokwaho (Dan Thompson) (New Mexico: Six Nations Indian Museum and The Tracking Project, 1993).

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INTRODUCTION: EXPANDING THE SCOPE OF TRIBAL SOVEREIGNTY

"The Stars"

We give thanks to the Stars who are spread across the sky like jewelry. We see them in the night, helping the Moon to light the darkness and bringing dew to the gardens and growing things. When we travel at night, they guide us home. With our minds gathered together as one, we send greetings and thanks to all the stars.

Now our minds are one.

Otsistanohkwa'shón:a

É:neken nentsitewakié:ra'te ne ne otsistanohkwa'shón:'a tentsiethinonhwerá:ton. Ahsonthenhnéhshon iethí:kenhs shakotiienawá:se ne ionkhihsótha karáhkwa tehotihswathé:ton. Oni tsi ne'e ron'aweiástha ne ne skén:nen tsi akontonha'tén:ti ne tsi nahò:ten shonkwaienthó:wi tánon' tsi ionkwathehtaké:ron. Ne oni tewate'nientenhsthákhwa tsi iah thaitewakia'táhton tsi niahonkwennonhákie. Enska tsi entewahwe'nón:ni ne onkwa'nikón:ra tánon' teniethinonhwerá:ton ne otsistanonkwa'shón:'a.

Éhto niiohtónha'k ne onkwa'nikón:ra.[2]

The Haudenosaunee's ("People of the Longhouse") *Thanksgiving Address* is just one of many places where their connections to airspace are embedded. Many American

2. *Thanksgiving Address: Greetings to the Natural World*.

Indian and Alaskan Natives (AIANs) have similar connections to airspace, which are commonly inseparable from their connections to the land. As advancements in aviation technology present new threats and possibilities for expanding Indigenous rights in land management, economic development, and cultural resource management, recent events make the link between land and air more visible. For instance, during the NoDAPL Movement, the TigerSwan private security flew surveillance drones over water protector camps on the Standing Rock Reservation in North Dakota.[3] On the one hand, the aerial trespassing of those spy drones violated Standing Rock Sioux Airspace and posed a threat to tribal members' land and privacy rights.[4] While, on the other hand, the drones presented new possibilities for tribes in defense of their land and water rights. Indigenous film director Myron Dewey's use of media drones at Standing Rock to expose environmental injustice and police brutality against the water protectors reflect this potential.[5]

Recent activism, development, and court cases have illustrated the ambiguity of *tribal airspace sovereignty* – an inherent right to manage, develop, and police the airspace and its quality above tribal lands and resources – with the state, local and federal governments. In air (aviation) law, we will see federal agencies such as the Federal

3. Sara Rafsky, "Eyes in the Sky: Drones at Standing Rock and the Next Frontier of Human Rights Video," Witness Media Lab, last modified November 2, 2017, https://lab.witness.org/projects/drones-standing-rock/. This source contains footage from Digital Smoke Signals and an interview Dean Dedman Jr. (Shiyé Bidzill).

4. Ibid. It is important we remember the historical role unmanned aircraft have played in warfare and the debates that surround them. As Rafsky reflects, "Up until relatively recently, if the words 'drones' and 'human rights' appeared in the same sentence it was mostly to protest the United States' use of armed drones to carry out its targeted killing program. As unarmed drones became more prevalent, the debate shifted to surveillance and privacy concerns."

5. Paul Spencer, "Native Americans Are Resisting the Dakota Pipeline with Tech and Media Savvy," *Vice News*, last modified October 29, 2016, http://motherboard.vice.com/read/tech-behind-the-dakotaaccess-pipeline-protests.

Aviation Administration (FAA) interpret tribal airspace sovereignty loosely and contingently, causing greater tensions between tribes, state and local governments, and the federal government. Before delving into a more-in-depth analysis of the FAA's relationship with tribes and how their actions affect tribes, first, it is necessary to understand how tribes have historically connected to and used their tribal airspace.

INDIGENEITY IN THE AIR

Indigenous peoples have perceived the world from an aerial perspective long before the invention of aircraft. Their prayers, songs, oral traditions, arts and crafts, ceremonies, architecture, cultural resources and much more reflect the way Indigenous cultures uniquely interact with and relate to the sky.[6] A common theme linking these Indigenous epistemologies is their view of airspace as infinite. For many Indigenous communities, their astronomical knowledge informs their farming practices, ceremonial and ritual practices, and architectural style.[7] The constellations also guide Indigenous peoples across their cultural landscapes and connect them to the cosmos – everything existing to the north, east, south, west, and in other directions and dimensions.[8] This concept of airspace compares to the *ad coelom* (Latin for "to the heavens") doctrine which recognizes a

6. For Indigenous connections and relations to airspace found in oral tradition, *see* Monroe Jean Guard and Ray A. Williamson, *They Dance in the Sky: Native American Star Myths* (Boston: Houghton Mifflin, 1987).

7. *See* Wanda Dalla Costa, "Teaching Indigeneity in Architecture: Indigenous Placekeeping Framework," in *Our Voices: Indigeneity and Architecture,* edited by Rebecca Kiddle, L.P. Stewart, and Kevin O'Brien (New York: ORO Editions, 2018), 146-153.

8. *Native America*, 1, "From Caves to Cosmos," directed by Gary Glassman, aired March 28, 2018, on PBS, https://www.pbs.org/show/native-america/.

property owner's right to use the resources beneath, upon, and above the land; though rather than claiming ownership over these resources, they serve as communal caretakers.[9]

Indigenous scholar Walter Echo-Hawk cites the way Pawnee relate to their sky through kinship and prayer: "Father sky sits at the top, in a special place where people can direct their prayers…anywhere you go, we are in a holy place – 'Just look up' (suks riiwataa)…the entire American sky is one vast holy place."[10] Across Indigenous epistemologies, indigenous peoples often view airspace similar to land in that both are living filled with relatives they must care for in return for the well-being of their communities.[11] The Oohl (Yurok) Tribe in northern California chooses a powerful individual from their community, one every generation, to make "contact with the cosmic universe" on behalf of their community by ascending into heaven.[12] Their deities and the

9. *Jackson Municipal Airport Auth. v. Evans*, 191 S. 2d 126, 128 (Miss. 1966); Daniel R. Wildcat, *Red Alert!: Saving the Planet With Indigenous Knowledge* (Golden: Fulcrum, 2009), 90. Wildcat cites the Menominee worldview which expresses this communal possession over the land that entails communal responsibility to protect the land.

10. Walter R. Ecko-Hawk, *In the Courts of the Conqueror: The 10 Worst Indian Law Cases Ever Decided* (Golden: Fulcrum Publishing, 2010), 331.

11. Department of Health and Human Resources, U.S. National Library of Medicine, "Medicine Ways: Traditional Healers and Healing," Native Voices: Native Peoples' Concepts of Heath and Illness, accessed March 29, 2018, https://www.nlm.nih.gov/nativevoices/exhibition/healing-ways/medicine-ways/medicine-wheel.html. This statement refers to commonly shared views and beliefs among Indigenous peoples in a reciprocal, interdependent relationship with the natural world and its elements through terms of kindship. For instance, names such as "Father Sky, Mother Earth, and Spirit Tree," represent this bond. Also, for many Indigenous traditions, the Medicine Wheel embodies these views and this relationship: "The Medicine Wheel can take many different forms. It can be an artwork such as artifact or painting, or it can be a physical construction on the land. Hundreds or even thousands of Medicine Wheels have been built on Native lands in North America over the last several centuries."

12. Ecko-Hawk, *In the Courts of the Conqueror*, 337. Echo-Hawk cites Kurok traditions based on interviews collected as evidence for *Lyng v. Northwest Indian Cemetery Association* (1988) to protect their sacred sites.

spirits of their medicine people reside in the sky. Pilgrimage to these places on land allows them to perform World Renewal ceremonies or to make their journey to the dead as the A:shiwi (Zuni) do on their way to Kolhu/wala:wa (Zuni Heaven).[13] Indigenous peoples have had a connection to the skies since time immemorial.

Maintaining their connection to the skies requires stewardship with both the land and air through religious and cultural practice. Clean air, natural quiet, and an unobstructed view of sacred sites are necessary to communicate with their deities and spirits in the Sky World. However, Western modernity threatens this connection through exploiting natural resources and polluting the land, water, and air – tribes like the Oohl (Yurok) fight to protect the pristine environment especially surrounding their sacred sites. In *Lyng v. Northwest Indian Cemetery Association*, northern California tribes united to defend the Chimney Rock area of the Six Rivers National Forest from road construction and logging. These activities stood to threaten the tribes' ceremonial practices and cultural landscapes by physically altering the landscape, inviting more traffic into the area, and creating pollution.[14] Unfortunately, this case decided the free exercise clause does not protect their place-based religion from federal activities on public land even if it means destroying their religion.[15] This decision expresses the stark differences between Western and Indigenous views of the land, air, and sacredness. Moreover, the judicial court's opinion reflects a more rigid dichotomy or disconnect between land and air which contrasts with a more fluid and holistic Indigenous worldview.

13. Ibid. 332.
14. *Lyng v. Northwest Indian Cemetery Protective Association*, 485 US 439 (1988) [hereinafter *Lyng v. Northwest Indian Cemetery*].
15. Ibid.

The *Lyng* case reveals that natural objects in American jurisprudence have far less legal standing than corporations and individuals.[16] A young woman's plea for protection under the free exercise clause in *Bowen v. Roy*,[17] because she believed receiving a Social Security number "deprived and robbed" her spirit, for instance, was referenced in *Lyng* as having maybe even more precedence than the tribes' plea for protection.[18] Justice Sandra Day O'Connor states, "Well, if anything, the consequence asserted in the *Bowen v. Roy* case was perhaps more severe than in yours [the tribes']."[19] Her statement conveys how an individual's spirit theoretically grants more protection than all of the Chum-ne (Karuk), Oohl (Yurok), and Taa-laa-wa Dee-ni' (Tolowa) spirits inhabiting the Six Rivers National Forest combined. Granted, the majority opinion felt the court's decision "stripped respondents and all other Native Americans of any constitutional protection against perhaps the most serious threat to their age-old religious practices, and indeed to their entire way of life,"[20] however, her statement reveals a continuous struggle to equally weigh the interests[21] of Native and non-Native citizens. An example of the hierarchy underlying many decisions by the colonial courts are in the following order: 1.) public or corporate interests,

16. *See* Christopher D. Stone, *Should Trees Have Legal Standing?: Law, Morality, and the Environment* (New York: Oxford University Press, 2010); Steve Pavlik, "Should Trees Have Legal Standing in Indian Country?," *Wíčazo Ša Review* 30, no. 1: 7–28.

17. *Gowen v. Roy*, 476 US 693 (1986).

18. *Lyng v. Northwest Indian Cemetery*.

19. Ibid.

20. Ibid. For more about this case, *see* Deloria and Wilkins, *Tribes*, 112-17.

21. *Federal, corporate, public and tribal interests* refer to how these terms are employed in American jurisprudence. Federal and public interests are noted by the FAA as factors for creating air categories but, since the federal government does not formally recognize tribal airspace sovereignty, public interests often exclude tribal interests. Corporate interests tend to refer to major corporations with an interest in natural resource management (i.e., Dakota Access, LLC).

2.) public or tribal interests, and finally, 3.) tribal or environmental interests. As *Lyng* also demonstrates, natural objects have even less legal standing in court with which Indigenous peoples share a strong familial bond.

Colonial mechanisms and institutions, like the courts and policies, systematically work[22] to erase Indigeneity from the natural landscape, including the land and air. Federal Indian policies such as removal, allotment, and assimilation, whose residual effects persist and manifest in the form of historical trauma, attempted and in some cases successfully severed tribal connections to the skies.[23] Through this separation, some Indigenous knowledge systems (food, science and medicine, language, politics, architecture, religion or spiritual beliefs, etc.) that were inextricably linked to Indigenous star knowledge were lost.[24] For instance, the erasure of Indigenous languages through assimilation took with it stories and interpretations about the stars, which would have been used for navigating, farming, and other life-sustaining activities. The survivance, resilience, and resistance of

22. Vine Deloria Jr. and David E. Wilkins, *Tribes, Treaties and Constitutional Tribulations,* 1st ed. (Austin: University of Texas Press, 1999), 47.

23. For more information about assimilation policies and historical trauma, *see* Maria Yellow Horse Brave Heart, and Lemyra M. DeBruyn, "The American Indian Holocaust: Healing Historical Unresolved Grief," *American Indian and Alaska Native Mental Health Research* 8, no. 2 (1998): 56-78.

24. *See* Patrick Wolfe, "Settler Colonialism and the Elimination of the Native," *Journal of Genocide Research* 8, no. 4 (Dec. 2006): 387. Settler colonialism seeks to replace the Indigenous population and their knowledge systems and to control the historical narrative. As the dominating society, Euro-American culture marginalizes and invalidates other just as valid and meaningful systems of knowledge. *See* Konnie LeMay, "'Native Skywatchers' Revives Indigenous Star Knowledge," *Lake Superior Magazine*, last modified August 13, 2014, https://www.lakesuperior.com/the-lake/natural-world/native-skywatchers-revives-traditional-constellations/. LeMay quotes Astronomy Professor Annette Lee, "'All human beings from all over the earth, all of human history, had a connection to the stars . . . People think the Greek (constellation) system is the only system. It's really sad.'" LeMay's article also references *Talking Sky* by Carl Gawboy and Ron Morton and *Dakota/Lakota Star Map Constellation Guidebook: An Introduction to D(L)akota Star Knowledge* by Annette Lee, Jim Rock, and Charlene O'Rourke.

Indigenous communities accumulated across generations have shown considerable progress toward remembering, preserving, and reestablishing these connections.[25] Tribes made enormous progress gaining their political voice during the self-determination and repatriation eras by reclaiming their traditional economies and education and their religious practices. In airspace, tribes are continuing this legacy by reclaiming their stewardship with the skies.

American Indian and Alaska Native tribes have become progressively more involved in reclaiming their management of airspace ever since the Environmental Protection Agency (EPA) began the process of redesignating air quality management to tribes following the Clean Air Act of 1970.[26] Similarly, tribes are building their capacity to take on FAA responsibilities as well. Through gaining skills and experience in air traffic control, safety regulations, and certification processes, tribes are reclaiming their connections to the sky and setting their own standards for stewardship with the land and air. Some tribes do this through developing aerospace industries and educational programs, advocating for wildlife and people affected by low overflights, and developing wind farms

25. *See* Gerald Vizenor, *Manifest Manners: Narratives on Postindian Survivance* (Lincoln: University of Nebraska Press, 1999). Vizenor first applied "survivance" to a Native American context to indicate the continual process of both survival and resistance among tribes.

26. James M. Grijalva, "Winds of Change: Honoring Tribal Air Quality Values," in *Closing the Circle: Environmental Justice in Indian Country* (Durham: Carolina Academic Press, 2008), 107-142. Many tribal governments have adopted federal responsibilities to gain control over their natural resources, but Steve Pavlik raises a remaining issue that tribal nations face: "Although some tribes have worked hard to incorporate elements of cultural recognition and sensitivity into their management plans and operations, most tribal programs in this area [of natural resource management] continue to be built on a Western model that views the natural world as an object and its components as property that exists only for human use (and often exploitation)." Pavlik, "Should Trees Have Legal Standing in Indian Country?," 7.

for renewable energy as an alternative to the exploitation and pollution of coal mining, to name a few.[27] Some of their efforts are instruments of economic development and nation-building in a safe and culturally receptive way. With their continued political, economic, and religious interests at stake, tribes also defend their airspace, including their spirits and deities in the sky, by demanding a reduction in noise, air, and visual pollution. The highs and lows of taking on such tasks, however, pertains to their relationship with the federal government which views airspace as yet another exploitable resource to claim and control, as seen through domestic air law.

DOMESTIC AIR LAW

Domestic air law upheld its belief in a property owner's 'unlimited' air rights. Then, in *Causby v. US* (1946) airspace was redefined as a "public highway," severely limiting a land owner's air rights.[28] *Causby's* decision assumed the ad coelom doctrine, or the belief in a property's owners limitless rights in airspace, held outdated views about airspace. However, abandoning this doctrine altogether clearly dismissed the way Indigenous

27. For Navajo Nation's EPA site, *see* Navajo Nation Environmental Protection Agency, "Home: The Navajo Environmental Protection Commission Was Established in 1972," accessed March 5, 2019, http://navajonationepa.org/main/index.php. For Allison Dussias's article on how wind farms desecrate tribal sacred viewscapes when they are constructed without tribal consultation, *see* Allison M. Dussias, "Room For a (Sacred) View? American Indian Tribes Confront Visual Desecration Caused by Wind Energy Projects," *American Indian Legal Review 38*, no. 2 (2014): 333-420. For Winona LaDuke's chapter on the Pine Ridge Reservation's development of wind turbines for renewable energy and radio broadcasting, *see* LaDuke, Winona, "Recovering Power to Slow Climate Change," in *Recovering the Sacred* (Cambridge: South End Press, 2005). For an in-depth analysis of developing Internet in Indian Country, *see* Marisa Elene Duarte, Network Sovereignty: Building the Internet across Indian Country (Seattle: University of Washington Press, 2017).

28. *United States v. Causby*, 328 US 256 (1946).

peoples continued to religiously and spiritually interact with and relate to their airspace. Moving from an ad coelom concept of airspace to claiming airspace a "public highway," instead, led to a more exploitable view of airspace.[29] As a public resource, airspace is mapped (via zoning, air classifications and categories) and commodified (via corporate real estate). In the 1980s, sixty years after the first domestic air laws formed, Donald Trump made it popular to claim air rights to secure his enterprise. His monopoly over air rights surrounding his 58-story tower ensured the tallest, best view in New York City. Claiming ownership of this airspace was a catalyst for the development of air law beyond aviation,[30] meaning that air law has since considered how people can utilize and invest in airspace like 'real property' and not just for transportation purposes.

Since then, American Indians have gradually gained experience and expertise with air law by developing and defending their airspace. Some tribes, especially those in Alaska, Washington, Oklahoma, and the Southwest, have begun to develop their airspace through air transport and tourism by building commercial service airports, cargo airports, helicopter pads, and runways. For many, air tourism is a rapidly expanding industry, offering tourists a unique experience to view natural scenery from an airplane, rotorcraft (i.e., helicopters), gliders, ultralight aircraft (i.e., balloons), paraplanes (i.e., powered parachutes for land or sea), or weight-shift-control aircraft (i.e., trikes).[31] Likewise, tribal nations have gained experience and expertise in defending their airspace from the negative impacts of low

29. Ibid.

30. Robin Finn, "The Great Air Race," New York Times, February 22, 2013, https://www.nytimes.com/2013/02/24/realestate/the-great-race-for-manhattan-air-rights.html.

31. Not all pilots for these categories of aircraft require FAA licensing, but they do need proper certification and training depending on which air classes they wish to fly.

overflights. In 1984, for instance, the Kewa Pueblo (Santo Domingo Pueblo) "fil[ed] a $3.65 million lawsuit [in Federal District Court] against a local newspaper [*The Santa Fe New Mexican*] for photographing tribal dances from a low-flying airplane and publishing them."[32] The Kewa Pueblo "charged the paper with trespassing, violation of tribal law and invasion of privacy" especially since its widely known that Kewa tribal law bans photographing, sketching, and recording tribal dances.[33] This incident made pueblos like the Kewa particularly fearful of how an increase in low overflights would severely violate their free exercise of religion by exposing and misrepresenting their sacred traditions. In addition to a severe violation of religious freedom, the Tohono O'Odham Nation feared a severe impact on their physical health and wellbeing as a result of overflights by supersonic jets. In 1988, the US Department of the Air Force conducted a Final Environmental Impact Statement (FEIS) which included letters from Tohono O'Odham youth describing how the supersonic booms caused them, their families, and livestock enormous distress.[34]

32. "Photo of Tribal Ritual Prompt Suit," *New York Times*, last modified March 13, 1984, https://www.nytimes.com/1984/03/13/us/photos-of-tribal-ritual-prompt-suit.html.

33. Ibid.

34. Department of the Air Force, Tactical Air Command, *Final Environmental Impact Statement: Flight Operations in the Sells Airspace Overlying the Tohono O'Odham Indian Reservation and Organ Pipe Cactus National Monument* (Washington, D.C.: Dept. of the Air Force, 1988). On November 13, 1986, the Tohono O'Odham Nation's general council argued, "It is morally and ethically wrong for a governmental agency knowingly to subject a human population to this form of increased stress" (1-32). The stress they are referring to was expressed in letters written by students from San Simon School in Sells, AZ. Second- and third-graders pleaded, "Please don't fly your supersonic jets over the O'odham Reservation. They break windows, scare the animals, and we don't want the bombs. Good-bye" (1-40). Other concerns related to difficulties hearing, sleeping, herding, studying, and other activities requiring peace and quiet. The children also expressed their concern for their elders' health. Manuel C. Lopez (sixth grade) wrote that the supersonic boom scares "the elder and young one" (1-67), and Carmolita (fourth grade) stresses that sonic booms in the past caused her grandmother to have a heart attack. Some concerns mention property damage (i.e., windows and cars) (1-

Since the 1980s, tribal nations have only gained more experience and expertise in developing and defending their airspace according to domestic air law, yet 'tribal airspace sovereignty' has never been mentioned in federal Indian or aviation law. Tribal governments have only recently been mentioned in revisions of the Aviation Innovation, Reform, and Reauthorization Act of 2016 (H.R. 4441).[35] Because of this absence, the Federal Aviation Administration (FAA) has little to no legal guide for how they should or should not handle issues in tribal airspace.[36] The FAA's Order 1210.20 is the only document that expresses the agency's responsibility to consult with tribes.[37] This Order extends the federal government's trust relationship, or trustship, – respect for tribal sovereignty and treaty rights – to the FAA and requires them to act in the best interest of

56, 1-61) and the possibility of a crash killing civilians on the ground as well (1-53). As a result, this FEIS (1988) raised base altitude for jets flying over the reservation, continued the Air Force's reliance on flight simulators, limited air combat training (ACT) to daylight hours and in Sells Airspace only if other areas are congested, established a "cultural exchange/awareness program" between the Tohono O'Odham Nation and Air Force, and more (3-1, 3-2).

35. Aviation Innovation, Reform, and Reauthorization Act, H.R. 4441, 114th Cong. (2nd Sess. 2016) [hereinafter H.R. 4441].

36. Internally, on the other hand, the FAA's Office of Civil Rights provides a guide for implementing government programs while upholding civil rights in the following mission statement: "To implement civil rights and equal employment opportunity policies and operational programs, to ensure their full and successful development in support of the FAA, in providing the safest, most efficient aerospace system in the world." *See* Department of Transportation, Federal Aviation Administration, "Office of Civil Rights (ACR)," last modified February 15, 2018, https://www.faa.gov/about/office_org/headquarters_offices/acr/.

37. Department of Transportation, Federal Aviation Administration, Order 1210.20, "American Indian and Alaskan Native Tribal Consultation Policy and Procedures," January 28, 2004, https://www.faa.gov/documentLibrary/media/1210.pdf [hereinafter Order 1210.20]. Order 1210.20 specifies that the FAA must conduct timely and efficient consultation with tribes on a government-to-government basis. They must respect tribal sovereignty, maintain their trustship, uphold their constitutional rights, maintain their access to sacred sites and preservation of other cultural properties, support their aviation enterprises, respond quickly to tribal concerns (in environmental justice, public safety, health care, etc), assess environmental impacts, and more.

tribes by anticipating how their activities might uniquely affect tribes.[38] However, the FAA struggles to uphold these responsibilities and priorities because at the root of the problem is conflicting definitions of sovereignty and self-governance.[39]

Eileen Luna-Firebaugh and other Indigenous scholars distinguish between two types of sovereignty of which the former is often under attack by the US government: "Sovereignty can be either de jure – that right to self-government that comes from the courts – or de facto – those self-determined exercises of self-government that come from the tribe itself, and against which there is no law."[40] Based on these definitions, the federal government often recognizes the former without the latter by defining tribal sovereignty as flexible, malleable, and docile, as defined in Order 1210.20:

38. Ibid. The Bureau of Indian Affairs (BIA) has a trust relationship with tribes. The Bureau is tasked with overseeing tribes' relations with other federal agencies such as the FAA. Whether or not the Bureau maintains federal oversight over other agencies, other federal agencies are held to the same standards of consultation and trust. The FAA is held to these standard through Order 1210.20 in Section 3a: "Agencies shall respect Indian tribal self-government and sovereignty, honor tribal treaty and other rights, and strive to meet the responsibilities that arise from the unique relationship between the Federal Government and Indian tribal governments." In other words, this document reaffirms and extends trust responsibilities to the FAA.

39. *Tribal sovereignty* is the inherent right of federally recognized tribes to "manage and control their own destinies and to operate without incursions into their legal and business affairs by the States." *See* Murray Lee, "What is Tribal Sovereignty?" *Partnership with Native Americans,* September 9, 2014. http://blog.nativepartnership.org/what-is-tribal-sovereignty/. Similarly, *self-governance* "includes the power to control the conduct of members by tribal legislation, to administer justice, and to punish offenses that occur on tribal lands." *See* Eileen Luna-Firebaugh, *Tribal Policing: Asserting Sovereignty, Seeking Justice* (Tucson: University of Arizona Press, 2007), 8. Chief Justice John Marshall famously describes the relationships between American Indian tribes and the Unites States as a "ward to its guardian," which implies the Unites States has a level of responsibility to ensure the protection of tribes, which is also promised in treaties. *See Cherokee Nation v. Georgia*, 20 U.S. 1 (1831). Group rights are important for recognizing how tribal governments and jurisprudences pre-date the formation of the United States, so some tribal rights are unique or distinguishable from other tribes and non-Indians. *See* Deloria and Wilkins, *Tribes*, 24-25, 45, 51.

40. Luna-Firebaugh, *Tribal Policing*, 4.

> Tribal Sovereignty. Refers to the unique legal status of federally recognized Indian tribes as set forth in the U.S. Constitution, treaties, and Federal statutes, executive orders, and court decisions, which establish these tribes, as domestic dependent nations subject to the protection of the U.S. Government. As domestic dependent nations, these tribes exercise inherent sovereign powers over their members and territory unless explicitly removed by Congress.[41]

The beginning of this definition connotes de jure sovereignty, then ends by referencing "inherent sovereign power" or de facto sovereignty which the government believes to be limited by "domestic dependent" status and to be "removed by Congress." On the contrary, tribes keep both (de jure and de facto) in mind by defining sovereignty as inherent and eternal. Concerning tribal airspace sovereignty, the federal government is hesitant to expand the scope of tribal sovereignty into airspace in American jurisprudence regardless of its implication in de facto sovereignty.

The federal government's justification for interpreting and limiting tribal airspace sovereignty is rooted in the plenary power doctrine.[42] This doctrine assumes Congress has an extraconstitutional right to assert authority over tribes because of their right "to regulate Commerce with foreign Nations, and among the several States, and with Indian Tribes."[43] Another interpretation of the Constitution similarly leads to an assumption that rights are not implied unless they are explicitly reserved or delegated. The tenth amendment states,

41. Order 1210.20 at 5.
42. Luna-Firebaugh, *Tribal Policing*, 45-46.
43. The Constitution of the United States, Article I, § 8. Seeing as how air rights often deal with air commerce, this Doctrine is particularly relevant for analyzing how the US government divests tribal airspace sovereignty

"[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people," which, to some interpreters, does not include tribes."[44] What they forget is the reserved rights doctrine, which refers to tribal rights reserved in treaties. Since the value of treaties has been demoted as the law of the land, arguments for 'reserved powers' have also been greatly weakened. Without recognition of reserved rights in tribal airspace, violations of Indigenous air rights are becoming more common. The need to assert and defend tribal airspace sovereignty will also become more necessary and relevant to tribes as aviation technology continues to give individuals more access to the world around them.

THESIS

Using two case studies to demonstrate the scope of tribal airspace sovereignty, I examine the strategies tribes utilize to strengthen their presence in a relatively new body of law. These case studies examine different levels of government and society (federal, state, municipal and local level, and public and private sectors) where tensions reside when tribes use, defend, and develop their airspace. These studies examine one contemporary issue, with a focus on events from 2016 to 2017, and an older issue, with a focus on events from 1975 to 2012, in the following order: 1) defending air rights in Standing Rock Sioux tribal airspace, and 2) managing noise pollution in tribal airspace adjacent to the Grand Canyon National Park. I argue that American Indian and Alaskan Natives have the ability and right as sovereign nations to regulate their airspace while the US government has the capacity

44. U.S. Const. amend. X.

and responsibility to recognize tribal airspace sovereignty in a way that will not diminish the safety of the National Airspace System (NAS).

Currently, the ambiguity of tribal airspace sovereignty in federal Indian and air law allows the federal government to interpret tthribal airspace sovereignty loosely and contingently, causing tensions to increase. The three main assumptions the federal government, consequently, makes about tribal airspace sovereignty are 1) air rights unspecified in law are not reserved, 2) tribal interests in airspace are not a priority, and 3) tribes do not have either the interest or ability nor the capacity to manage airspace safely. These assumptions express the manner in which American jurisprudence is comfortable with contradicting its own promises and principles. Also, these assumptions reflect how the federal government justifies prioritizing corporate and non-Native interests (in expanding their access to land) above tribal interests (in economic development, cultural and spiritual preservation, and self-governance). Such priorities are situated in America's foundational history of subjugating and displacing American Indians through colonization since contact.

METHODS

Throughout this paper, I employ several analytical lenses that are frequently absent from current legal disputes in tribal airspace. I apply foundational legal principles from federal Indian, water, and air law to two separate case studies. A lens of federal Indian law provides a foundational understanding of tribal rights and status in American jurisprudence as well as a map for following tribal relations with the United States. Domestic air law provides further historical context for how its doctrines have created more space for exploitation of resources and privatization. I highlight these doctrines to urge the need for

asserting tribal airspace sovereignty in American jurisprudence before its development attempts to erase or hinder tribal air rights. In support of reforming domestic air law, I apply water law doctrines to suggest that there is an existing legal foundation to logically imply and support tribal air rights. Since water and air law are both types of property law, this lens is particularly useful as a starting point for defining tribal air rights and status. Also, with water law as their guide, I argue that the Federal Aviation Administration has the structural capacity to recognize tribal airspace sovereignty. Together, these different lenses expose the highs and lows of clarifying tribal airspace sovereignty while the federal government strategically uses its ambiguity as an opportunity to exercise plenary power and contort the law.

In the second chapter, the legal ambiguity of tribal airspace sovereignty contributes to rising tensions between the Standing Rock Sioux Tribe, the Federal Aviation Administration, Dakota Access company, and state and local governments. This study looks at how water protectors utilized Standing Rock Sioux tribal airspace as their treaty and constitutional right to exercise free speech and free press by using media drones to document and publicize the protest. In that case, I analyze the Fort Laramie treaties as well as FAA consultation policy and procedures to locate precisely how and where the FAA failed to uphold their responsibilities to the tribe, which the second case study will reaffirm.[45] Lastly, applying water law doctrines express how a legal foundation for

45. Treaty of Fort Laramie with Cheyenne, Sioux, Arapaho, Crow, Assiniboine, Mandan, Hidatsa, Arikara, Oglala Sioux, Brule Sioux, Gros Ventra, Shoshone, Arikara, Snake, Rees, 1851 and 11 Stat. 749 [hereinafter 1851 Treaty of Horse Creek]; Treaty of Fort Laramie with Sioux-Brule, Oglala, Miniconjou, Yanktonai, Hunkpapa, Blackfeet, Cuthead, Two Kettle, San Arcs, and Santee-and Arapaho, 1868 and 15 Stat. 635 [hereinafter 1868 Treaty of Fort Laramie].

recognizing tribal airspace sovereignty exists, a foundation in which the FAA failed to consider by placing the interests of a corporation before the welfare of the people.

The third chapter's case study represents how the Federal Aviation Administration fell short of their trust responsibilities by making rules and regulations to reduce noise pollution in the Grand Canyon National Park in two major ways: 1) by failing to consider how their government actions may negatively impact tribes, and 2) by failing to make rules that address tribal interests in *both* developing their aviation enterprises and defending their cultural resources. This study involves an analysis of legal documents (e.g., bills, statutes, court cases, agreements, environmental surveys) and consultation documents (public comments and meeting minutes) between the FAA and tribes adjacent to the Park. Some documents reference all eleven of the tribes with cultural affiliation to the Grand Canyon, but I will be focusing on only three – Diné (Navajo Nation), Havasu 'Baaja (Havasupai Indian Tribe), and Hwal'Bay (Hualapai Tribe) – because of how FAA rulemaking has the most immediate impact on their cultural resources and airspace. Additionally, I analyze the legislation that grants the FAA's authority to address noise abatement issues, and that defines the Park's boundaries in relation to these tribes. This analysis will provide a historical context for the relationship these tribes have with the FAA and National Park Service (NPS). Keeping in mind their complicated relationship, I track gradual improvements in tribal consultation over the span of 36 years to argue how collaborative rulemaking between the FAA and tribes through "meaningful" consultation proves far more productive and mutually beneficial than when the FAA attempted to reduce noise pollution in the Canyon on their own. Consequently, I expose the federal government's capacity to recognize and strengthen tribal airspace sovereignty. Lastly, applying water law doctrines to this study reveals how water law is possibly too narrow of a lens for finding a

legal basis that implies tribal air rights. The FAA and NPS's capacity to recognize tribal air rights through collaborative rulemaking and meaningful consultation expresses how other types of cultural resource law, not just water law, are useful for providing a legal basis for tribal rights in airspace.

In the fourth chapter, I will summarize my research findings to accomplish two goals: 1) to identify some of the most successful strategies tribes use to maneuver political spaces to clarify their sovereignty in the airspace, and 2) to define "meaningful consultation" based on the presence or lack thereof in each case studies. In achieving the first goal, I turn to Laura Evans' scholarship, titled *Power from Powerlessness*, on political strategic legacies since each tribe has its own set of strategies and expertise (public protest, litigation, and entrepreneurship) for asserting their sovereignty in vastly different environments (ranging from a hostile to supportive environment). Because both studies strengthen the presence of indigeneity in airspace, her scholarship provides a framework for evaluating tribes' success without reducing their social and political activism to either a win or loss. For the second goal, I reference Attorney Troy Eid's "Beyond the Dakota Access Pipeline: Working Effectively with Indian Tribes on Energy Projects," and Thomas King's *Cultural Resource Laws and Practice* to compare and contrast tribal consultation in each case study. As a result, a third goal arises from this comparison in which I argue how the FAA's conduct with the tribes in the second study further proves how their conduct in the first study did not meet their own standards for meaningful consultation. Lastly, I

reference Eid and King's scholarship to add suggestions for how the federal government and corporations can and should make consultation more meaningful.[46]

In the later sections of this concluding chapter, I discuss how the rising popularity and accessibility of drone technology opens greater possibilities and risks for tribes, insisting the need for expanding action research and literature on air law as it pertains to American Indians and Alaska Natives. To end on a positive and inspiring note, I mention several of many achievements tribes are making to innovate and problem-solve in Indian Country. By ending there, this research attempts to contribute to Indigenous futurisms[47] by expressing how the scientific knowledge embedded in Indigenous traditions gives tribes a strong intellectual and cultural ability to manage their airspace safely and responsibly.

46. Troy A. Eid, "Beyond the Dakota Access Pipeline: Working Effectively with Indian Tribes on Energy Projects," American Bar Association, last modified March 2, 2018, https://www.americanbar.org/groups/environment_energy_resources/publications/trends/2017-2018/march-april-2018/beyond-the-dakota-access-pipeline/; Thomas F. King, "Impacts of Historic Properties: Section 106 of the National Historic Preservation Act (NHPA)," in *Cultural Resource Laws and Practice: An Introductory Guide*, ed. 2 (New York: AltaMira Press, 2004), 89.

47. Elizabeth LaPensée, Allen Turner, Rebecca Roanhorse, and Johnnie Jae, "Indigenous Futurisms," panel discussion, Indigenous Comic-Con from Isleta Resort and Casino, Albuquerque, NM, November, 3, 2018. This panel discussion included Elizabeth LaPensée (Anishanaabe, Metis, and Irish), daughter of Grace L. Dillon, who coined the term 'Indigenous futurisms' to refer to the scientific meanings embedded in Indigenous knowledge systems. At this I-CON18 event, LaPensée described the phrase to mean a concern for the past, present, and the future as well as an inquiry into what people can do right now to enact a future they want. These panelists unanimously agreed with a future where Indigenous peoples represent themselves and all of the nuances of being Indigenous. Scholar and game designer Allen Turner mentioned how important *play* is for exploring themselves, changing roles, and retiring things that no longer serve them. In a follow-up question, each panelist named things that no longer serve them as Indigenous peoples. Joahnnie Jae, the founder of "A Tribe Called Geek" podcast, acknowledged that Indigenous peoples cannot always be in "survival mode" since it does not always serve them in thriving. Their discussion expressed some of the ways people from various Indigenous communities with unique, yet similar, epistemologies engage in conversations about the future and their commitment to science, technology, engineering, and mathematics (STEM).

Before jumping into the case studies, the next section will present the legal and literary foundation for this paper's argument. I will begin with a review of tribal sovereignty in air law, followed by a more abundant review of tribal sovereignty in water law, moving onto a review of tribal airspace sovereignty in literature, and finally a more general review of tribal sovereignty in literature. These reviews will present how tribal airspace sovereignty is ambiguous in law, and some of the arguments Indigenous scholars make about the deliberate role ambiguity plays in American jurisprudence.

Limitations

Some components missing from this study include qualitative data and analysis and active engagement with tribal communities to fill in gaps of knowledge and information. Some of these gaps include individual tribal responses to and definitions of the term 'tribal airspace sovereignty.' Another gap relates to the tensions that exist within tribal communities as they assert their airspace sovereignty at different levels of society (government, community, family, and individual). This study also does not adequately explore the tensions existing between tribal nations regarding conflicting approaches to managing, developing, or policing their airspace. For instance, the Hualapai Tribe engages in air tourism while neighboring tribes have little to no involvement in air tourism. Further research calls for more insight into what steps the Hualapai Tribe might be taking to improve the safety and accessibility of the Park for neighboring tribes and visitors. Since Helicopter Alley and some notorious pilots have a reputation for making this area of the

Park noisy and dangerous,[48] further research could delve into how tribes hold one another accountable to certain safety standards.

This thesis also lacks a deeper acknowledgment of the roles that certain colonial systems play in creating these tensions such as IRA-adopted governance and capitalism. The arguments throughout this thesis could also be accompanied by discussions of gender roles and tribal leadership in processes of consultation. Unfortunately, this thesis does not go into specific detail about whom all is speaking and participating in consultation. Future research could explore some of these missing topics and discussions.

Furthermore, my arguments are lacking further research into how tribal airspace sovereignty is to be understood concerning tribes in Public Law 280 states with limited jurisdiction and issues of checkerboarding. These legal circumstances require additional research and investigation to discuss ways in which tribal airspace sovereignty is exercised or understood by these tribes.

REVIEW OF LITERATURE AND LAW

A review of literature and law representing reserved rights for tribal nations in airspace produced one result each while the rest were found in tribal constitutions and codes. The only domestic air law that specifically notes tribes is in a revision of the Aviation Innovation, Reform, and Reauthorization Act of 2016, also known as H.R. 4441. This reform bill proposes a three-year plan to privative air traffic control (ATC) as a not-

48. Ron Dungan, "Grand Canyon Air Tours: Conservationists Hear Noisy Flights, Tribe Sees Economic Returns," *AZCentral*, last modified September 29, 2017, https://www.azcentral.com/story/news/local/arizona-environment/2017/09/29/grand-canyon-air-tours-conservationists-hear-noisy-helicopters-tribe-sees-economic-returns/588119001/.

for-profit corporation with two main goals: to save taxpayer money and allow the FAA to focus on transportation instead of building an elaborate communication network.[49] Sections on "Public UAS Operations" and "Nominating Membership" in this bill identify tribal governments by securing their right to operate unmanned aircraft systems (UAS) for law enforcement and public safety (see Figure 1 for FAA aircraft classifications).[50]

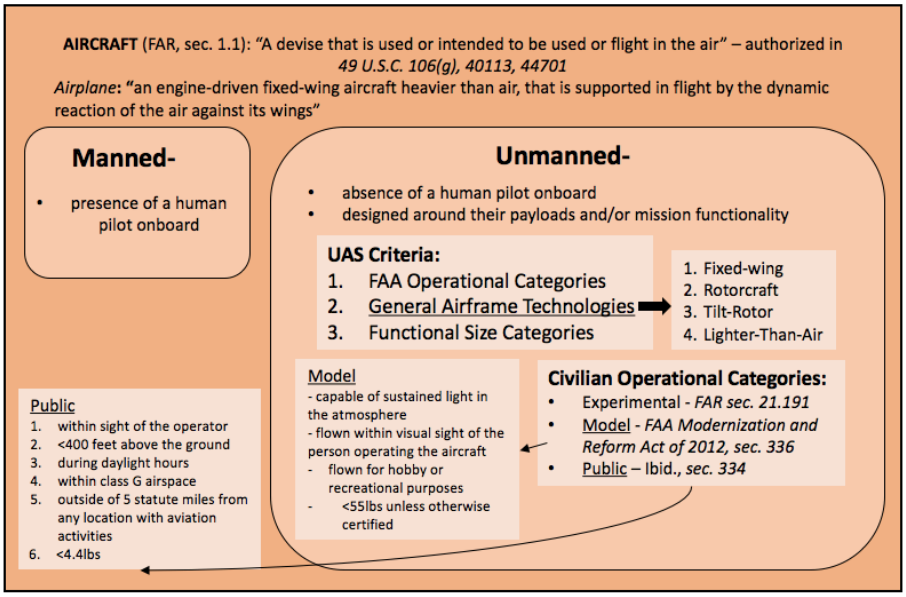

Figure 1. FAA Aircraft Classifications[51]

So far, this bill has been the only domestic air law to specifically mention tribal rights in airspace.

Results for 'air' or 'airspace' in tribal law, on the other hand, proved more robust. The following tribes have specified their airspace sovereignty and rights in their tribal

49. HR 4441.

50. Ibid. Under "Nominating Membership" (§ 90305), tribal governments are identified as one of the groups that do not qualify for serving as a member of the ATC Corporation along with members of Congress and elected officials, officers or employees of federal, state, or local government.

51. Donna A. Dulo, "Unmanned Aircraft Classifications," *SciTech Law* 11 (2014-2015): 16-19. For a definition of 'aircraft,' *see* 49 USC106(g), 40113, 44701.

constitutions, codes, or both: Citizen Potawatomi Nation, Snoqualmie Indian Tribe, Navajo Nation, White Earth Nation, Eastern Band Cherokee Nation, Swinomish Indian Tribal Community, and Osage Nation.[52] In addition to tribal constitutions and codes, an assertion of tribal air rights is found in other areas of governance as well. The Jicarilla Apache Tribal Member Hunting Proclamation, for example, has continuously stated the use of aircraft as an illegal and unethical method for hunting but recently specified the use of unmanned aircraft by adding "drones" to Resolution 2018-R-031-01.[53] Tribes such as the ones listed above often claim their airspace sovereignty out of a need to protect themselves as well as their hunting and fishing rights from aerial threats because of their proximity to an Air Force base or airstrip.

Furthermore, a review of tribal water rights proves far more developed than tribal air rights defined by both tribes and domestic air law. See Figure 2 for a timeline of notable laws throughout the development of water rights in comparison to air rights.

52. *See* Citizen Potawatomi Nation Const. art I, § 1 (2007); Snoqualmie Indian Tribe Const. art. I, § 4(a) (2006); White Earth Nation Const. ch. 1 (2013); Eastern Band Cherokee Nation Code § 113A-22 (2010); Navajo Nation Code tit. 16, § 2203(C) (2009); Snoqualmie Tribal Code tit. 5.4, § 4.0 (2009); Swinomish Indian Tribal Community Const. art. I, § 2 (2017); and Osage Nation Const. art. I, § 1 (2016).

53. Jicarilla Apache Nation Legislative Council, Proclamation, "2018-2019 Jicarilla Apache Tribal Member Hunting Proclamation," Jicarilla Game and Fish, Resolution 2018-R-031-01, https://docplayer.net/74774312-Jicarilla-apache-tribal-member-hunting-proclamation.html.

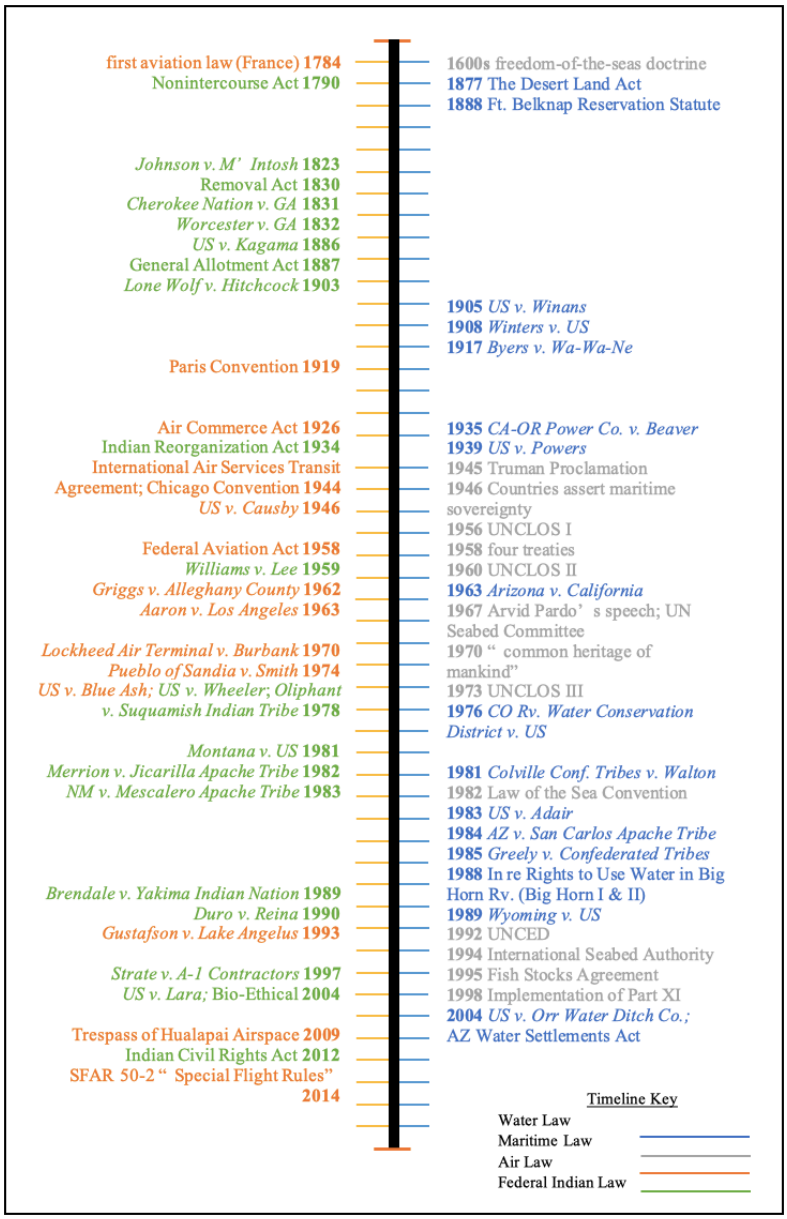

Figure 2. Evolution of Air Law, Water Law, Maritime Law, and Federal Indian Law

Three primary doctrines exist in water law: the riparian, prior appropriation, and Winters doctrine. The riparian doctrine applies to eastern states, and prior appropriation applies to western states. These doctrines consider water rights based on usage, benefit, priority, quantification, and transferability, but only the Winters doctrine decides the criteria for how these terms apply to tribes. For American Indians, decisions from *US v. Winans*,

Winters v. US, and *Arizona v. California* establishes their water rights under state and federal law. The Winters doctrine assumes that the US government must have implied water rights when establishing reservations to the amount necessary for a tribe to survive.[54] Thus, the priority date for tribal water rights is both time immemorial and the reservation establishment date.[55] *Winters* reaffirms tribal rights over water while no such case exists in air law yet; therefore, this case can provide a legal basis for claiming tribal air rights also based on reserved rights and the syllogism: *The federal government created reservations for Indians, and all people need water to survive. Therefore, the federal government must have intended for Indians to have water rights to survive on reservations.*

Member of the Seminole Nation of Oklahoma and Staff Attorney for the San Manuel Band of Mission Indians William Haney's legal scholarship is the first to define the legal scope of tribal airspace sovereignty. His article "Protecting Tribal Skies" argues and defends tribes' inherent sovereign right to regulate their airspace. Haney references several court cases regarding aerial trespass and the impact of low overflights to demonstrate how the judicial and legislative branches have divested tribes of their airspace sovereignty by failing to apply a federal Indian law lens. By applying this lens to domestic air law, Haney identifies areas in which tribes have the inherent right to police, develop, and regulate their airspace. He even prepares arguments to counter popular arguments that attempt to divest tribal civil jurisdiction, policing power, nationhood, and collective property rights.

Haney's article contributes an understanding of how the US government limits regulatory power over national airspace to their control. The history of domestic air law,

54. *Winters v. United States*, 207 US 564 (1908).
55. Ibid.

for instance, indicates their motives for claiming absolute sovereignty. In 1958, Congress referred to the commerce clause to grant the federal government power to set safety standards, which were lacking under the states' control, in hopes of reducing mid-air collisions.[56] Since then, the FAA has established a grand network of air traffic controllers (tower controllers, terminal radar approach controllers, air route controllers, and command center traffic management specialists) that "regulate the flow of air traffic to minimize delays and congestions while maximizing the overall operation of the NAS [National Airspace System]."[57] Their ability to enforce rules and regulations to make US national airspace among "the safest and most efficient in the world"[58] serves as the same justification to divest tribal, state and local governments from sharing any regulatory power with them. To argue on behalf of tribes, Haney cites the Marshall trilogy, treaties, and other laws and policies regarding tribal civil jurisdiction, 'collective' property rights, and self-determination. His arguments provide a basis for understanding tribal airspace sovereignty with an applied lens of federal Indian law to domestic air law.

Haney's primary defense for tribal airspace sovereignty relates closely to Indigenous scholar and activist Vine Deloria Jr.'s arguments. Both Haney and Deloria argue that the US government uses plenary power and applies a status of domestic

56. Haney, "Protecting Tribal Skies," 10. *See* Federal Aviation Act of 1958, Pub. L. No. 85-726, 72 Stat. 731, 731.

57. Department of Transportation, Federal Aviation Administration, "NAS Operations: Air Traffic Control System Command Center (ATCSCC)," accessed March 3, 2019, https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/nas_ops/atcscc/.

58. Department of Transportation, Federal Aviation Administration, "FAA TV: How Does the National Airspace System (NAS) Works," ATO Communication Services, September 15, 2011, https://www.faa.gov/tv/?mediaId=370.

dependence to divest tribes of their sovereign rights whenever those rights are ambiguous. Haney responds to the federal government's assumption of power by demanding that treaties and policies of self-governance do imply tribes' reserved rights.[59] This is why treaties are also referred to as the reserved rights doctrine.[60] In other words, just because the policy-makers did not explicitly mention tribal governments does not mean those rights do not exist. Since tribes are nations, as recognized by the United States when it signed treaties with them on a government-to-government basis, their sovereign rights are inherently equivalent to the United States as a nation and precedent to that of state and local governments.

Haney's argument creates a basis for understanding some of the ways the federal government divests tribal airspace sovereignty through forming legal contradictions despite there being space to recognize tribal airspace sovereignty. His arguments, summarized in Figure 3, express the obstacles and barriers tribes face in trying to regain authority over their airspace from the FAA.

59. Haney, "Protecting Tribal Skies," 23.
60. *See United States v. Winans*, 198 US 371 (1905).

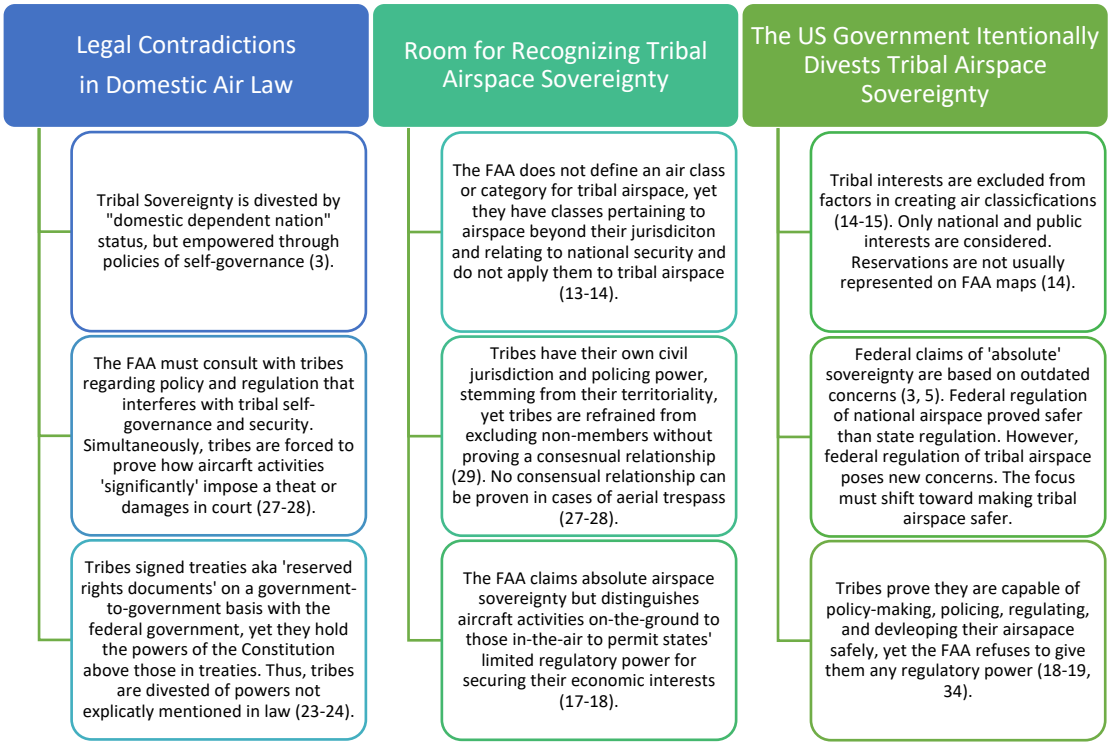

Figure 3. Findings from Applying a Federal Indian Law Lens to Domestic Air Law[61]

My case studies address these findings by specifically locating them in contemporary issues to evaluate how tribes assert their tribal airspace sovereignty amid these contradictions and maneuver the federal government's attempts to divest their power in airspace. Also, by identifying these barriers to tribal airspace sovereignty, tribes can focus on ways of breaking down the barriers while appealing to the FAA's purpose for maintaining the safety of the National Airspace System. In addition to using a lens of federal Indian law similar to that of Haney's, I will apply the legal framework from water law to air law to show how tribal air rights are similarly implied and reserved.

61. Haney, "Protecting Tribal Skies," 3, 5, 13-5, 17-9, 23-4, 27-9, 34.

Since legal research and laws on tribal airspace sovereignty proved scarce, I expanded my review of the literature to include general assertions of tribal sovereignty from a critical Indigenous studies lens. Indigenous scholars and activists, such as Vine Deloria Jr. and David Wilkins, provide insight into some of the ways tribes have argued their sovereignty throughout the centuries. Some of their arguments, reflected in many Indian civil rights movements, were successful in asserting tribal sovereignty in federal Indian law while other issues remained unreconciled (e.g., treaty rights and violations). Building off of these arguments for tribal sovereignty prove useful for expanding tribal sovereignty according to more recent events and for contributing to ongoing century-long debates. Some common themes across this literature include the following summarized claims about tribal sovereignty and self-governance:

- Tribal definitions of sovereignty vastly differ and conflict with the United States' definition. The United States defines sovereignty as something that can be taken or given by another nation while tribes' define sovereignty as static and inflexible.[62]
- The ambiguity of tribal rights and status in American jurisprudence is a deliberate tool for the US government to divest tribal sovereignty and to reprioritize national and public interests.[63]
- The federal government fails to recognize treaties as "the law of the land" or containing reserved rights.[64]

62. Luna-Firebaugh, *Tribal Policing*, 4.
63. Deloria. and Wilkins, *Tribes*, 24-25, 45, 51.
64. Ibid., 28.

- American jurisprudence is comfortable with contradictions especially when they allow the US government to re-emphasize parts of an Indian and tribal identity easily.[65]
- Reinstating treaties would prove beneficial for the US government by saving them time and energy in litigating issues already within the boundaries of tribal self-governance.[66]

The ambiguity of tribal rights and status is what links all of these themes together. Vine Deloria Jr. and David Wilkins provide invaluable insight into the roles that ambiguity and group rights play in law. In *Tribes, Treaties and Constitutional Tribulation*, the authors argue that American Indians and other ethnic groups are purposefully left ambiguous in Anglo-Saxon jurisprudence so the federal government can contort laws and decisions to free-up land, control commerce, and bend civil liberties to benefit non-Natives.[67] Their argument also applies to matters pertaining to American Indian airspace rights. The absence of a clear definition and understanding of the full scope of tribal sovereignty allows the federal government to assume that tribal airspace is enveloped or nonexistent within national airspace. Consequently, this assumption makes it easy for the FAA and other agencies to forget about tribal interests in airspace. Since consultation is the FAA's only legal guide for taking government action in tribal airspace, the FAA is free to police, develop, and regulate all national airspace until they declare that an action has a potential impact on tribes of which they cannot readily identify without tribal consultation.

65. Deloria and Wilkins, *Tribes*, 146-48.

66. Vine Deloria Jr., *Behind a Trail of Broken Treaties: An Indian Declaration of Independence* (Austin: University of Texas Press, 1985), 255-58.

67. Deloria and Wilkins, *Tribes*, 24-25, 45, 51.

The FAA's tribal consultation policy and procedures align with the federal government's responsibilities in Executive Order 13175. However, the FAA's responsibilities rely more heavily on an understanding of federal Indian law and policy. Order 1210.20 hints to federal Indian laws and policies by referencing self-determination, self-governance, government-to-government relations, sovereignty, and implying a trust and guardian arrangement with tribes. These terms and responsibilities are expressed in Figure 4, which represents the process in which the FAA must adhere to as an agency of the federal government when working with American Indian and Alaska Native tribes.

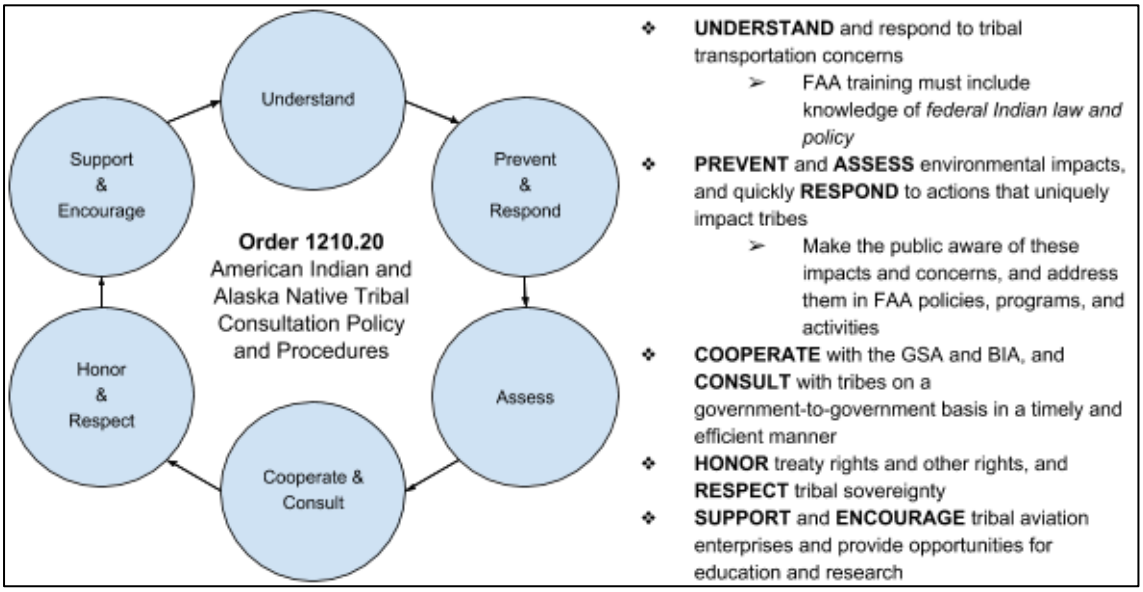

Figure 4. FAA's Tribal Consultation Policy and Procedures[68]

But, these terms and principles are not reaffirmed anywhere else in air law, meaning there is a significant gap that essentially empowers the FAA to choose how and when to apply a federal Indian law lens to issues in airspace. In the second promise of Order 1210.20, the FAA must address tribal concerns in airspace and aviation transportation in their policies,

68. Order 1210.20.

programs, and activities, but a revision of H.R. 4441 is the only proof of such action taken by the FAA.[69] Also, their thirteenth promise states the FAA is supposed to be well-trained in federal Indian law. On the contrary, protest and litigation against the FAA reveals a different narrative. One where the FAA is rarely held accountable (by the courts) to apply a lens of federal Indian law to issues in airspace. In *Coalition v. FAA*, the Hualapai expressed their frustration over the FAA's failure to consider their concerns about protecting their religious freedoms and opportunities for economic development. They described the FAA's actions to regulate airspace by rerouting flight corridors as "too much, too soon" because the alternative routes would extinguish their opportunity for expanding their air-tour industry.[70] The Hualapai's argument against the FAA indicates how the agency dismissed tribal self-determination and economic development.[71]

Since air law has not yet defined or reaffirmed tribal territorial sovereignty, the federal government could potentially treat tribal air rights like either property rights as citizens *or* "collective" property rights as an ethnic group. As Deloria and Wilkins argue, tribal members status and privileges as US citizens sometimes convolute their identity, allowing the FAA and federal courts to decide which status to emphasize in any given circumstance. In most cases, the status that can benefit non-Native citizens is the most favorable by the court.[72] For example, Deloria and Wilkins cite treaties as a prime example to express how the federal government contorts laws to benefit non-Natives.

69. Ibid. *See* HR 4441.

70. *Grand Canyon Air Tour Coalition v. FAA*, 154 F.3d 455 (D.C. Cir. Sept. 4, 1998) [hereinafter *Coalition v. FAA*].

71. *See* Indian Self-Determination and Education Assistance Act, Pub. L. No. 93-638, 88 Stat. 2203 (1975) (codified as amended at 25 U.S.C. § 5301 et seq.).

72. Deloria and Wilkins, *Tribes*, 45, 51.

Under the U.S. Constitution, treaties are "the supreme law of the land"; but, in 1871, Congress unilaterally ended treaty-making with tribes because the United States no longer recognized tribes as foreign nations that processed the power to make such agreements.[73] Federal Indian law and policy such as the Indian Appropriations Acts of 1885 and 1889 and Dawes Act of 1887 further reduced Indian lands through sanctioning white settler claims to so-called "unassigned" lands or wilderness areas.[74] This act of establishing dominance over tribes was necessary for the United States to remap the American landscape. As a result of Indian removal, termination, and forced assimilation policies for over a century, tribes lost thousands of acres of their homelands to anxiously awaiting frontiersmen and women, which shows how the federal government needed to break their promise to tribes in order to provide for its non-Native citizens.[75] Some of these laws have since been the *supreme laws of the stolen land* even though federal recognition of tribal nationhood has since improved. The Red Power Movement and repatriation era pressured the US government to uphold treaties, once again providing invaluable insight into how the federal government can uphold treaties and compensate tribes yet chooses not to. The same goes for recognizing tribal airspace sovereignty. Deloria and Wilkins show how flexible and contradictory the US legal system must be for the government to justify

73. U.S. Constitution, article VI; Future Treaties with Indian Tribes, 25 U.S.C. § 71 (1988), 16 Stat. 544, 566; Deloria. and Wilkins, *Tribes*, 28; National Archives, "Rights of Native Americans: The End of Treaty-Making 1871," Records of Rights Exhibition, accessed March 8, 2019, http://recordsofrights.org/events/51/the-end-of-treaty-making.

74. Indian Appropriations Act of 1988, 25 U.S.C. § 71 (2012); General Allotment Act (or Dawes Act), 24 Stat. 388, ch. 119, 25 USCA 331, 49th Cong. (2nd Sess. 1887.). For more about representations of wilderness lands to justify settler colonialism, *see* Juliana Barr, "Geographies of Power: Mapping Indian Borders in the 'Borderlands' of the Early Southwest," *William and Mary Quarterly* 68, no. 1 (2011): 5-46.

75. Deloria and Wilkins, *Tribes*, 130.

different claims. I will add to their argument by demonstrating how the FAA uses its regulatory power and flexibility to make exceptions that allow the agency to prioritize public and corporate interests above tribal interests.

In *Behind a Trail of Broken Treaties*, Deloria argues that the US government has a legal basis to clarify tribal sovereignty through international legal terms and by renewing the policy of treaty-making with tribal nations. Deloria states that if the federal government assigned tribes a protectorate status and abide by a treaty relationship, the relationship "would prove fruitful" for all Americans, especially by alleviating Congress' responsibilities.[76] For example, abiding by a treaty relationship would help clarify tribal rights and federal responsibilities, provide an agreement process, reduce federal liability for claims of budget misuse, and eliminate jurisdictional confusion with states.[77] The same applies to matters of airspace.

The case studies addressed in this thesis demonstrate that the FAA lacks the will to address tribal concerns about the control of their airspace. Federal recognition of tribal airspace sovereignty would prove mutually beneficial by enabling those Indigenous nations to provide the agency with much-needed guidelines and by providing tribes room to address their concerns. To counter the FAA's fear that American Indian control of reservation airspace would diminish national air safety, I illustrate in my research how the Standing Rock Sioux Tribe, Hualapai Tribe, Havasupai Tribe, and Navajo Nation have the ability to adhere to FAA flight regulations and safety standards. The next chapter stresses that the Standing Rock Sioux Tribe has this ability to follow FAA safety protocol

76. Deloria, *Behind a Trail of Broken Treaties*, 255-58.
77. Ibid., 253-56.

pertaining to the flying of media drones during the No DAPL protest while the FAA abused its regulatory power.

CHAPTER 2

SURVEILLANCE: DEFENDING AIR RIGHTS IN STANDING ROCK SIOUX TRIBAL AIRSPACE

The Thunderers

> Now we turn to the west where our Grandfathers, the Thunder Beings, live. With lightning and thundering voices, they bring with them the water that renews life. We bring our minds together as one to send greetings and thanks to our Grandfathers, the Thunders.
>
> *Now our minds are one.*

Ratiwé:ras

> Onen ehnón:we ientsitewakié:ra ’te ne tsi ia ‘tewa ‘tshénthos nón:we thatiienhthákhwa ne ionkhisho’thokón:’a ratiwé:ras. Tewahni’nakara ‘wánionhs nó:nen á:re tontaiaonharé:re tahatihnekenhá:wi ne á:se enshonnón:ni ne tsi ionhontsiá:te. Ne tsi nentewá:iere enska tsi entewahwe’nón:ni ne onkwa’nikón:ra tánon’ teniethinonhwerá:ton ne ionkhisho’thokón:’a ratiwé:ras.
>
> Ehtho niiohtonha’k ne onkwa’nikon:ra.[78]

Water protectors, made up of both Natives and non-Natives, brought their minds together as one at Standing Rock, North Dakota in early 2016 to protest the Dakota Access Pipeline (DAPL) in what is known as the NoDAPL Movement.[79] Managed by Dakota

78. *Thanksgiving Address: Greetings to the Natural World*.

79. For a timeline of events, *see* Earthjustice, “Timeline of Events,” accessed April 13, 2019, https://earthjustice.org/features/faq-standing-rock-litigation; Amy Sisk, “Timeline: The Long Road to #NoDAPL,” Inside Energy, last modified Jan 23, 2017, http://insideenergy.org/2017/01/23/timeline-the-long-road-to-nodapl/; Ryan W. Miller,

Access, LLC, a member of Transfer Energy Partners, this pipeline transports crude oil underground from North Dakota to Illinois.[80] The Standing Rock Sioux Tribe led the grassroots movement with support from tribal nations, organizational allies, celebrities, veterans, and other water protectors[81] against Dakota Access and its supporters, which included private security personnel from TigerSwan International Ltd.[82] and county and federal law enforcement personnel.[83] Facing those well-armed units, the peaceful, but vocal, water protectors experienced physical, spiritual, emotional, and legal abuse at the hands of DAPL employees and police officers.

"How the Dakota Access Pipeline Battle Unfolded," *USA Today*, last modified December 2, 2016, https://www.usatoday.com/story/news/nation/2016/12/02/timeline-dakota-access-pipeline-and-protests/94800796/.

80. Energy Transfer, "Bakken," accessed February 24, 2019, https://www.energytransfer.com/ops_bakken.aspx; "Company Overview of Dakota Access, LLC," *Bloomberg*, accessed February 24, 2019, https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=264269763.

81. Standing Rock Sioux Tribe, "Oceti Sakowin," Standing with Standing Rock, accessed April 13, 2019, https://standwithstandingrock.net/oceti-sakowin/.

82. TigerSwan: Solutions to Uncertainty, "Who We Are," accessed March 1, 2019, https://www.tigerswan.com/who-we-are/; TigerSwan: Solutions to Uncertainty, "Corporate Risk Management for Modern Global Threat," accessed March 1, 2019, https://www.tigerswan.com/for-enterprise/. TigerSwan prides itself on being "uniquely qualified" in "risk mitigation" and global consultancy for parties, ranging from individuals to whole corporations, both domestic and abroad. For instance, they protect "government contractors promoting American interests in foreign countries," which could also be used to describe their assignment to protect DAPL contractors in Indian Country. In protecting corporate property and enterprise (e.g., DAPL), "TigerSwan provides the contextual awareness, executive visibility, and actionable intelligence required to more effectively anticipate, manage, and mitigate risk." However, if they truly govern with a "contextual awareness," it surely does not include federal Indian law or American history.

83. Alleen Brown, Will Parrish, and Alice Speri, "The Battle of Treaty Camp: Law Enforcement Descended on Standing Rock a Year Ago and Changed the DAPL Fight Forever," *Intercept*, last modified October 27, 2017, https://theintercept.com/2017/10/27/law-enforcement-descended-on-standing-rock-a-year-ago-and-changed-the-dapl-fight-forever/. Daily meetings took place between "intelligence officers from the FBI, Department of Homeland Security, Bureau of Indian Affairs, and other agencies" without representation from the Sioux Nation.

Unmanned aerial systems (UAS) played an essential role in the Native resistance,[84] resulting in a unique connection between water and air rights. Media drone pilots captured footage of the protesters unified efforts to stop the construction of DAPL for the benefit of humanity and Earth. Along with it, this footage revealed police brutality in the form of false imprisonment, intimidation, unwarranted surveillance, unwarranted seizures of property, and the use of police dogs, water cannons, batons, pepper spray, and rubber bullets.[85] In this movement, water protectors used the sky and Internet to spread their

84. *See* Bill Zimmerman, *Airlift to Wounded Knee* (Chicago: Shallow Press, 1976). This is not the first time aircraft (e.g., UASs) played an important role in Indigenous resistance. In 1973, during the occupation of Wounded Knee, Bill Zimmerman and a few other non-Natives organized an airlift to get essentials to citizens of Pine Ridge Reservation and participants of the American Indian Movement. Similar to the NoDAPL Movement, occupants of Wounded Knee were surrounded by a combination of federal and local agents, and the airspace was declared "restricted." Zimmerman, *Airlift to Wounded Knee*, 5, 177. Even though the FAA labeled the airlift "illegal," the Justice Department had actually illegally seized the airspace from the FAA and failed to give proper notice of the ban according to Federal Air Regulations. Zimmerman, *Airlift to Wounded Knee*, 1, 177. Also similar to NoDAPL, federal agents conducted flight surveillance and spread rumors that the activists were potentially armed and violent. Because of these rumors, an FBI helicopter called "Snoopy" shot at a family getting food from one of the cargo drops. The FBI used "leather cases" as an excuse for using force because leather indicates an artillery drop, which is why members of the airlift intentionally used cloth bags. Zimmerman, *Airlift to Wounded Knee*, 276. Federal and local agents used many excuses for their use of force, including self-defense, but it is evident that the airlift was really just a threat to their plan to starve out the occupants of Wounded Knee. For Zimmerman and his colleagues, the airlift represented a bridge between two movements: AIM and the anti-war movement. Zimmerman, *Airlift to Wounded Knee*, 309.

85. For reports of police brutality against water protectors, *see* Ben Norton, "Dakota Pipeline Protesters Say They Were Detained in Dog Kennels: 268 Arrested in Week of Police Crackdown," *Salon*, last modified October 31, 2016, http://www.salon.com/2016/10/31/dakotapipeline-protesters-say-they-were-detained-in-dog-kennels-268-arrests-in-week-of-policecrackdown/. Also, *see* ACLU Standing Rock Letter to Justice Department, November 4, 2016, https://www.aclu.org/letter/aclu-standing-rock-letter-justice-department; "Journalist Shot with Rubber Bullets During N.D. Pipeline Protests," *CBS News*, last modified November 4, 2016, http://www.cbsnews.com/news/erin-schrode-joumalist-shot-with-rubber-bullets-duringdakota-access-pipeline-protests/; Terray Sylvester, "North Dakota Officials Hope

message – "Water is life! (Mni Wiconi)" and "Life is water!" – across the country throughout social media networks.[86]

The water protectors' message captured the attention of the nation. It reached the crowd at Seneca Niagara Casino's annual Native American Music Awards (NAMA) ceremony: "A special appearance made by the family of nominee Joseph Flying Bye — whose recording *Putting The Moccasins Back On* was nominated in two categories — received an overwhelming response from the attendees in support of their opposition of the Dakota Access Pipeline."[87] NAMA attendees, many of whom are Haudenosaunee (People of the Longhouse), pledged their support to the Sioux Nation.[88] The following year, Indigenous musicians such as Taboo of Black Eyed Peas and Prolific the Rapper wrote songs dedicated to NoDAPL efforts, expressing the renewal characteristics of water and its relationship with all beings.[89] NAMA celebrated artists that spread Standing Rock's

to Quell Pipeline Protests with Fines," *Reuters*, last modified November 30, 2016, http://www.reuters.com/article/us-north-dakota-pipeline-idUSKBN1302FD; Unicom Riot, "Four Unicom Riot Journalists Face Charges for Covering #NoDAPL," last modified October 17, 2016, http://www.unicomriot.ninja/?p=10071.

86. Prolific The Rapper, "Prolific The Rapper x A Tribe Called Red - Black Snakes," January 24, 2017, https://www.youtube.com/watch?v=QdeHUrL1FEM. This music video features drone footage taken during the NoDAPL Movement.

87. Kristin Brown, "2016 Native American Music Awards: A Diverse and Impressive List of Talents Turned Up to Celebrate the 2016 Native American Musicologists Awards," *Cowboys and Indians*, last modified September 28, 2016, https://www.cowboysindians.com/2016/09/2016-native-american-music-awards/.

88. Doug George-Kanentiio, "Iroquois Prophecy and People at Standing Rock," Manataka American Indian Council, accessed March 3, 2019, https://www.manataka.org/page2977.html. George-Kanentiio writes to the Standing Rock Sioux Tribe in solidarity of their fight against the black snake (pipeline) while situating the threat of the pipeline in Iroquois prophecy to remind them that, with "peace and unity," there is hope.

89. Native American Music Awards, "Water Is Life Mni Wiconi: Various Artists - Native American Music Association & Awards," accessed March 3, 2018, https://nativeamericanmusicawards.com/album/410865/water-is-life-mni-wiconi; "Taboo of Black Eyed Peas, Native American Artists' Standing Rock Music Video Nominated

message along with countless other online communities that hash-tagged slogans and reposted drone footage. Diverse communities and peoples stood in solidarity with the Standing Rock Sioux Tribe[90] because of how the issues resonated with so many.

The Movement responded to several different issues. Its participants addressed matters of environmental injustice, corporate greed, and government corruption. They also sought to remedy the long history of inadequate consultation and failed government-to-government relations between tribes and the United States, which the next section will further investigate.

Consultation

The events that provoked such an explosive display of on-the-ground and in-the-media support for the NoDAPL Movement originated back in 2008 when the oil industry in "western North Dakota and eastern Montana" started to boom.[91] Tensions worsened

for MTV Video Music Award: 'Magnificent Seven' Collaborate with Taboo on First All-Star Native American Hip Hop Nomination in Brand New VMA Category," Cision PR Newswire, last modified August 24, 2017, https://www.prnewswire.com/news-releases/taboo-of-black-eyed-peas-native-american-artists-standing-rock-music-video-nominated-for-mtv-video-music-award-300508905.html; Prolific The Rapper, "Prolific The Rapper x A Tribe Called Red - Black Snakes."

90. For more about the tribal nations located in the Dakotas, *see* South Dakota Department of Tourism, "General Information," accessed March 30, 2019, https://www.travelsouthdakota.com/before-you-go/about-south-dakota/plains-indians/general-information. The nine tribal governments residing in South Dakota include the "Cheyenne River Sioux Tribe, Crow Creek Sioux Tribe, Flandreau Santee Sioux Tribe, Lower Brule Sioux Tribe, Oglala Sioux Tribe, Rosebud Sioux Tribe, Sisseton Wahpeton Oyate, Standing Rock Sioux Tribe and Yankton Sioux Tribe." *See* North Dakota Indian Affairs Commission, Tribal Nations," accessed March 30, 2019, http://indianaffairs.nd.gov/tribal-nations/. "There are five federally recognized Tribes and one Indian community located at least partially within the State of North Dakota. These include the Mandan, Hidatsa, & Arikara Nation (Three Affiliated Tribes), the Spirit Lake Nation, the Standing Rock Sioux Tribe, the Turtle Mountain Band of Chippewa Indians, the Sisseton-Wahpeton Oyate Nation, and the Trenton Indian Service Area."

91. Sisk, "Timeline."

when Dakota Access announced their plan to build a pipeline from North Dakota to Illinois in June of 2014.[92] Poor and insufficient consultation between 2014 to 2016 added to the conflict between the Standing Rock Sioux Tribe and those in support of the pipeline (The Army Corps of Engineers ("Corps"), Transfer Energy Partners and numerous other Wall Street corporations),[93] reaching its peak in 2016.

In *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, the Corps defended that they complied with Section 106 of the National Historic Preservation Act[94] by consulting with tribes and their respective historic preservation offices and by conducting an environmental impact statement.[95] However, the Corps' only proof of consultation was a list of times they contacted the tribes without receiving a response.[96] The only proof their evidence serves is confirmation that the Corps proceeded with the permitting process without tribal input. Furthermore, they proceeded while well-aware of how the water is sacred to tribes based on testimonies given during a public comment period.[97]

92. Ibid.

93. For a chart listing the companies that gave financial support to the DAPL project, *see* Jo Miles and Hugh MacMillan, "Who's Banking on the Dakota Access Pipeline?: The Standing Rock Sioux Are Inspiring the World with Their Resistance Against the Pipeline. But It's Not Just Big Oil and Gas That They're Opposing," Food and Water Watch, last modified September 6, 2016, https://www.foodandwaterwatch.org/news/who%27s-banking-dakota-access-pipeline. Their chart was last modified on December 5, 2016.

94. *See* National Environmental Policy Act, P.L. 91-190, 83 Stat. 852 (1970).

95. *Standing Rock Sioux Tribe et al. v. U.S. Army Corps of Engineers*, 205 F. Supp. 3d 4, 7 (D.D.C. 2016) [hereinafter *Standing Rock v. U.S. Army Corps*].

96. Leigh Paterson, "Tribal Consultation at Heart of Pipeline Fight," Inside Energy, last modified September 23, 2016, http://insideenergy.org/2016/09/23/tribal-consultation-at-heart-of-pipeline-fight/.

97. *Standing Rock v. U.S. Army Corps*. It is cited in this court case that Steve Vance went on record during a meeting to express how water is sacred: "ECF No. 143–1 (Transcript of NHPA Consultation Meeting, Feb. 18–19, 2016) at 3 (Steve Vance, Cheyenne River's Tribal Historic Preservation Officer: 'The water is the big thing. You know, we as tribes and Cheyenne River went on record and saying that water is a sacred

The Cheyenne River and Standing Rock Sioux tribes continued to argue the Corps "flouted its duty" to engage in timely and meaningful consultation.[98] For instance, under the Trump Administration, the executive office had acted quickly and swiftly to move DAPL construction along while consultation remained absent, lethargic, and even deceitful. Then too, Trump "approved the final portion [of the pipeline] in North Dakota" while "Dave Archambault II, the former Standing Rock chairman, was in an airplane on his way to Washington, D.C., for a pre-arranged meeting at the White House."[99] Archambault reflects on how federal consultation concerning DAPL fell into a long history of failure to adequately prioritize "the interests of tribes and Indian people."[100] In a motion for summary judgment, the tribes situate Trump's actions to bypass NEPA and consultation in a continuous pattern of violating their treaty rights as well:

object. If you look at the sacred site policy and that it says 'other things', it [doesn't] say the water.... And here we are[,] this is it. I mean, when that's gone we're all hurting.')." Vance also attended earlier meetings on December 8, 2015 and January 25, 2016. *See Standing Rock Sioux et al. v. U.S. Army Corps of Engineers*, No. 16-1534, Memorandum Opinion (D. D.C. June 14, 2017) (ECF No. 239) [hereinafter Memorandum Opinion]. Since tribal members expressed the importance of water to their Indigenous rights, "the Court agrees that it [the Corps] did not adequately consider the impacts of an oil spill on fishing rights, hunting rights, or environmental justice, or the degree to which the pipeline's effects are likely to be highly controversial."

98. Memorandum Opinion. US District Judge Boasberg states, "Cheyenne River further maintains that the Corps made its decision on the Section 408 permit long before the EA was published, thus truncating the time period for meaningful comment." However, note that the court in the Standing Rock I case did not agree that the Corps failed to comply with section 106 responsibilities.

99. "Standing Rock Sioux Tribe Warns of 'Same Mistakes' With New Dakota Access Study," Indianz.com, last modified March 7, 2018, https://www.indianz.com/News/2018/03/07/standing-rock-sioux-tribe-warns-of-same.asp.

100. Standing Rock Sioux Tribal Council, Comments of Chairman Dave Archambault, II, Standing Rock Sioux Tribe on Federal Consultation with Tribes on Infrastructure Decision Making, November 22, 2016, Fort Yates, ND, https://www.bia.gov/sites/bia.gov/files/assets/as-ia/raca/pdf/idc2-055454.pdf.

> Within a few days of his inauguration, the new President abandoned this commitment [to conduct an EIS with alternative routes that avoided treaty lands and areas of potential impact by oil spills]—perpetuating our nation's pattern of broken promises to the Tribe—and directed the Army to "review and approve" pipeline permits on an expedited basis. The Corps obeyed this direction, and on February 8, 2017, issued the easement and summarily terminated the EIS process. Construction is now underway. The Tribe now seeks expedited summary judgment on claims that this easement decision, as well as the Corps' July regulatory actions and accompanying NEPA analysis, are arbitrary, capricious, and contrary to law.[101]

Following the standoff, tribes of the Sioux Nation continue to argue that the Corps has given Dakota Access an advantage by prioritizing their timeline and has been completely "non-responsive concerning the remand process."[102] For one, Standing Rock argues the government also failed consultation by not providing vital information or response plans in case of an oil spill. The Tribe claims that "DAPL and the Corps of Engineers have failed to . . . communicate and share needed planning documentation such as unredacted facility response plans, geographical response plans, spill models, WCD calculations, etc., but this has not been done."[103] Altogether, this evidence of inadequate consultation and

101. *Standing Rock v. U.S. Army Corps.*

102. Attorney Nicole E. Ducheneaux, Cheyenne River Sioux Tribe to U.S. Army Corps of Engineers, No. 16-1534, Status Report Regarding Remand, (D. D.C. February 1, 2018) (EFCNo, 327) [hereinafter Status Report Regarding Remand].

103. Standing Rock Sioux Tribe, "Impacts of an Oil Spill From the Dakota Access Pipeline on the Standing Rock Sioux Tribe," prepared by Mike Faith Jr., February 21, 2018, https://www.standingrock.org/sites/default/files/uploads/srst_impacts_of_an_oil_spill_2.21.2018.pdf. For the Corps statement in defense of federal consultation, *see* US Army

environmental ethics reveals the federal government's reluctance to involve tribal input that will hold them accountable to their legal standards.

Disputes over consultation, or lack thereof, made by the Standing Rock Sioux Tribe involve massive allegations against the Corps, Dakota Access, the executive branch, and some criticism against the FAA. In regards to the FAA, however, tribal consultation was completely absent but did not fall under the same scrutiny as it did with the Corps because the FAA's government actions were not related to environmental policy as much as they were related to constitutional rights. Also, it is not yet widely known that Order 1210.20 extends section 106 responsibilities to the FAA. Later, I will discuss the FAA's responsibilities to the Standing Rock Sioux Tribe in more detail.

At the heart of the conflict at Standing Rock is the US government's failure to recognize American Indians' treaty and constitutional rights. On October 27, 2016, for instance, police raided a protest camp and arrested over 140 people, residing on land within the boundaries of the 1851 Horse Creek Treaty, for trespassing on public property "claimed" by the Dakota Access company.[104] In the Standing Rock Sioux's civil action suit against the Corps filed in September of 2016, US District Judge James E. Boasber acknowledges a long history of "removal and relocation of many tribes, often by treaty but also by force."[105] Judge Boasber also recognizes the Tribe's fears by paraphrasing in his memorandum opinion how the pipeline "is an "unlawful encroachment on its [the Tribe's]

Corps of Engineers, "Dakota Access Pipeline," accessed March 6, 2019, https://www.usace.army.mil/Dakota-Access-Pipeline/.

104. Miller, "How the Dakota Access Pipeline Battle Unfolded." For a map of the Great Sioux Reservation and a loss of boundaries from the 1851 to 1868 Treaty, *see* Nick Estes, *Our History Is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance* (New York: Verso, 2019).

105. *Standing Rock v. U.S. Army Corps.*

heritage" because it "runs within half a mile of its reservation in North and South Dakota, [and] will destroy sites of cultural and historical significance."[106] Even with this historical context, nevertheless, the Court denied the Tribe's motion because they saw no clear violation of federal consultation or evidence for how the Tribe "will suffer injury" from the pipeline.[107] This opinion reveals how the Courts of the Conquerors contradict or 'doublethink' – the mental capacity to hold on to "such contradictory ideas and beliefs" at ounce[108] – by failing to understand the encroachment of the pipeline to the extent in which it disregards their promise to protect tribes through treaties and cultural resource management law and policy.[109] This shows the federal government's selective ignorance toward American Indian treaty and constitutional rights which I will bring attention to in the next section.

TREATY AND CONSTITUTIONAL RIGHTS

The 1851 Treaty of Horse Creek, an agreement between the United States, the Great Sioux Nation, and many other tribal nations, is proof in itself that the federal government once recognized tribes as sovereign nations.[110] The Great Sioux Nation, properly known as the Oceti Skowin ("Seven Council Fires"), is made up of the Tetonwans (Lakota), Santee

106. Ibid.
107. Ibid.
108. Ecko-Hawk, *In the Courts of the Conqueror*; Miller and Riding In, *Native Historians Write Back*. "Court of the Conquerors" is a title Ecko-Hawk gives to the judicial branch to indicate how the American court system is not fundamentally designed to serve justice to American Indian tribes and people. Susan Miller applies George Orwell's term "doublethink" to an American Indian context by using 'battle' to describe massacres. Such mental behavior can help create an illusion or cause amnesia of historical narratives.
109. *See Cherokee Nation v. Georgia*, 20 U.S. 1 (1831). For more about "guardianship."
110. 1851 Treaty of Horse Creek.

(Dakota), and Ihantown-Ihantowana (Nakota) peoples, each comprised of several bands.[111] Hereinafter, however, I use Sioux instead of Lakota, Dakota, or Nakota to reference the relationships and rights within the 1851 Treaty. This treaty, including many more, have been broken and violated by the US government. The seizing of the Black Hills is a prime example of how the United States broke the 1868 Treaty, which was an attempt to restore peace after having broken the previous treaty.[112] Gold prospectors took notice of the Black Hills during the California Gold Rush in the mid to late 1800s, and the federal government did little to protect the Lakota Sioux from encroachment.[113] Instead, the US seized ownership of the land in 1877 through the ManyPenny Agreement and the "Sell or Starve" rider.[114] Succeeding federal Indian law and policy continued to reduce tribal lands and attack tribal jurisdiction.[115] The Standing Rock Sioux Tribe declares and defends, "The tribe maintains jurisdiction on all reservation lands, including rights-of-way, waterways, and streams running through the reservation."[116] Breaking the treaties of 1851 and 1868 by disrespecting the Great Sioux Nation's sovereign territory and status is equivalent to admitting that the United States originally signed these treaties as a ploy to gain the Nation's cooperation so they could seize the land and resources. If the US government

111. Akta Lakota Museum and Cultural Center, "Understanding the Great Sioux Nation," accessed March 30, 2019, http://aktalakota.stjo.org/site/News2?page=newsArticle&id=9017.

112. Vine Deloria Jr., "The United States Has No Jurisdiction in Sioux Territory," in *Native Historians Write Back: Decolonizing American Indian History*, Susan A. Miller and James Riding In, eds. (Lubbock: Texas Tech University Press, 2011), 72.

113. Ibid., 72-73.

114. *Sioux Nation of Indians, et al. v. United States*, 601 F.2d 1157 (200 Ct. Cl. 442) (1979).

115. *Cherokee Nation v. Georgia*, 20 U.S. 1 (1831). Applying a domestic-dependent status to tribes, for example, attacked tribal sovereignty by positioning tribal nationhood within the scope of the US government system.

116. Standing Rock Sioux Tribe, "History," accessed March 30, 2019, https://www.standingrock.org/content/history.

wishes to reconcile its relationship with tribes and to protect the authority of their international diplomatic peace treaties in return, it must first and foremost abide by treaties. In order to uphold their treaty promises and government-to-government relations treaties must also be brought up-to-date with current issues and technological advancements.

I argue, with today's technological advancements, that the federal government must recognize the intent in the 1851 and 1868 Treaty to maintain a wide scope of tribal sovereignty that includes jurisdiction over tribal airspace. Similar to how the United States' judicial branch re-interprets the Bill of Rights to address new threats in the Digital Age, treaties must also reserve treaty rights in relation to contemporary issues.[117] For example, the federal government must recognize that the Sioux Nation reserves the right to restrict aerial trespass over treaty lands, including the space above the pipeline, that poses a threat to their treaty, constitutional, and Indigenous rights. This right to restrict aerial trespass is implied in Article V of the 1851 Treaty and Article II of the 1868 Treaty because both articles recognize tribal territoriality in a way that does not diminish tribal jurisdiction or

117. Wiretapping is an advanced form of search and seizure, protected by citizens' right to privacy in the Fourth Amendment, which did not exist when the US Constitution's Bill of Rights were written. It was up to the Supreme Court to re-interpret the Constitution in *Olmstead vs. United States* (1928). Later, after the events of September 11, 2001, the Department of Homeland Security's practice of wiretapping to collect intel from potential terrorists came into dispute. In the same year, Congress passed the USA Patriot Act, sanctioning such practices by public safety officials and federal agents without Congressional oversight in the name of national security. *Olmstead* not only not only exemplifies how the Constitution can be re-interpreted but also how the US government creates legal loopholes (e.g., USA Patriot Act) to squanders such efforts to expand citizens' rights. With this said, tribes must be at the forefront of re-interpreting their treaties to address the current issues they face. An investigation of how riders such as the "Sell or Starve" rider negatively impacted the nation must also be considered. The agreement and rider to seize the Black Hills are instrumentalized legal loopholes like the USA Patriot Act that recognize the need to contradict their principles in order to fulfill another (i.e., contradict international diplomacy for access to land, contradict freedom for national security).

policing power. The 1868 Treaty states, "no persons, except those herein designated and authorized so to do, and except such officers, agents, and employees of the government as may be authorized to enter upon Indian reservations in discharge of duties enjoined by law, shall ever be permitted to *pass over* [emphasis added], settle upon, or reside in the territory described in this article."[118] Even though this article gives the US government some authority to enter tribal territories, they are still required to "maintain good faith and friendship in all their mutual intercourse, and to make an effective and lasting peace" with tribes, as stated in Article I of the 1851 Treaty and restated in the 1868 Treaty.[119] The Federal Aviation Administration's policing in Standing Rock Sioux Airspace, however, did not represent peaceful relations.

As part of tribal sovereignty, the right to prohibit entry into Standing Rock Sioux Airspace extends to the right to regulate their airspace. The FAA violated this right by putting into effect two Temporary Flight Restrictions (TFR) during the pipeline's construction without permission from the Standing Rock Sioux Tribe. These no-fly zones were effective November 26 to December 2 and again from December 2 to December 16.[120] Whether or not the US government believes that the pipeline resides on trust or federal land, the FAA's no-fly zone applied to "154 square miles of airspace above the pipeline resistance" which included land on the reservation.[121] With the largest demonstration of protest at Lake Oahe, this no-fly zone violates airspace over both reservation and trust land and requires the FAA to consult with the tribal council before taking such actions that will

118. 1868 Treaty of Fort Laramie.
119. 1868 Treaty of Fort Laramie; 1851 Treaty of Horse Creek.
120. TFR 6/1887, November 21, 2016; TFR 6/5932, December 2, 2016.
121. Brown, Passish, and Speri, "Police Used Private Security Aircraft."

adversely impact their safety and rights.[122] The FAA's justification for applying these restrictions violates the protectors' freedom of the press because their intentions to use TFRs for blocking the media were transparent.[123]

The no-fly zone at Standing Rock is not the first time the FAA has used temporary flight restrictions to block the media. There is proof that they have used this tactic in the past to prevent media coverage surrounding Ferguson, Missouri after the shooting of Michael Brown in 2014.[124] A journalist for *New York* magazine, Caroline Bankoff, cited a Kansas City FAA employee at Ferguson claiming, "police 'did not care if you ran commercial traffic through this TFR (temporary flight restriction) all day long. They didn't want media in there."[125] He goes on to say that the FAA did not see any other option available to them to restrict the media, so they issued a TFR.[126] The same obviously occurred at Standing Rock because the only justification 'hazard' or 'condition' they could

122. Order 1210.20.

123. Alleen Brown, Will Passish, and Alice Speri, "Police Used Private Security Aircraft for Surveillance in Standing Rock No-Fly Zone," *The Intercept*, September 29, 2017, https://theintercept.com/2017/09/29/standing-rock-dakota-access-pipeline-dapl-no-fly-zone-drones-tigerswan/; Jason Koehler, "The Government Is Using a No Fly Zone to Suppress Journalism at Standing Rock," *Vice News*, last modified November 30, 2016, http://motherboard.vice.com/read/the-government-is-usinga-no-fly-zone-to-suppress-joumalism-at-standing-rock; ACLU Letter to FAA Protesting No-Fly Zone for Media in Ferguson, November 4, 2014, https://www.aclu.org/other/aclu-letter-faa-protesting-no-fly-zone-media-ferguson.

124. "U.S. Approved Ferguson No-fly Area to Block Media," *USA Today*, last modified November 2, 2014, https://www.usatoday.com/story/news/nation/2014/11/02/ferguson-flight-restrictions-helicopters-protests/18380867/; Peter Sachs, "Why Is There a TFR Over Standing Rock?," *Drone Law Journal*, last modified November 27, 2016, http://dronelawjournal.com/why-is-there-a-tfr-over-standing-rock/.

125. Caroline Bankoff, "FAA Officials Agreed to Help Police Prevent Media From Failing Ferguson Protests," *Missouri's Finest*, last modified November 2, 2014, http://nymag.com/intelligencer/2014/11/report-ferguson-no-fly-zone-was-aimed-at-media.html.

126. Ibid.

specify for issuing the TFR was "for law enforcement operations."[127] This reason for issuing a TFR, as Peter Sachs argues in his article for the *Drone Law Journal*, makes several inaccurate assumptions about the situation at Standing Rock:

> Assuming that the FAA does not consider law enforcement operations themselves to be a 'hazard,' (which ironically *is* the case at Standing Rock), it must consider those operations to be a 'condition.' Under FAR 91.137, that condition must also be the reason specified to support the issuance of the TFR to '[p]rotect persons and property on the surface or in the air from a hazard associated with an incident on the surface.'[128]

Even then, with a revision to the specified hazard or condition, the FAA did not have in mind the safety of persons on the surface.

Morton County Sheriff's Department charged water protectors and drone journalists for endangering a helicopter pilot and passengers and persons on the surface by flying drones. On the contrary, law enforcement officials shooting drones out of the sky presented far greater threats to their safety. Some of the drone journalists charged by Morton County and the state of North Dakota include Myron Dewey (Digital Smoke Signals), Aaron Turgeon ("Prolific the Rapper"), and Shiyé Bidzíil (Dr0ne2bwild).[129] Highway Patrol Sergeant Shannon Hanke testified that "Aaron Turgeon, who was arrested

127. Sachs, "Why Is There a TFR Over Standing Rock?"

128. Ibid. *See* Temporary Flight Restrictions in the Vicinity of Disaster/Hazard Areas, 14 CFR § 91.137 (2014).

129. For more about the stories and experiences of the drone pilots at Standing Rock, *see* Shiyé Bidzíil and Dean Dedman, Jr., *Through Indigenous Eyes: The Story of the Standing Rock Movement as Told by a Local Drone Pilot and Visionary* (Cincinnati: True North House Publishing, 2017); Dean Dedman, Jr., *Embrace the Darkness* (Cincinnati: True North House Publishing, 2019).

by Morton County officials," endangered the lives of civilians on the ground based on the possibility that his drone could fall out of the sky; but, "Henke later admitted his accusations were wrong."[130] Since Turgeon's own footage proved his innocence, Turgeon's lead counsel, Doug Parr, suspected that the purpose of the charges against his client were to justify the TFR: "One of my concerns is that the charges in this case appear to have been fabricated to justify the no-fly zone that was imposed in late October of last year."[131] Similarly, "Dean Dedman Jr. [also known as Shiyé Bidzíil], a Standing Rock Hunkpapa citizen who was registered with the FAA, [was accused of] pilot[ing] his drone too close to police helicopters during a TFR."[132] At least one drone was shot down before the flight ban because law enforcement claimed it endangered helicopter traffic.[133] In

130. Jason Koehler, "The Government Is Using a No Fly Zone to Suppress Journalism at Standing Rock," *Vice News*, last modified November 30, 2016, http://motherboard.vice.com/read/the-government-is-usinga-no-fly-zone-to-suppress-joumalism-at-standing-rock.

131. Water Protector Legal Collective, "Press Release: Prolific the Rapper Found Not Guilty," last modified May 26, 2017, https://waterprotectorlegal.org/prolific-rapper-found-not-guilty/.

132. Ibid. For more about the helicopters that flew over water protectors during the TFR, *see* Steve Horn, "How a Company With Ties to a Dakota Access Pipeline Owner Flew Over Protests in the No Fly Zone," DeSmog, last modified November 6, 2016, https://www.desmogblog.com/2016/11/06/helicopter-dakota-access-enbridge-no-fly-zone.

133. Miriam McNabb, "The TFR Over Standing Rock: What Law Enforcement Doesn't Want You to See," Drone Life, last modified November 29, 2016, https://dronelife.com/2016/11/29/tfr-standing-rock-law-enforcement-hiding/. For footage of Shiyé Bidzíil's drone being shot down, *see* Dr0ne2bwild Photography and Video, "Dr0ne2bwild's Drone Gets Shot at Multiple Times," Facebook, October 24, 2016, https://www.facebook.com/pg/Drone.nation2017/videos/. For footage of Myron Dewey and Shiyé Bidzíil flying drones at Standing Rock and of officers shooting at their drones, *see* AJ Plus, "Meet The Drone Operators of #NoDAPL," Facebook, December 2, 2016, https://www.facebook.com/ajplusenglish/videos/850063135135195/?v=850063135135195. AJ Plus commented, "Over the weekend, the U.S. Federal Aviation Administration issued a flight restriction over the Standing Rock pipeline protest, banning all aircraft except those flown for and by law enforcement. The ban is expected to be lifted today, but drone operator Shiyé Bidzíil told our producer Shadi Rahimi it appears to still be in

reality, shooting drones out of the sky with rubber bullets poses far more of a threat to civilians on the ground, not less.[134] Also, it should be noted that law enforcement officials took it upon themselves to regulate the airspace before a TFR or other forms of authorization from either the FAA or the Tribe. If the FAA prioritized civilians' safety, they would have stopped law enforcement officials from policing airspace without their authority and, instead, would have allowed media drone pilots to cover the abuse against peaceful protestors taking place on the ground. The FAA's failure to protect citizens and abuse of TCPs is a clear violation of water protectors' constitutional rights.

The restraints placed on media drones, to document peaceful protest against DAPL and the behavior of law enforcement officials, are in clear violation of both Standing Rock members and non-members' constitutional right to freedom of the press.[135] Article VI of the 1868 Treaty states members of the Sioux Nation are "entitled to all the privileges and immunities of such citizens, and shall, at the same time, retain all his rights to benefits accruing to Indians under this treaty."[136] The Indian Citizenship Act of 1924, additionally, extends constitutional rights to all Natives.[137] Therefore, both Native and non-Native reporters had the right to fly drones that meet FAA regulation with the Standing Rock (Sioux Nation's) permission. The FAA sanctioned media drones only on the contingent that these pilots met FAA regulations and applied for media waivers. However, even with

effect. This is the second such restriction put on civilian drone operators at the #NoDAPL camp(s)."

134. *See* Careless or Reckless Operation, 14 CFR § 91.13 (2011); Dr0ne2bwild Photography and Video, "Dr0ne2bwild's Drone Gets Shot at Multiple Times," October 24, 2016, https://www.facebook.com/pg/Drone.nation2017/videos/.

135. U.S. Const. amen. 1.

136. 1868 Treaty of Fort Laramie.

137. Indian Citizenship Act of 1924, P.L. 68-175, 43 Stat. 253, approved 1924-06-02.

media waivers, drone journalists were limited to only a small portion of the no-fly zone, making the construction site less visible.[138] This limited sanction exhibits how the US government "intentionally extends some form of political participation to [tribal governments and members] who pose a threat" through co-optation.[139] It appears the media waivers were just a ploy for the FAA to counter opposition against their no-fly zone.

The confiscation of media drones and other media equipment by law enforcement officials serves another issue related to the 1868 Treaty and tribal jurisdiction. As shown in the documentary *Awake, a Dream from Standing Rock* (2017), Morton County officials confiscated co-director Myron Dewey's drone and refused to address his inquiries and concerns regarding evidence forms.[140] Although charges were dropped, county officials charged Dewey with a misdemeanor for stalking.[141] It was also reported that Turgeon received two counts, one being a Class C felony for Reckless Endangerment, for which he was found not guilty.[142] On Sioux territory, according to the 1868 Treaty, *Montana v. United States*, and *Strate v. A-1 Contractors*, the Standing Rock Sioux Tribal Council has the right to prosecute DAPL helicopter and drone pilots and to confiscate their materials.[143]

138. Alleen, Passish, and Speri, "Police Used Private Security Aircraft."

139. Michael G. Lacy, "The United States and American Indians: Political Relations," in *American Indian Policy in the Twentieth Century* (Norman: University of Oklahoma Press, 1985), 83-104.

140. *Awake, a Dream from Standing Rock*, directed by Myron Dewey, Josh Fox, and James Spione (2017; Standing Rock Sioux Reservation, ND: Digital Smoke Signals and International WOW Company), DVD. *See* National Lawyers Guild, "Law Enforcement Arrest 29 Water Protectors on Indigenous Peoples' Day: Continue to Target Journalists Covering DAPL," Common Dreams, last modified October 14, 2016, https://www.commondreams.org/newswire/2016/10/14/law-enforcement-arrest-29-water-protectors-indigenous-peoples-day-continue.

141. Alleen, Passish, and Speri, "Police Used Private Security Aircraft."

142. Koehler, "The Government Is Using a No Fly Zone."

143. *Montana v. United States*, 450 U.S. 544, 565-66 (1981); *Strate v. A-1 Contractors*, 520 U.S. 438, 453 (1997).

In *Montana*, the Sioux Tribal Council has jurisdiction to prosecute non-members and non-Indians threatening "the political integrity, the economic safety, or the health or welfare of the tribe," but, as Haney mentions, there is an overwhelming amount of evidence required to prove the direct effects.[144]

Nonetheless, the US government is obligated by the 1851 Treaty to "protect the aforesaid Indian nations against the commission of all depredations by the people of the said United States," and 1868 Treaty to "deliver up the wrongdoer to the United States, to be tried and punished according to its laws, and, in case they willfully refuse so to do, the person injured shall be reimbursed for his loss from the annuities, or other moneys due."[145] Fortunately, in the past, tribal courts like the Hualapai have exercised their tribal airspace sovereignty by prosecuting non-members for aerial trespass. For example, the tribal court case between Lionel de Antoni and the Hualapai Nation supports the tribe's jurisdiction to prosecute violations of airspace.[146] Rather than recognizing the Standing Rock Sioux's right to do the same as the Hualapai, the Morton County government was given jurisdiction to prosecute the water protectors instead even though North Dakota is not a Public Law 280 state.[147] This means the federal government failed their treaty promise to protect the Sioux Nation from wrongdoers and to respond to their concerns. The 1868 Treaty states the federal agency "residing among them [Indians]" must offer "prompt and diligent inquiry into such matters of complaint by and against the Indians as may be presented for

144. Montana, 450 U.S. at 566; Haney, "Protecting Tribal Skies," 27.
145. 1851 Horse Creek Treaty; 1868 Treaty of Fort Laramie.
146. Cyndy, Cole, "In Citing Pilot, Tribe Lays Claim to Airspace Over Its Lands," *Arizona Daily Sun*, January 21, 2009.
147. Public Law 280, Pub. L. No. 280-505, 67 Stat. 588, 588-90 (1953). This public law extends state authority or jurisdiction over tribal governments residing in six states.

investigation."[148] This promise shows that federal agencies and law enforcement were responsible for addressing Dewey and other water protectors' complaints regarding the pipeline and confiscation of their media equipment. The US government's error in responding to Dewey's concern and complaint, thus, is another example of their failure to uphold their trust responsibilities.

In addition to prosecuting offenders, another major trust responsibility of the US government is to provide border protection and to keep the peace; however, the invasion of the pipeline onto Sioux territory (Standing Rock Sioux Reservation) with support from the FAA and law enforcement further violates this condition. In keeping the peace, the Sioux Nation has kept clean of their promise even in resisting DAPL. On the other hand, Dakota Access hired TigerSwan and collaborated with law enforcement agencies using anti-terrorist techniques to abuse water protectors.[149] The US government's trust responsibility requires them to respond to the concerns of Sioux members, as previously cited, and to any "bad men among the whites…[that] shall commit any wrong upon the person or property of the Indians."[150] TigerSwan, the "bad men," compared the peaceful (unarmed and nonviolent) protestors to "jihadi insurgents" to justify taking force against water protectors and serves as propaganda which was endorsed by FAA's no-fly zone to ban media drones.[151] The collaboration between DAPL and the FAA reveals a conflict of interests due to how they ensured the safety of company employees from water protectors.[152] The US government promised to defend the Sioux Nation, not to enable

148. 1868 Treaty of Fort Laramie.
149. Alleen, Passish, and Speri, "Police Used Private Security Aircraft."
150. 1868 Treaty of Fort Laramie.
151. Alleen, Passish, and Speri, "Police Used Private Security Aircraft."
152. Ibid.

others to exploit their land and airspace. The 1868 Treaty also stipulates that "officers, agents, and employees of the government" may be authorized to cross Sioux land and airspace; however, TigerSwan does not qualify, and the law enforcement officers were never deputized.[153] Therefore, violating this stipulation expresses the federal sector's failure to adhere to its own procedures and trust responsibilities.

Alongside keeping the peace, the US government also promised "undisturbed use and occupation" of land in Article II of the 1868 Treaty. On the contrary, the use of helicopters and drones to reconnoiter the Standing Rock members qualifies as disturbing tribal members' use of their territory. Construction of the pipeline project also posed the issue of increased noise disruption.[154] Additionally, Article XI of the 1868 Treaty stipulates peaceful operations between the Sioux and railroad laborers. The Sioux agreed to "withdraw all opposition" and to "permit the peaceful construction" of the railroads by promising "to do them [whites] no harm."[155] Even though the Sioux Nation agreed "they will not in future object to the construction of . . . other works of utility or necessity," they agreed on the basis that future works would be peaceful and do them no harm.[156] As shown by the physical abuse toward water protectors, the Dakota Access project is *not* peaceful and *does* harm the Sioux Nation. In return, the United States agreed to compensate tribes for any damages sustained. But, like the Black Hills, how do you put a price on sacred land and your ancestors?[157] Also, drones were damaged when law enforcement shot them down,

153. 1868 Treaty of Fort Laramie.
154. Dakota Access, LLC, Final Environmental Assessment: Dakota Access Pipeline Project, section 408, consent for crossing federally authorized projects and federal flowage easements, Illinois, 2016.
155. 1868 Treaty of Fort Laramie.
156. Ibid.
157. Ibid.

but the media and film companies were charged with crimes instead of compensated for property damage. The FAA's eventual confession to banning the air for censorship reasons further proves their abuse of power.[158] The US government signed a treaty with the Sioux Nation, not DAPL, yet it concentrated its efforts on protecting a company over their constitutional and trust responsibilities to protect citizens of the United States and a federally recognized tribe.

The FAA's apathy toward following specific legal procedures further exposes their intent to protect DAPL operations and failure to prioritize their trust responsibilities. Since the US government never deputized the law enforcement officers accompanying these flights or members of DAPL, they cannot defend these aircraft as legally authorized. Article II of the 1851 Treaty allows the "United States government to establish roads, military and other posts," but, again, while maintaining peace, not to collude with Dakota Access security and local law enforcement officials.[159] Furthermore, these treaties do not relinquish the Sioux Nation's jurisdiction in any way. As Deloria argues, the promise of "free and undisturbed use of the land" in article II of the 1868 Treaty meant the "Unites States could not and cannot come in and police the people without their consent."[160] Instead, by allowing Dakota Access's aircraft to take photos of water protectors for evidence in prosecutions, the FAA prioritized its relationship with corporations above its trust responsibility to the Sioux Nation. While providing DAPL with the opportunity to police tribal airspace by collecting evidence against water protectors, the ban unlawfully

158. Alleen, Passish, and Speri, "Police Used Private Security Aircraft."
159. 1861 Treaty of Horse Creek; 1868 Treaty of Fort Laramie.
160. Deloria, "The United States Has No Jurisdiction in Sioux Territory," 72.

kept the Standing Rock Sioux from policing their airspace by monitoring their land and collecting their own evidence.

Conflict with the Standing Rock nation (Sioux Nation) could have easily been avoided if the FAA consulted with tribal councils, first. Such a gesture would symbolize their nation-to-nation relationship and communicate to law enforcement officials their lack of jurisdiction in Standing Rock (Sioux) airspace. A gesture recognizing Standing Rock (Sioux) airspace and territoriality, alone, could have reduced the presence of law enforcement[161] and alleviated some of the tension between organizations. Instead, the FAA granted non-members, such as Highway Patrol airplane pilots and TigerSwan helicopters pilots, access to Sioux territory under their authority. To make matters worse, the FAA lied about their purpose for allowing non-members access. The FAA defended their action by stating that "only relief aircraft ops under direction of North Dakota Tactical Operations Center [were] authorized in the airspace" to protect the people.[162] But whom did they intend to protect? There is unsettling proof that the FAA approved Dakota Access helicopters, flown by TigerSwan pilots, access to "conduct aerial surveillance."[163] Thus, the flight restrictions were not meant to protect tribal members, but rather DAPL operations.

161. Morton County Sheriffs Department, "News Release: Drone Operator Attacks Helicopter Using Unmanned Aircraft," last modified October 23, 2016, https://drive.google.com/drive/folders/OBzEKNLJqG3cwUFV4ZEdVTGRzaUU; Myron Dewey, "Water Ceremony with DAPL security, Morton County Police department and National Gu[a]rd," YouTube, November 24, 2016, https://www.youtube.com/watch?v=mN35tiXsgck&feature=youtu.be.

162. Brown, Passish, and Speri, "Police Used Private Security Aircraft."

163. Ibid.

THROUGH A LENS OF WATER LAW

One way the federal government could have reduced tensions at Standing Rock would have been to seek legal guidance from federal Indian law, which includes water laws specifying tribal rights, as for how to approach the conflict. The Winters doctrine, for instance, defines tribal water rights which indicates that tribal rights are often implied or reserved in treaties or through the establishment of reservations. Applying a water rights legal framework to air rights, based on the previous arguments about of the Fort Laramie treaties, reveals how the FAA should have utilized existing legal principles *before* promptly assigning their priorities to the DAPL corporation. Rather than recognizing their constitutional and trust responsibilities, government action diminished the power of civil and treaty rights at Standing Rock by violating their duties.

Applying water law doctrines to this case study, specifically that of 1) priority rights, 2) quantification, 3) flexible use, and 4) transferability, shows how American jurisprudence is logically inclined to recognize tribal rights in airspace even when the FAA is not. First and foremost, the notion of tribal airspace sovereignty should have been implied at Standing Rock just as water rights are implied and reserved based on the original intent to establish the reservation. One of the intentions for establishing the Standing Rock Reservation indicates a need and right to protect themselves from trespassers which must also imply the right to protect their citizens from aerial trespass.[164] Likewise, the priority date for establishing Standing Rock air rights should refer to the peace promised in the

164. Judy Dworkin, "Indian Water Rights: Relevant Case Law," SacksTierney P.A., last modified October 2011, https://www.sackstierney.com/articles/indian-water-rights.htm. The intent to imply tribal air rights is found in the United States' promise to ensure the tribe's full protection. Their tribal air rights are not newly contemplated but the technology is new.

original boundaries of the 1851 Treaty. 1851 would serve as a priority date based on the government-to-government relationship formed in this treaty while the Standing Rock Sioux Tribe's priority date would be time immemorial.[165] Both of which are dates that supersede Dakota Access's priority to use either the land, water, or airspace.

Looking at water rights, which have had a century to develop, can provide a basis for establishing air claims as well. Quantifying air rights through a measuring system like the "practicably irrigable acreage (PIA) standard," however, proves challenging since new uses of airspace are rapidly emerging.[166] Airspace can be claimed for real estate, wind energy, transportation, mapping, and other purposes. The most common way to quantify air rights is through mapping (jurisdictional) boundaries, air classifications, or flight routes on an aeronautical chart. In this case, air law provides some guidance for quantification of rights. If Standing Rock (Sioux) national airspace were to be locatable on a map, DAPL and law enforcement activities would have been framed within their airspace or, better yet, within their jurisdiction. In US national airspace, the government claims absolute sovereignty and jurisdiction while states' authority is limited to aircraft activities on-the-ground or through zoning, and property owners are further limited to the amount of airspace a person can physically utilize.[167] In addition to being their own nation, citizens of the Sioux Nation have proved their reasonable use of airspace by flying FAA-certified drones for media coverage. Defining the scope of how someone can *use* airspace remains incomplete since new technology presents new uses. Any definition proposed by the FAA would just prove unfulfilling anyways because of their different perceptions of the natural

165. *US v. Winans*, 198 US 371 (1905).
166. Dworkin, "Indian Water Rights."
167. *Gustafson v. City of Lake Angelus* and *Center for Bio-Ethical Reform v. Honolulu* for state rights to regulate airspace; *US v. Causby*, 328 US 256 (1946).

world. Thus, just as "the PIA standard is not always appropriate" for quantifying water rights, the FAA should also consider several factors before trying to quantify tribal air rights. These factors, originally outlined by Attorney Judy Dworkin in the context of water rights, are the following: "tribal history including [air] use for rituals and traditional activities, tribal culture and [airspace] using tribal practices, the tribe's geography and natural resources including [their airspace and soundscapes], the tribe's economic base and the reservation's economic infrastructure, past [air] use, [and] present and projected future population."[168] Protecting the sanctity of the river and their groundwater is one of the main reasons why water protectors protested the pipeline.[169] Another reason is to protect the ancestral burial grounds residing in the area from contamination.[170] Thus, any standard applied to tribal air-use *must* address not only tribes' constitutional rights but also their right to manage their cultural resources and properties.

In addition to quantification, the support for flexible use of water in *Winters* is also applicable to airspace. Legislation must support changes in tribal uses of airspace over time so that tribes can meet their interests for survival, growth, and maintaining their way of life just like in water law.[171] It would be illogical, digressive, and even assimilative to limit tribal uses in airspace. During the early stages of water law, the federal government

168. Dworkin, "Indian Water Rights."

169. Memorandum Opinion. Judge Boasberg states the tribes claimed that "the presence of oil in the pipeline under Lake Oahe would desecrate sacred waters and make it impossible for the Tribes to freely exercise their religious beliefs, thus violating the Religious Freedom Restoration Act." *See* Religious Freedom Restoration Act of 1993, Pub. L. No. 103-141, 107 Stat. 1488 (1993).

170. Jessica Ravitz, "The Sacred Land at the Center of the Dakota Pipeline Dispute," *CNN*, last modified November 1, 2016, https://www.cnn.com/2016/11/01/us/standing-rock-sioux-sacred-land-dakota-pipeline/index.html.

171. Ibid.

recognized tribal water rights to promote and support the assimilation of American Indians into becoming productive farmers. Over time, the government loosened its assimilation policies and recognized a more expansive use of water by tribes in *Arizona v. California*.[172] With this said, the federal government must support and maintain the flexible use of tribal airspace as intended in water law.

Furthermore, water law recognizes how those with water rights may wish to transfer or extend their rights. Because of the Non-Intercourse Act, American Indians cannot transfer their water rights to non-Indians for profit, but they may be able to lease it.[173] Depending on their settlement with the United States, some tribes may be authorized to "transfer water rights for off-reservation uses."[174] Whether or not the government defines the area above the pipeline and protest camps as on or off the reservation, they should have upheld a formal request for media permits to surveillance the pipeline as a form of transferability. Additionally, such a transfer of rights should be applied equally, or more, to the tribe as it applies to a corporation. When the FAA placed greater limits on media permits for Natives while giving a full transfer of rights to TigerSwan without formal representation, the federal government abused their power and disregarded tribal airspace sovereignty.

Applying legal doctrines from water rights to the events that unfolded at Standing Rock reveals how the federal government has the legal capacity and foundation to recognize tribal airspace sovereignty but failed to make this logical connection. Of course, water law cannot apply to all areas and uses of airspace, but it does provide a realistic and

172. Dworkin, "Indian Water Rights"; *Arizona v. California*.
173. Non-Intercourse Act, P.L. 10-24, 2 Stat. 528 (1807).
174. Dworkin, "Indian Water Rights."

promising means for developing air laws with tribes in mind. Applying water rights doctrine to the next case study proves some of the legwork is already in the works for creating air laws that can protect tribal cultural and natural resources and economic development. The next study shows a need for extending the use of airspace beyond flying aircraft which makes claiming air rights more difficult, but not impossible. Persistent demands from tribes adjacent to and affiliated with the Grand Canyon force the FAA to consider *all* of their interests, cultural and economic, which expresses the vital need for tribes to regulate their airspace and assert their definitions for a natural soundscape.

CHAPTER 3

RULEMAKING: THE MANAGEMENT OF NOISE POLLUTION IN TRIBAL AIRSPACE ADJACENT TO THE GRAND CANYON NATIONAL PARK

The Four Winds

We are all thankful to the powers we know as the Four Winds. We hear their voices in the moving air as they refresh us and purify the air we breathe. They help us to bring the change of seasons. From the four directions they come, bringing us messages and giving us strength. With one mind, we send our greetings and thanks to the Four Winds.

Now our minds are one.

Owera'shón:'a

Onen nón:wa ehnón:we nentsitewate'nikonraié:ra'te ne tsi ní:ioht tsi rokwatá:kwen rawé:ren enkaién:take ne ka'shatstenhsera'shón:'a ne ne kaié:ri nikawerá:ke. Ne iethiwennahrónkha ratiwerarástha ne tsi ionhontsiá:te á:se shonnón:ni ne tsi ní:ioht tsi tewatón:rie oni tsi ne tehotitenionhákie ne tsi niionkwakenhnhó:tens. Kaié:ri niiokwén:rare tsi nón:we thatiienhthékhwa tsi ionkhi'shatstenhsherá:wihs. Ne tsi nentsitewá:iere enska tsi entewahwe'nón:ni ne onkwa'nikón:ra tánon' teniethinonhwerá:ton ne ne kaié:re nikawera:ká.

Éhtho niiohtónha'k ne onkwa'nikón:ra.[175]

175. *Thanksgiving Address: Greetings to the Natural World*.

For many tribal nations, prayers travel the winds to the Creator and deities living throughout the natural landscape. Tribal nations have worked tirelessly to protect their sacred and spiritual space. In 1988, a group of Northern California tribes explained how "communication with the '[G]reat [C]reator' is possible in the [H]igh [C]ountry [also known as Chimney Rock] because of the pristine environment and opportunity for solitude found there" in *Lyng v. Northwest Indian Cemetery Association*.[176] These tribes argued against logging and the construction of a road in this area of the Six Rivers National Forest because of how the traffic noise and physical alteration of the land "would seriously damage the salient visual, aural, and environmental qualities" on which their religious practices and wellbeing depend.[177] In the case of this chapter, the Diné (Navajo Nation), Havasu 'Baaja (Havasupai Indian Tribe), and Hwal'Bay (Hualapai Tribe) have similarly raised their concerns over the threats of increased noise pollution from recreational and aviation activities in the Grand Canyon National Park (GCNP) area. These tribes' concerns have been expressed and cited throughout scholarship and government documents. In this chapter, I discuss the Park's history associated with its boundaries and how noise pollution has become a relevant issue to tribes and visitors. Then, this chapter will evaluate the FAA's treatment of tribal airspace sovereignty through two major court cases petitioned by the Hualapai Indian Tribe in opposition to FAA rules and regulations for restoring the Park's natural quiet.

176. *Lyng v. Northwest Indian Cemetery*.
177. Ibid.

THE IMPACTS OF NOISE POLLUTION ON TRIBAL AIRSPACE

Scholarship written by members of the Navajo Nation describes their familial connections to airspace and best capture how noise pollution in the Canyon impacts these connections. Though these nations each have a unique connection to airspace, these tribes provide background and context for the issues the Hualapai litigate in defending their connections to airspace. I will begin with a review of these tribes' connections (familial, ceremonial, and economic) to airspace, the impact of noise pollution on their wellbeing, and notable historical documents that further limit their connections to airspace.

Robert Begay, a scholar from the Navajo Nation, has interviewed Navajo citizens at Black Mesa to gather reactions on the impacts of Park tourism on their physical and spiritual well-being. Same as the tribes in *Lyng*, "[T]he activities [ceremony, ritual, song and prayer] that tap into this power to protect and heal must be performed in a respectful and serene and reverent manner."[178] This requirement means that any diminishment of air quality, including both noise and air pollution, poses a threat to their wellbeing (of mind, body, and spirit). Begay summarizes his interviewees' concerns with poor air quality and reveals how their physical and spiritual wellbeing are interlinked with the environment: "Many Navajo people have expressed concerns about the effects of poor air quality on their health, and some have also mentioned the effects on the sacredness of the air."[179]

As previously indicated, the Navajo depend on a pristine environment, including the natural quiet, to maintain a ceremonial bond with "physical elements of the earth's

178. Begay, "Doo Dilzin Da," 21-22, 24-25.

179. Begay, "Doo Dilzin Da," 26. In Begay's article, he is discussing mining and tourism, two very different activities, but defends his argument by stating that both activities have similarly "limited and affected the healing power of the earth." Ibid., 21.

surface, as well as to the deities who inhabit the earth and the realms below and above it."[180] Though their connections to the skies may differ, many of the tribes affiliated with the Canyon (a total of eleven federally recognized tribes) require the same pristine environment to practice their traditions as noted in almost every environmental assessment and impact statement conducted in the Park.[181] Because of the spiritual way these tribes relate to airspace, disturbances in the Park's soundscape pose a threat to the spiritual practices and wellbeing of neighboring tribes, who also need access to their sacred sites and medicines within the Park's boundaries.

In the same article, "Doo Dilzin Da: Abuse of the Natural World," Begay mentions some of the ways Park recreational activities are having a negative impact on the Navajo Nation. He identifies from interviews the following activities as contributing to noise pollution in the Park: camping, river trips, and driving recreational vehicles.[182] Interruptions from hikers and other Park tourists present another problem for ceremonialists: "It is also not uncommon for curious tourists to interrupt ceremonial proceedings by invading ceremonial space to gawk at those who are making offerings or by asking questions to satisfy their curiosity."[183] The growing popularity in hobby drones

180. Begay, "Doo Dilzin Da," 23.

181. Department of Transportation, Federal Aviation Administration, Final Supplemental Environmental Assessment: Special Flight Rules in the Vicinity of Grand Canyon National Park (Washington, D.C.: Dept. of Transportation, 2000) [hereafter 2000 FSEA]; Department of the Interior, National Park Service, Draft Environmental Impact Statement: Special Flight Rules Area in the Vicinity of Grand Canyon National Park: Actions to Substantially Restore Natural Quiet (Washington, D.C., 2011) [hereinafter 2011 DEIS]; Department of the Interior, National Park Service, Final Environmental Impact Statement Draft: Special Flight Rules Area in the Vicinity of Grand Canyon National Park: Actions to Substantially Restore Natural Quiet (Washington, D.C., 2012) [hereinafter 2012 FEIS Draft].

182. Begay, "Doo Dilzin Da," 25.

183. Ibid.

also makes it increasingly likely for tourists to gawk from a distance. The National Park Service issued Policy Memorandum 14-05 on June 19, 2014 to ban the use of unmanned aircraft such as drones due to the "unacceptable impacts" they threaten: "Although their [drones] use remains relatively infrequent across the National Park System, this new use has the potential to cause unacceptable impacts such as harming visitors, interfering with rescue operations, causing excessive noise, impacting viewsheds, and disturbing wildlife."[184] Since 2014, smaller and cheaper drones are making their use more frequent, not less, allowing non-tribal members to gain greater access to and awareness of *confidential* sacred sites and places where religious practices occur.[185] Online forums,

184. Director Jonathan B. Jarvis to National Park Service Regional Directors and Superintendents, June 19, 2014, National Park Service, Unmanned Aircraft – Interim Policy, 14-05. "The purpose of this Policy Memorandum is to ensure that the use of unmanned aircraft is addressed in a consistent manner by the NPS before a significant level of such use occurs within the National Park System." *See* Department of the Interior, National Park Service, Management Policies 2006, https://www.nps.gov/policy/MP_2006.pdf. Under Recreational Activities § 8.2.2, this policy states the NPS superintendents' authority to change policies according to new threats of recreational activities, including the use of aircraft, in the National Park System: "The Service will monitor new or changing patterns of use or trends in recreational activities and assess their potential impacts on park resources. A new form of recreational activity will not be allowed within a park until a superintendent has made a determination that it will be appropriate and not cause unacceptable impacts. Restrictions placed on recreational uses that have been found to be appropriate will be limited to the minimum necessary to protect park resources and values and promote visitor safety and enjoyment."

185. Felicia Fonseca, "Navajo Nation Puts Bald Eagle on its Endangered Species List" (September 27, 2008), accessed April 4, 2018, http://azdailysun.com/news/navajo-nation-puts-bald-eagle-on-its-endangered-species-list/article_0d6288e0-bd01-54bc-8368-026e09b1c925.html; Eric Uhlfelder, "Bloody Skies: The Fight to Rescue Deadly Bird-Plane Collisions" (November 8, 2013), https://news.nationalgeographic.com/news/2013/10/131108-aircraft-bird-strikes-faa-radar-science/. Ideally, the Endangered Species Act, Migratory Bird Treaty Act, and E.O. 13007 *Indian Sacred Sites* should also protect TCPs from low overflights. *See* Migratory Bird Treaty Act of 1918 (MBTA), 16 U.S.C. §§ 703–712 (1918); The Bald and Golden Eagle Protection Act, 16 U.S.C. 668-668c (1940); Exec. Order No. 13007, Indian Sacred Sites, 61 CFR 267771 (1996).

drone communities, and YouTubers reveal hobbyist drone pilots' carelessness or acceptance of potential penalties and fines to fly (or crash!) drones in the Canyon.[186] Along with this behavior, Begay's interviews reveal the disappointing reality: "[b]ecause of the tourists it is rare to experience the serenity needed to make offerings along the Colorado River for protection and healing," felt by so many Navajo people.[187] As a result of these interruptions and the penetration of the natural soundscape, deities are vacating "their homes and places of contact" at sacred sites.[188]

Without natural quiet or the presence of their deities in these spaces, Navajo ceremony is significantly impeded. Begay explains,

> [t]raditional Navajo ceremonies and rituals are a way for Navajo people to request protection, healing, and assistance from the earth in times of need. This is comparable to the relationship that Navajo mothers have with their children. If a Navajo child is in need of comfort, healing, or protection it will turn to his or her mother for help much like a Navajo would turn to the earth.[189]

186. SkyHighSteve, "'Illegal' Drone Flight in The Grand Canyon National Park - Shh, Don't Tell," Youtube, last modified October 15, 2016, https://www.youtube.com/watch?v=qM9X9rfCldM; JoeC, "Second Day of Flying - And Its Over the Grand Canyon," Phantom Pilots, July 9, 2013, https://phantompilots.com/threads/second-day-of-flying-and-its-over-the-grand-canyon.1377/. There are plenty of online forums, drone communities, and YouTubers sharing videos of the Grand Canyon and their drones crashing in the Canyon. Some communities show people discussing the drone restrictions and others discussing the logistics as to why their drones have a tendency to crash over certain parts of the Canyon.

187. Begay, "Doo Dilzin Da," 25.

188. Ibid., 26.

189. Ibid., 24.

But what if the mother could not hear her children asking for help or reach them for healing? "To establish familial ties between themselves and the natural world, Navajo people have a communication link with the earth through ceremony, ritual, prayer, and respect."[190] When noise and other interruptions break this link, the Navajo lose "their access to and use of healing resources in the Grand and Glen Canyons."[191] Though other tribes and pueblos culturally and religiously affiliated with the Canyon connect with its natural environment in each their own unique way, noise pollution is a concern for all of them because of how it similarly impedes their traditional lifeways. Letters, comments, and other forms of testimony during consultation are proof of their concerns, which I will discuss with my analysis of consultation in a later section.

In addition to how tourism and aircraft activity in the Park limits tribal members' access to cultural and sacred sites, legislation has inscribed some sacred sites and places within the Park's boundaries making it difficult for neighboring tribes to manage the land and air around them. In 1975, Congress enacted the Grand Canyon Enlargement Act which maintained the Navajo Nation's boundaries but inscribed both Navajo and Hualapai Traditional Cultural Properties (TCPs)[192] within the Park's new limits.[193] The NPS defines

190. Ibid.

191. Ibid.," 21-22.

192. TCPs are a category of cultural resources protected by the National Historic Preservation Act of 1966 (NHPA) and eligible for listing on the National Registry of Historic Places (NRHP).

193. Grand Canyon Enlargement Act of 1975, P.L. 93-620, 88 Stat. 2089 (1975) [hereinafter Enlargement Act]. This Act still recognizes the Navajo Nation's boundaries defined in the Navajo Boundary Act of 1934, P.L. 93-620, 88 Stat. 2090 (1934) as well as the Havasupai Reservation. Under the "Aircraft Regulation" section, this Act also specifies consultation with only the Secretary of Interior in regards to noise abatement and aircraft safety: "After reviewing the submission of the Secretary, the responsible agency shall consider the matter, and after consultation with the Secretary, shall take appropriate action to protect the park and visitors." Enlargement Act at 2091.

these properties as vital to traditional communities and their cultural identities.[194] Such places and sites are intergenerationally passed down through oral tradition and cultural practice and paint the community's historical and cultural landscape. With help from their communities, the Navajo Nation's Heritage and Historic Preservation Department and Hualapai Department of Cultural Resources identify and safeguard their cultural resources because they depend on them for maintaining their living spiritual or religious and cultural traditions. Without the protection of these properties, their "cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions" are vulnerable to exploitation, vandalism, and erosion.[195] These vulnerabilities are why it is vital for the Tribal Historic Preservation Offices (THPOs) to have the authority and voice to regulate airspace surrounding TCPs for protecting against their growing vulnerability.

A rise in air tourism at the Park presents new vulnerabilities to tribes' TCPs because noise from aircraft also disrupts religious practices, birds and other wildlife.[196] The earliest government document to note concerns toward increased mid-air collisions and noise pollution produced by "sightseeing aircraft" and "commercial aviation" is the National Parks Overflight Act of 1987.[197] Since then, other vulnerabilities include increased

194. Patricia L. Parker and Thomas F. King, "Guidelines for Evaluating and Documenting Traditional Cultural Properties," National Register Bulletin, last modified 1998, https://www.nps.gov/nr/publications/bulletins/nrb38/.

195. Department of the Interior, National Park Service, "Quick Guide for Preserving Native American Cultural Resources: National Register of Historic Places, Traditional Cultural Properties" (2012), https://www.nps.gov/history/tribes/Documents/TCP.pdf.

196. Begay, "Doo Dilzin Da," 21-22.

197. *National Parks Overflights Act of 1987*, P.L. 100-91 § 3, 100 Stat. 676, 16 U.S.C. § 1a-1 (1992) [hereinafter Overflights Act]. At § 3(a), these concerns are stated as follows: "Noise associated with aircraft overflights at the Grand Canyon National Park is causing a significant adverse effect on the natural quiet and experience of the park and

exposure of people, wildlife, and places to aircraft emissions. Begay, himself, is well aware that these issues cannot simply be resolved by reducing tourism in the Park because "tourists have provided a wealth of economic opportunities for the Navajo people." For the Hualapai, but not yet for the Navajo or Havasupai,[198] managing their air-tour industries requires taking deliberate action to develop their economies while preserving their natural soundscapes. The Hualapai depend enormously on revenue from their Grand Canyon West Airport and Quartermaster Canyon landing pads.[199] To enhance their revenue, they also charge air-tour operators to use these sites for Elevator Flights or Over the Edge rides.[200] Even though the Havasupai do not currently have an air-tour industry, they still depend on a flight route to Supai Village for transporting supplies, tribal members, and *occasionally* tourists in and out of the Canyon.[201] These tribes' concerns for their traditional cultural properties, as previously described, and their participation in tourism, either on the ground

current aircraft operations at the Grand Canyon National Park have raised serious concerns regarding public safety, including concerns regarding the safety of park users."

198. "Neither the Navajo Nation nor the Cameron Chapter is currently involved in the air-tour industry," but the Nation has expressed a desire to secure air-tourism as a future possibility. 71 FR 4192 at 593. Alternative routes in the 2011 DEIS make room for this possibility: "The Navajo Nation could become involved in the Grand Canyon air-tour industry by allowing established helicopter tour companies to fly over and land on Navajo Nation land through agreements with the tribe, and as authorized by the FAA." Ibid. at 594.

199. 2000 FSEA at 3-10 (§ 3.6.2). In the 2000 final SEA, "Current improvement at Grand Canyon West consist of a paved airstrip, a terminal building, a visitor center with shops and restrooms, paved roads to scenic vistas, mobile homes for Grand Canyon West employee lodging, water tanks, a dining facility with a scenic vista a Guano Point where lunch is served to visitors, and hiking trails along the Grand Canyon Rim."

200. Elevator Flights or Over the Edge Flights are defined as "[a] helicopter descent from Grand Canyon West Airport to Colorado River pads conducted wholly on and within the Hualapai Reservation. Ibid. at 629. "The Hualapai collect about $3 million per year in charges and fees from various air-tour operators that land on the reservation." Ibid. at 587.

201. Ibid. at 592.

or in the air, complicates any approach to restoring the Park's natural quiet. With this said, government agencies in the Park need tribal input and involvement in order to address tribal religious and economic interests simultaneously. The FAA's responsibility for attending to both types of concerns is rooted in their trust obligations and the Indian Self-Determination and Education Assistance Act.[202]

Conundrums like this, involving multiple interest groups each with their entangled interests, is the reason why the FAA needs support from tribes via consultation and cooperative rulemaking to find a solution that benefits everyone.[203] The next section will follow the history of FAA's rules and regulations in the Park and two lawsuits filed by the Hualapai at odds with their actions. This history will demonstrate how the FAA initially failed to consult meaningfully with the Hualapai and other tribes in an area of potential effect. A major contributing factor for the FAA's unchecked power is that they do not share regulatory power with tribes in recognition of tribal airspace sovereignty. The Hualapai's legal arguments against the FAA will express how crucial it is for the agency to share

202. Jennifer Nez Denedale, "Naal Tsoos Saní (The Old Paper): The Navajo Treaty of 1868, Nation Building and Self-Determination," *Native American Magazine* 19, no. 2 (2018): 116-132; Indian Self-Determination and Education Assistance Act, Pub. L. No. 93-638, 88 Stat. 2203 (1975) (codified as amended at 25 U.S.C. § 5301 et seq.). More recently, Indian Community Economic Enhancement Act of 2017 (S. 1116) reported to Senate amendments for Native American Business Development, Trade Promotion, and Tourism Act of 2000. The amendments reaffirm the priorities of the Administration for Native Americans (ANA): "Under the economic opportunity program, ANA must give priority to applicants whose programs seek to develop: (1) tribal codes and court systems relating to economic development, (2) tribal business structures, (3) community development financial institutions, or (4) tribal master plans for community and economic development and infrastructure. When providing technical assistance, ANA must also prioritize those applicants."

203. Begay, "Doo Dilzin Da," 21-22.

authority through meaningful consultation, which involves tribal input in the process of creating flight rules and regulations.

ADDRESSING NOISE POLLUTION IN THE PARK

This section will argue how FAA rulemaking to reduce noise pollution in the Park was less effective from 1975 to 1996 until they began engaging in more meaningful consultation with tribes, which means working closely with the Grand Canyon Working Group[204] (tribes included) to create rules and regulations that take into account everyone's concerns. The FAA's hesitant yet gradual inclination toward more meaningful consultation with tribes adjacent to the Park for 37 years, from 1975 to 2012, will be the focus of this section. The Group's collaborative efforts to reach a solution that works in everyone's best interests signifies successful consultation. Furthermore, FAA rules and regulations improved over time by considering tribal economic and spiritual concerns *together* and by documenting the tribes' abilities to manage their airspace safely. Though this issue is ongoing, this study represents the federal government's capacity to recognize and strengthen tribal airspace sovereignty by expanding tribes' regulatory role in airspace.

Noise Control in the Canyon

First, for historical context, one of the reasons the FAA struggles to divulge any regulatory power is due to their success in reducing the rate of mid-air collisions throughout US aviation history. Following a rise of aircraft collisions during the 1950s, the US

204. 2011 DEIS at 630. "The Grand Canyon Working Group cognsist of co-chairs from the NPS and FAA and representatives from air-tour operators, environmental groups, American Indian Tribes, commercial and general-aviation interests, recreational activities, and other Federal agencies."

government centralized power over national airspace by forming the FAA in the Federal Aviation Act of 1958. In fact, one of the worst commercial flight crashes occurred in the Canyon on June 30, 1956, taking the lives of 128 passengers.[205] Since poor air traffic communication caused the collision, this horrific event sparked the need to create safety standards under a single authority.[206] The FAA's formation of safety standards for certifying aircraft and pilots has significantly improved safety for both pilots and pedestrians. Henceforth, the FAA's success in making the skies safer helps justify their claim of absolute authority in national airspace, which persuades the courts (e.g., district courts) to maintain their authority over state, local, and tribal governments. Among their many tasks, the FAA has absolute authority to classify airspace, establish travel routes or corridors, and apply flight-free zones.

Moreover, another spike in mid-air collisions from 1986 to 1987 motivated Congress to reinvigorate the FAA's regulatory power above the Park to reduce noise pollution caused by aircraft and recreational activities. Congress made this request in the Grand Canyon National Park Enlargement Act of 1975. (Before this Act, the events from 1968 to 1986 on Figure 5 indicate sources of the FAA's power to address noise abatement issues.) With power granted by Congress, the FAA published numerous rules and proposals

205 Alexis Egeland, "60 Years Ago, 2 Planes Collided Over the Grand Canyon and It Changed the World," *AZCentral*, last modified June 30, 2016, https://www.azcentral.com/story/news/local/arizona-history/2016/06/30/60-years-ago-2-planes-collided-over-grand-canyon/86529858/. For Arizona Republic's original articles on this report, *see* Ray Silvius and Ted Kazy, "128 May Be Dead: 70 Aboard One, 58 On Other Ship," *Arizona Republic* (Phoenix, AZ), July 1, 1956, http://archive.azcentral.com/persistent/icimages/news/1956%20Grand%20Canyon%20crash%20.pdf.

206. Egeland, "60 Years Ago."

from 1987 to 1996, which are significant precursors to the Hualapai's litigation against them.

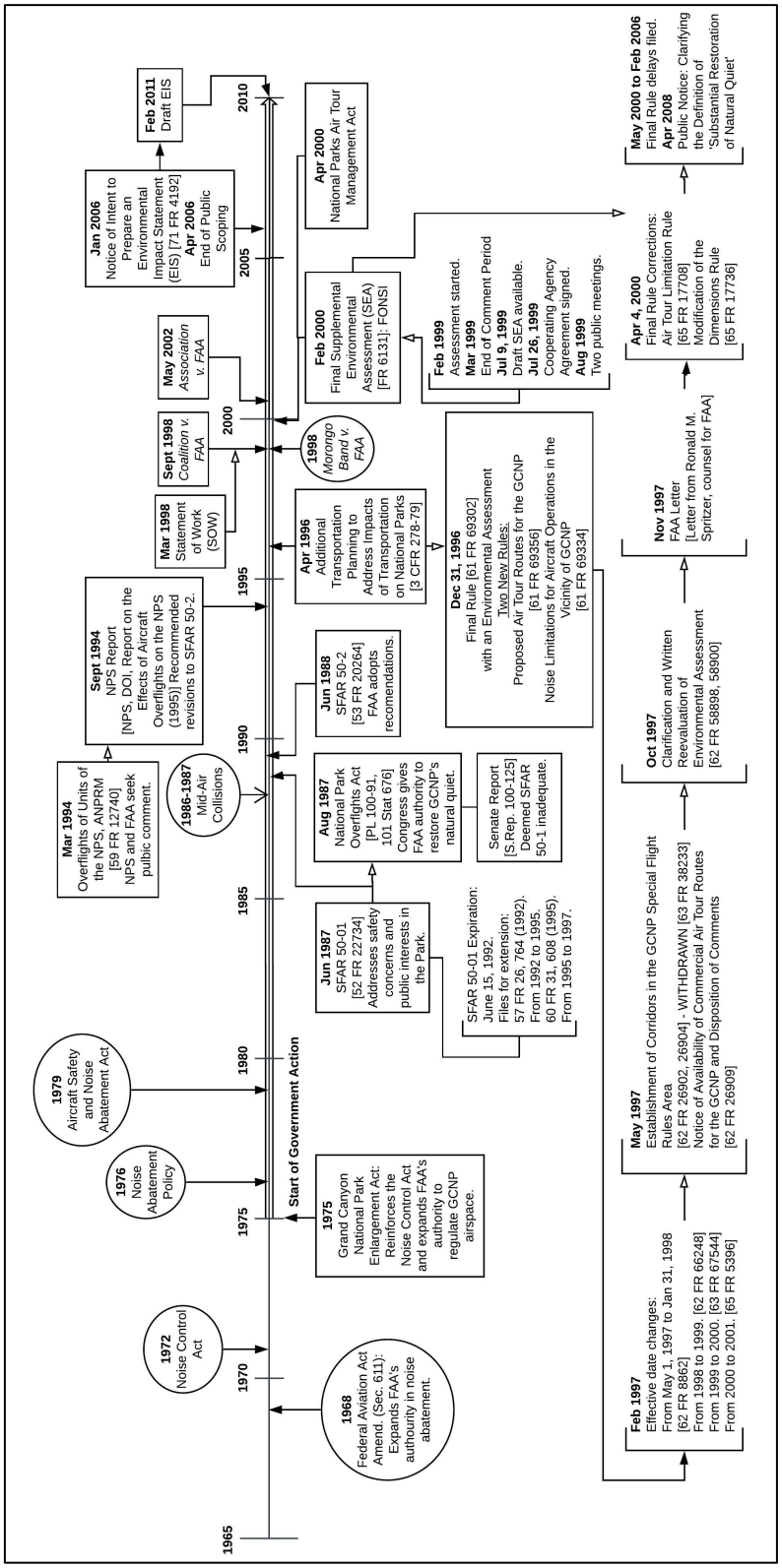

Figure 5. Noise Abatement in the Grand Canyon National Park[207]

Among the FAA's most notable action to reduce noise pollution in the Park is the implementation of their Final Rule in 1996, which proposed two additional rules for using quieter aircraft and modifying air tour routes.[208] *Coalition v. FAA* (1998) was the first case against the two rules, followed by another appeal in *Association v. FAA* (2002). A more in-depth analysis of the events leading to this controversy will reveal why strengthening tribal authority in managing airspace proved more beneficial to those with interests in the Park than assigning the FAA with absolute authority.

To begin, the Grand Canyon Enlargement Act of 1975 reinforced the Noise Control Act of 1972, which granted the FAA's authority to address noise pollution in the Park. The Enlargement Act responded to the danger that noise from increased aircraft activity in the Park posed visitors (tribal and non-tribal) because of their dependency on the Park's natural soundscape and viewscape.[209] For example, the National Park Service more recently explained, "Noise can [] distract visitors from the resources and purposes of cultural areas—the tranquility of historic settings and the solemnity of memorials, battlefields, prehistoric ruins, and sacred sites."[210] This Act referenced the Noise Control Act (NCA) to assign federal agencies (i.e., NPS, FAA, and EPA) authority to manage the Park's airspace in order to protect visitors from noise pollution, which is why the NCA was created. The

208. Special Flights Area Rules in the Vicinity of Grand Canyon National Park, 61 Fed. Reg. 69,302-69,333 (1996) [hereinafter Final Rule]. For the two rules added to this one, *see* Proposed Air Tour Routes for the Grand Canyon National Park, 61 Fed. Reg. 69,356 (1996) [hereinafter "Proposed Air Tour Routes"]; Noise Limitations for Aircraft Operations in the Vicinity of Grand Canyon National Park, 61 Fed. Reg. 69,334 (1996) [hereinafter "Proposed Noise Limitations" or "Quiet Technology Rule"].

209. Enlargement Act at 2091.

210. Department of the Interior, National Park Service, "Director's Order 47: Soundscape Preservation and Noise Management," approved by Robert Stanton, effective December 1, 2000.

new Park boundaries maintained the boundaries of Indian lands held in trust, including their hunting, grazing, and religious rights in the area, and depicted the Havasupai Indian Reservation on a map attached to the Act.[211] This Act also reaffirmed tribal consultation, jurisdiction and policing power, and self-determination. Of course, these are crucial factors to include, but the Act also signifies another step toward enveloping Indian land within the authority of the US government. The Park's boundaries play a crucial role in overcomplicating relations between the FAA and NPS, and tribal governments and historic preservation offices as the next few rules and regulations will demonstrate.

Special Flight Rules Area in the Vicinity of Grand Canyon National Park No. 50-1 (SFAR 50-1) in 1987 marks the FAA's first action to address safety concerns and public interests in the Park related to noise,[212] which is also when tensions began to rise between the FAA and tribes adjacent to the Park's boundaries. This Rule led to the reaffirmation of their authority to continue addressing noise abatement in the Park in the National Park Overflights Act, which attached Senate Report 100-125 deeming SFAR 50-1 inadequate.[213] In a second attempt, the FAA published SFAR 50-2 in 1988,[214] creating "flight-free zones and specific flight corridors to accommodate air tour routes and general aviation flights"[215] and adopting recommendations from the Senate Report. After little to no progress, the

211. Ibid. at § 10(a).

212. Special Flights Area Rules in the Vicinity of Grand Canyon National Park, 52 Fed. Reg. 22,734 (1987). The FAA interpreted the phrase "substantial restoration of natural quiet" based on the Overflights Act and defended their thought process for defining this phrase in *Coalition v. FAA* and *Association v. FAA*.

213. S. Rep. 100-125, at 8 (1987). This Report stated, SFAR 50-1 did "not adequately address the adverse effects caused by low overflying aircraft."

214. Special Flight Rules in the Vicinity of the Grand Canyon National Park, 53 Fed. Reg. 20,264 (1988) [hereinafter SFAR 50-2].

215. National Parks Overflights Act, Pub. L. No. 100-91, 101 Stat. 676 (1987) (codified at 16 U.S.C. 1a-1 note (1992) [hereinafter Overflights Act].

National Park Service filed a report in September of 1994 per Congress's request in section three of the Overflights Act.[216] This report made several recommendations on how to revise SFAR 50-2, which the FAA and NPS both anticipated by seeking public comment four months prior.[217] A few years later, the FAA made additional plans which were published in their Final Rule on December 31, 199, along with an Environmental Assessment.[218] They also introduced two new rules: Proposed Air Tour Routes for the Grand Canyon National Park[219] and Noise Limitations for Aircraft Operations in the Vicinity of Grand Canyon National Park.[220] These new rules are what soon after raised tensions between the FAA and the Grand Canyon Working Group toward litigation in 1998.

Meanwhile, 1996 to 1997 was a busy but unproductive time for the FAA in substantially restoring the Park's natural quiet. In February of 1997, they filed several extensions moving the Final Rule expiration date all the way from May 1, 1997 to January 31, 2001.[221] In May, they tried adding two new rules, one to establish new flight corridors and the other to give notice of availability of commercial air tour routes, but later decided to withdrawal the former.[222] In October of 1997, the FAA admitting in a Notice of

216. Department of the Interior, National Park Service, Report on the Effects of Aircraft Overflights on the National Park System (1995) [hereinafter "NPS Report"].

217. *See* Overflights of Units of the National Park System, Advanced Notice of Proposed Rulemaking (ANPRM), 59 Fed. Reg. 12,740 (1994).

218. Special Flight Rules in the Vicinity of Grand Canyon National Park, 61 Fed. Reg. 40,120, 40,121 (1996) [hereinafter "Proposed Final Rule"]; FAA, U.S. Department of Transportation, Environmental Assessment: Special Flight Rules in the Vicinity of Grand Canyon National Park 4-4 to -5 (1996) [hereinafter "Environmental Assessment"].

219. Proposed Air Tour Routes.

220. Proposed Noise Limitations.

221. Special Flight Rules in the Vicinity of the Grand Canyon National Park, 57 Fed. Reg. 26,764 (1992); Special Flight Rules in the Vicinity of the Grand Canyon National Park, 60 Fed. Reg. 31,608 (1995).

222. Establishment of Corridors in the Grand Canyon National Park Special Flight Rules Area, 62 Fed. Reg. 26,902, 26,904 (1997). For notice of this rule's

Clarification that they had underestimated the projected growth of air tourism in the Park, rendering their Final Rule less efficient than they had initially envisioned.[223] In the following month, Ronald M. Spritzer, counsel for the FAA, wrote a letter stating that they were considering a cap on flights to address noise pollution in the Park swiftly.[224] Ron Dungan's article in *AZCentral* hints toward inter-agency conflict and clashing priorities during this time: "The Park Service wanted to restore quiet to the Park, while the FAA was primarily concerned with safety. The studies dragged on, the tours continued, and both conservationists and tour operators grew frustrated with the process."[225] In an interview with Dick Hingson, a Sierra Club representative, Hingson claims that their approach to rulemaking was flawed: "Years of negotiation led to a complex system of flight zones, flight caps, the phrasing in of 'quieter technology,' [and] studies of the visitor experience."[226] As a result, Hingson felt the tasked agencies were not making progress toward either group's goal: "the Canyon was getting noisier, not quieter, and the tour industry complained that it needed to grow."[227] Also in November of 1997, Grand Canyon Trust, Grand Canyon Air Tour Coalition, Clark County, and the Hualapai Tribe responded to the FAA's lack of progress by filing a lawsuit, which decided on September 4, 1998.[228]

withdrawal, *see* 63 Fed. Reg. 38,233 (July 15, 1998). *See* Notice of Availability of Commercial Air Tour Routes for the Grand Canyon National Park and Disposition of Comments, 62 Fed. Reg. 26,909 (1997).

223. Special Flight Rules in the Vicinity of Grand Canyon National Park, 62 Fed. Reg. 58,898, 58,900 (1997) [hereinafter "Clarification"].

224. Letter from Ronald M. Spritzer, counsel for FAA, at 2 (November 12, 1997) [hereinafter "FAA Letter"].

225. Dungan, "Grand Canyon Air Tours."

226. Ibid.

227. Ibid.

228. *Coalition v. FAA*.

In *Grand Canyon Air Tour Coalition v. FAA* et al. (or *Coalition v. FAA*), petitioners and intervenors contested the FAA's Final Rule for doing "too much, too soon" in the opinion of the Air Tour Coalition, Clark County, and Hualapai Tribe; and "too little, too late" in the opinion of Grand Canyon Trust.[229] The Hualapai Tribe and other petitioners argued the FAA's lack of public forum and consultation in regulating the Park's airspace attributed to their failure to factor in the plan's adverse effects on communities, economies, and industries. In the Tribe's brief, Walter A. Smith, Jr., Michael L. Kidney, and Robert Wiygul argued,

> The FAA issued its Final Rule too soon, because it failed to consider *first* [emphasis added] whether the establishment of expanded flight free zones would push aircraft noise off the Park and onto the Hualapai Reservation. The consequences of such a shift…would be harm[ful] to the Tribe's [TCPs], sacred sites, ongoing religious and cultural practices, natural resources, and economic development…the FAA's failure to consider these consequences, and to consult with the Tribe about them, violated the [NHPA], NEPA, the APA, and the United States' trust obligation to the Tribe.[230]

The Hualapai Tribe specifically feared how flight-free zones (FFZs) in the Park would adversely impact their religious practices and quiet enjoyment of the land on the reservation.[231] However, since the FAA defended that mapping flight routes and FFZs were not yet complete, the court found all arguments against the agency unripe or otherwise

229. Ibid.
230. Ibid.
231. Ibid.

moot.[232] The Tribe also argued that despite initiating consultation, the FAA still failed to engage in "meaningful" consultation. A footnote in *Coalition v. FAA* describes the Tribe's argument and the FAA's defending "proof":

> In its brief, the Tribe contended that under its trust obligations, the United States was required, but failed, to consult with it on a government-to-government basis while developing the Final Rule. The FAA, however, cited considerable evidence that consultations have occurred. See, e.g., Final Rule, 61 Fed. Reg. at 69,305-07 (outlining consultations with Indian tribes); Environmental Assessment at 4-19 to -21, 4-23 (outlining meetings with Hualapai and other tribes to review impact on historical sites and socio-economic interests of tribes). At oral argument, the Tribe reformulated its argument, conceding that there had been consultations, but contending that they had not been meaningful. See Oral Arg. Tr. at 50-51.[233]

If the FAA believed a laundry list of meetings to be proof enough of meaningful consultation, then their definition does not match that of the Hualapai Tribe. Later documentation of consultation between the FAA, Hualapai, and ten other tribes affiliated with the Park shows a more promising definition of consultation that was clearly lacking before 1997.

In this court case to present day, the Hualapai Tribe and more tribes demand the FAA maintain a nation-to-nation relationship with them by taking into full consideration

232. Ibid. The Hualapai Tribe's reason for filing a suit against the FAA while still moot was to avoid missing the deadline to file an appeal and to prepare for the likely possibility of petitioning for review.

233. Ibid. This is quoted from footnote: FN16.

how their rules adversely impact each of their traditional lifeways and environments. The next section will demonstrate how consultation with the FAA gradually improved based on collaborative rulemaking and substantial reform of the Final Rule. Another measure of success is the expansion of assertions of tribal sovereignty in laws, rules, and regulations related to air tourism and noise abatement in the Park.

Consultation

The FAA's rules and regulations, in the beginning, proved to be slow and inadequate at restoring the Park's natural quiet for more than a decade. Between SFAR 50-1 and 50-2 (1987-1988) and Notice of Clarification (1997), the FAA struggled to balance everyone's interests and concerns, including both the tribes' religious and economic concerns. One of the reasons for the FAA's shortcoming was their reluctance to designate any regulatory power to the tribes through meaningful consultation. This section will argue that meaningful consultation – taken before government action and involving tribes throughout the process of rulemaking – eventually proved more effective, time efficient, and mutually beneficial. In return, meaningful consultation results in the increased presence of tribal sovereignty in airspace by promoting tribal economic development and exhibiting tribes' ability to manage their airspace safely.

A closer look at the FAA's 1996 Final Rule, which they cite in court as documented proof of tribal consultation, reveals three major problems with their consultation efforts: 1) opportunities for public comment we brief and limited 2) consulting parties concurred that conducting an Environmental Impact Statement (EIS) was more necessary than an Environmental Assessment (EA), and 3) consulting parties were not given a chance to actively participate in proposing alternative routes. The first problem is evident in the section "Public Meetings," which documents three public meetings in September of 1996

and a congressional hearing from October 10 to 11 in 1996.[234] In later efforts to consult with tribes, there are far more opportunities for public input via mailed letters, telephone calls, and meetings held at many different locations. Another problem these meetings indicate is primarily consultation with the Hualapai and not yet the other tribes. Second, the frustration Dungan mentioned in his article could have stemmed from tribes' disapproval with the EA because "[t]hey believed that the situation called for an EIS" in compliance with NEPA. Due to the severity of the impact the Final Rule posed tribal lands, the tribes, as well as other interest groups, felt an EA was disappointingly inadequate. The third problem relates to the specific reason why an EA is not adequate. Tribes, conservationists, air-tour operators, and others wanted to be more involved in the FAA's rulemaking by proposing alternative routes or plans, but "the range of alternatives [in an EA] was limited to either no action or the [FAA] proposed alternative."[235] Thus, an EA does not invite nearly as much involvement in rulemaking as necessary for such a high-impact complex, multifaceted, and convoluted issue with so many groups involved. Their disappointment with the EA explains why the tribes "did not elect to…participate as cooperating agencies in the environmental review process."[236] Others reasons for declining the Departments of Interior and Transportation's invitation is because of the following concerns stated under the "Congressional Hearings" section: "Their major concerns were recognition of their sovereignty over the airspace, air access, potential noise increases over

234. Final Rule at 69303-4. Three public meetings took place September 16-20 in two different cities: Scottsdale, AZ and Las Vegas, NV to discuss the Final Rule and draft environmental assessment. The Congressional hearings took place from October 10 to 11 in Las Vegas, NV and Tempe, AZ.

235. Ibid. at 69304.

236. Ibid. at 69303-5.

tribal lands and religious/historic/cultural sites, and the lack of early coordination during the development of the proposed rule."[237] This quote from the 1996 Final Rule is rare but indicates one of the FAA's earliest steps toward acknowledging tribal airspace sovereignty. Later corrections to the Final Rule in April of 2000 better reflect this acknowledgment after the FAA takes steps to improve their consolation efforts.

In February of 2000, proof of gradual improvement in consultation is evident in the Final Supplemental Environmental Assessment (FSEA). Prior to the final, assessment began in February of 1999, involving a comment period which ended in March, and two public meetings in August. Different from the EA, this time the FSEA involved a Cooperating Agency Agreement signed on July 26, 1999 and a Programmatic Agreement signed by representatives from the FAA, NPS, and Hualapai Tribal Council and Historic Preservation Office.[238] The goals of this agreement were to identify the Area of Potential Effect (APE) on tribal lands and tribal cultural properties in and outside of the Park. A key characteristic of APE's definition is that the area's boundaries are as flexible as the FAA's rulemaking. If the FAA were to change the "proposed route structure," then the area could also change to account for new impacts on the tribe or their TCPs.[239] Another goal of this agreement was to reaffirm the THPO officer's role in identifying and compiling data on

237. Ibid.

238. 2000 FSEA; Department of Transportation, Federal Aviation Administration, "Programmatic Agreement Among the Federal Aviation Administration, the Hualapai Tribe, the Hualapai Tribe Historic Preservation Officer, the National Park Service, and the Advisory Council on Historic Preservation regarding the 'Special Flights Rule Area in the Vicinity of the Grand Canyon National Park'," accessed April 4, 2018, https://www.faa.gov/about/office_org/headquarters_offices/arc/programs/grand_canyon_overflights/documentation/GCNPHualapai106PA2000.pdf [hereinafter Programmatic Agreement].

239. Programmatic Agreement.

TCPs for noise modeling and mapping areas of noise-sensitive land use. Also, this agreement outlines long-term plans for monitoring and mitigating noise, which shows more promise for tribal involvement throughout the rulemaking process.

Also, this time around, the 2000 FSEA identifies "[s]ix Native American communities, represented by eight separate tribal governments," several of which acted as cooperating agencies with the FAA.[240] With greater participation, the FAA heard the concerns of more tribes. The FSEA highlights, for instance, one of the Havasupai's most pressing concerns: "The Havasupai Tribe commented that all commercial fixed wing tour flights should be removed from the Havasupai Reservation."[241] The more tribes were invited to participate in defining their environments (i.e., defining "natural quiet," identifying TCPs, locating APE), the more the FAA gained acknowledgment of tribal airspace sovereignty by considering more carefully how their actions potentially affect communities and resources adjacent to the Park.[242] In other words, Indigeneity's increased presence in airspace, through the tribes' persistence and hard work, the FAA began to recognize tribal airspace sovereignty and, along with it, their trust responsibilities.

Even though tribal consultation was improving in some ways, the FSEA's Findings of No Significant Impact (FONSI) left many issues remaining. In 2002, some of the same petitioners and intervenors from *Coalition v. FAA* returned to file another case against the FAA in *Association v. FAA.* This time the US Air Tour Association petitioned and the Hualapai Tribe and Grand Canyon Trust intervened. This case resulted in the court, again, siding with the FAA's definition of "natural quiet" (other than their interpretation of

240. 2000 FSEA at 1-6, 3-2.
241. Ibid. at 1-5.
242. Ibid. at 1-6.

"average annual day") and noise methodology, but the court required the FAA to take further action in adjusting their measuring system to "account for additional types of aircraft noise."[243] In getting caught up with the terminology, the court failed to adequately address the Hualapai Tribe's concerns regarding the threat new free-fly zones and changing flight corridors posed their own standard for "natural quiet" and their development of air tourism. The federal government has a trust obligation to address these issues, which they were still failing to do. By completely dismissing the Hualapai Tribe's concerns in this court case, it conveys that while the FAA was making some steps toward recognizing tribal airspace sovereignty, the courts had made none.

Finally, the tribes received Notice of Intent to Prepare an Environmental Impact Statement in January of 2006. This EIS took far greater lengths to involve tribal consultation than the previous two environmental studies. A draft was published in 2011 by the NPS showing a process of public scoping that offered more accessibility to comment (meetings occurred on tribal lands or at nearby cities), more publicity (in newspaper announcements) and education regarding the history of noise abatement in the Canyon (agencies prepared PowerPoint presentation, handouts, and other informational materials), and, most importantly, more collaborative rulemaking with the Grand Canyon Working Group.[244] At this stage, consultation had considerably evolved since before the 1996 Final Rule. From 2006 to 2011, tribal consultation acts more like community-planning because everyone was invited to the table to discuss their concerns in open house meetings and

243. Department of Transportation, Federal Aviation Administration, "Grand Canyon Overflights Statutory, Regulatory and Litigation Background"; *Association v. FAA*.

244. 2011 DEIS at 613-615.

through more private means. In these meetings, flip charts, audio recording devices, letter readings, and other tools and techniques were used to organize, code, and document everyone's thoughts and concerns.[245] More agreements were signed outlining each group's roles, expectations, and goals than previous studies. Also, Table 5.1 in the EIS tracked some of the disputes and resolutions that occurred throughout meetings.[246] For example, the Navajo Nation disputes the FAA and NPS's claim that they had endorsed the Alternative C route over the Little Colorado River; whereas, the Navajo do not prefer flights over the River because it is sacred.[247] Later, the Navajo Nation wrote multiple letters revisiting this issue along with several more meetings to discuss alternative routes and to review maps prepared by Navajo representatives.[248] It is not clear as to whether or not this issue was ultimately resolved, but a pending copy of the final EIS shows that Alternative C was dismissed from further analysis because it did not meet most of the EIS objectives.[249] These meeting notes also revealed how many of the tribes supported the route structure as long as the air-tour operator aircrafts incorporated quiet-technology.[250] Tribes also expressed appreciation and satisfaction when modifications were made to divert air traffic away from their TCPs.[251] Henceforth, this environmental study reflects more meaningful

245. Ibid. at 614. (All of the material cited from the 2011 DEIS matches the material in the 2012 FEIS Draft.)

246 Ibid. at 616-19.

247. This meeting took place on September 5, 2007 in Window Rock, AZ.

248 Ibid.

249. 2012 FEIS Draft at 57.

250. 2011 DEIS at 617. A meeting with the FAA, NPS, and Navajo Nation on August 29, 2006 document this response to the route structure by the Navajo Nation.

251. 2011 DEIS at 618. The Kaibab Band of Paiute Indians expressed this during a meeting with the NPS in September of 2009.

consultation than the previous studies because progress and changes to the route structure were beginning to reflect their interests and concerns.

Collaborative rulemaking is seen through more significant attempts to involve public comment and team meetings with the Working Group. The NPS published an EIS timeline, see Figure 6, last modified in December of 2007 to represent their plan for completing the EIS with tribal and non-tribal communities.[252] In this process, tribes were invited to define "natural quiet," identify and map TCPs within areas of potential effect (APE), and propose or choose alternative routes. Sometimes these discussions would lead to the need for subsequent environmental analyses, delaying the final EIS until 2012.

252. Department of Transportation, Federal Aviation Administration "Special Flight Rules in the Vicinity of Grand Canyon National Park: Environmental Impact Statement Timeline," last modified December 2017, https://www.faa.gov/about/office_org/headquarters_offices/arc/programs/grand_canyon_overflights/documentation/GRCA_timelinejan.pdf.

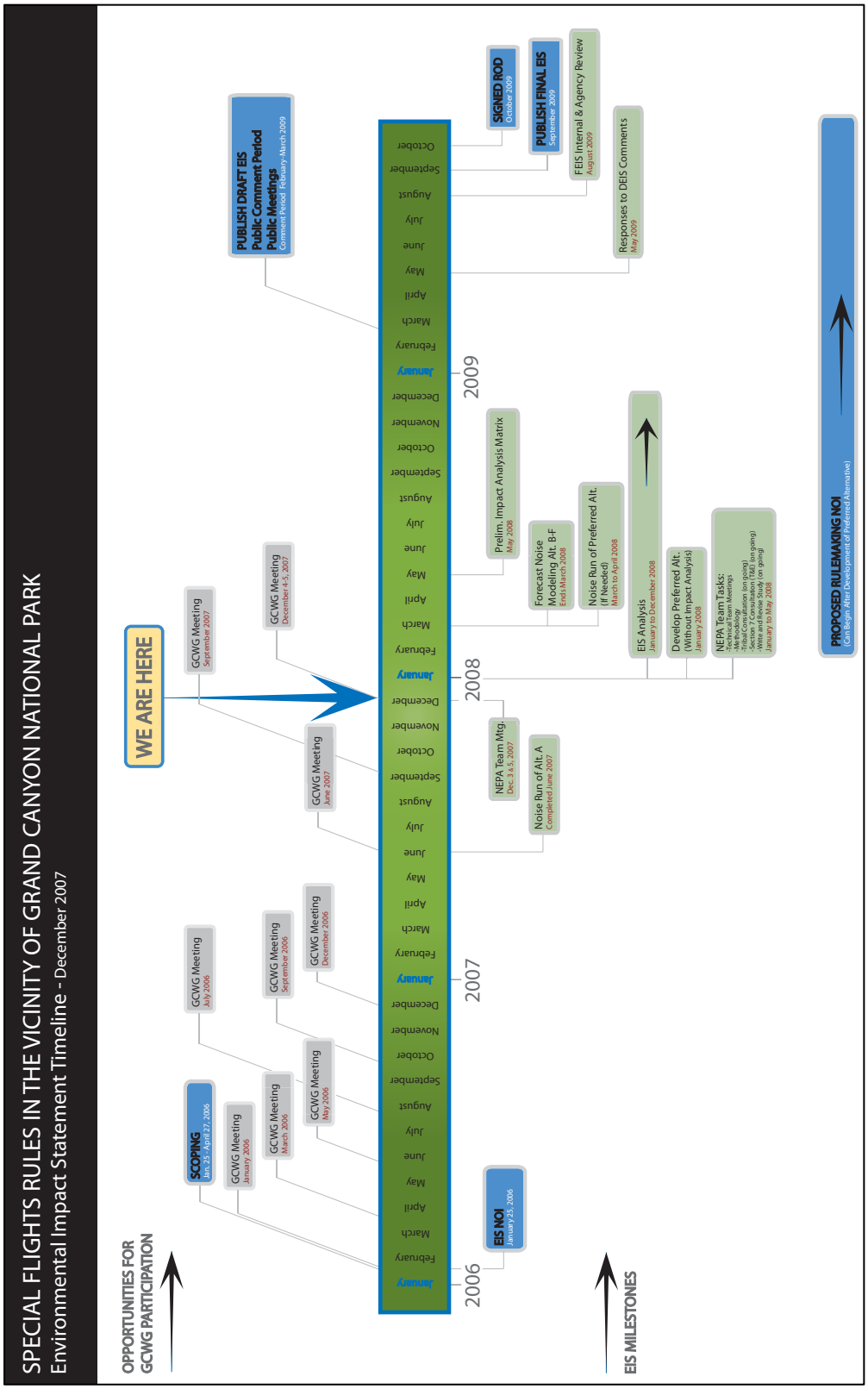

Figure 6. Environmental Impact Statement Timeline

Since the Hualapai has the most invested in air-tourism, they were especially instrumental in modifying the Final Rule. The FAA grants them an exception for a capped number of air-tour flights in the Park to secure the continued growth of their enterprise. With this exception, now the Hualapai has the same opportunity to secure their enterprise the way Trump had when he purchased air rights to secure his enterprise in the 1980s. The differences, however, are that the tribe did not claim airspace by purchasing real property and that their "claim," or better yet their right to develop their airspace, is rooted in their sovereignty as nations, which the United States has a trust obligation to support. On May 9, 2002, the FAA's decision to grant the Hualapai Tribe this exception was brought to court as unconstitutional by Airstar Helicopters in *Airstar Helicopters v. FAA*. In recognition of the federal government's trust obligation and the FAA's action to support tribal, the court denied Airstar's petition:

> Petitioner lacks standing to challenge to the Hualapai Tribe exception. In any event, the court of appeals correctly ruled that the exception is constitutional because it is rationally tied to the federal government's trust obligation to the Tribe. That ruling does not conflict with any decision of this Court or of any other court of appeals. Review by this Court is therefore not warranted.[253]

Opposition from Airstar, however, indicates that a more precise definition and more prominent assertion of tribal airspace sovereignty in American jurisprudence would provide not only federal agencies but also non-governmental groups a clearer understanding of tribal sovereignty.

253. *Airstar Helicopters, Inc. v. FAA et al*., 298 F.3d 997 (D.C. Cir. 2002). This is quotes from a brief in Petition Application A1-A39, Docket No. 02-931.

The frequent absence of a clear definition of tribal air rights continues to play a major role in issues that persist even though the FAA had made more significant attempts to consult with tribes over time meaningfully. For instance, the Draft Environmental Impact Statement (DEIS) in 2011 still raised some concerns for the Navajo Nation. Cindy Yurth, a reporter for the *Navajo Times*, discusses the Navajo Nation's struggle from within to balance cultural and economic interests and mentions their disagreements with environmentalists and the NPS over alternative flight routes proposed in the DEIS.[254] The DEIS diverted some routes away from TCPs; however, the modified routes would not allow the Navajo Nation to develop air tour businesses since the flight paths no longer passed over tribal land.[255] This Statement reveals the NPS, who conducted the study, and the FAA considered the Navajo Nation's cultural interests but still struggled to balance their economic interests. The DEIS's support from the Sierra Club Grand Canyon Chapter and "tens of millions of visitors uniting to call for the Park Service to implement strong noise pollution controls to help restore the [Park's] astonishing beauty and natural quiet," as Director Sandy Bahr states, also exposes the pressure federal agencies received from the public, still making it difficult for the agencies to balance public and tribal interests.[256] NPS Superintendent Palma Wilson's comment, "We recognize this plan does not meet everybody's needs. We have done our best to take all the views into consideration."[257] Her sentiment means that at some point the federal agencies decided to either prioritize tribal

254. Cindy Yurth, "Draft EIS on Grand Canyon Flights Could Impact Navajo," *Navajo Times*, February 17, 2011, A4.
255. Ibid.
256. Ibid.
257. Ibid.

interests or the public's interests. In some ways, it appears they chose both. By giving the Hualapai an exception from a flight cap to secure their economic growth, the agencies prioritized tribal interests,[258] but when it came to addressing the Navajo Nation's interest in future participation in air-tourism, they prioritized public interests.

THROUGH A LENS OF WATER LAW

One of the underlying reasons why the federal government has historically failed to recognize these tribes' rights is due to a complicated and contorted legal history. Water rights along the Colorado River are especially complicated because of how many tribes share the river's resources. Navajo water rights were not defined or established in the same fashion that other tribal water rights with which the Winters doctrine outlines. In *Winters*, the establishment date of a reservation or a signed water agreement between a tribe and the federal government usually defines tribal water rights. The Navajo Boundary Act of 1934 specified the Nation's borders with numerous water sources but did not imply a priority date; neither did their reservation establishment date.[259] Instead, a Navajo Indian Irrigation Project in 1962 marked their priority date.[260] This means that assuming these nations have a priority to airspace based on the Navajo Boundary Act and other settlements would prove more challenging. Regardless, to find the intent to reserve these rights, the federal

258. *See* Department of Transportation, Federal Aviation Administration, Grand Canyon National Park Special Flight Rules Area (GCNP SFRA) Procedures Manual, 6/1/2016, https://www.faa.gov/about/office_org/field_offices/fsdo/nev/media/SFRA_GCNP_Manual.pdf. Supai Village route at 3-1.

259. Navajo Boundary Act of 1934, P.L. 93-620, 88 Stat. 2090 (1934).

260. Navajo Indian Irrigation Project, P.L. 87-483, 76 Stat. 96, as amended, 43 USCS 615 et. Seq. (1976).

government would have to look no further than other subcategories of cultural resource management and federal Indian law and policy.

Next, when we apply methods of quantification from water law to tribal air rights, we find an existing method of quantifying air rights in the allocation of flight routes to special interest groups. Similar to water rights, the airspace over the Park can be quantified in a way that recognizes tribal jurisdiction and authority in the Canyon. In a way, this was done by creating alternative flight routes that acknowledged culturally sensitive areas by diverting air traffic away from these areas. Creating these alternative routes, some of which were adopted and some of which were not, was a major part of the consultation process. Currently, FAA maps lack the representation of reservation boundaries that makes Indigeneity less present in airspace, but the maps resulting from tribal consultation are a positive indication that the FAA has the capacity to affirm tribal authority in airspace through the use of maps.[261] A future step would be to represent tribal jurisdictional boundaries on flight maps. A specification of tribal airspace on maps to indicate a warning area or "tribal restricted airspace," as Haney proposes, would help distinguish and reinforce an Indigenous presence in airspace. Such categories would further remind federal agencies and individual pilots that tribes have jurisdiction regardless of whether the issue or conflict is related directly or indirectly to airspace. Mapping these soundscapes may not be an ideal method for increasing the presence of Indigeneity in airspace, but it is one way for tribes to reclaim their territoriality in spaces where colonization has already remapped them.

261. Haney, "Protecting Tribal Skies," 14. Haney, himself, suggests the FAA add an air class called "Restricted Tribal Airspace" to FAA sectional maps that air traffic controllers can use when needed. Haney, "Protecting Tribal Skies," 38.

Another method of quantifying air rights is through identifying the amount of space a private property owner can utilize. This case, of course, deals with group rights (e.g., Indigenous rights) and not individuals so this limitation should not apply just like proper appropriation rights do not apply the use-or-lose system to tribes. The use-or-lose system from the prior appropriation doctrine decides that an individual's water "right may be terminated by abandonment or forfeiture"; whereas, tribes are immune from this system in *Winters*.[262] In other words, nonuse does not terminate tribal water rights, comparable to the riparian doctrine.[263] Another reason why tribal citizens should never be limited to this measure is that the Indian Self-Determination Act and the Winters doctrine both recognize a tribe's flexibility to change their use of resources in order to improve their economies. The easiest way for the federal government to continue promoting tribal self-determination is to leave "space" for them to build their enterprises.

Meanwhile, if a tribe is not using their airspace, they should be allowed to transfer their rights off-reservation or through leasing just as they do with their water rights. The business agreements the Hualapai formed with air-tour operators to access their landing strips is an example of how they transfer their air rights to non-tribal members as an additional source of revenue and way of diversifying their economy. Partnerships with mutual benefits often result from these types of agreements, which express how transferability is an crucial aspect of tribal air rights.

In regard to a standard measuring system, the measures for sound and definition of "natural quiet" created ongoing debate in *Coalition v. FAA* and *Association v. FAA*.[264] The

262. Dworkin, "Indian Water Rights."
263. Ibid.
264. *Coalition v. FAA*; *Association v. FAA*.

FAA's measures for sound and definition of the "natural quiet" compares to the quantification of water because neither may be adequate for tribes based on their different understandings of the natural environment. The Working Group's advancements in formulating their definitions for "natural quiet" and for defining areas of potential effect (APE) reveal just how similar water and air rights operate in American jurisprudence. Since they operate similarly, this means some aspects of water law serve as a promising foundation for developing future tribal air laws. The last point I would like to raise here is how tribes should be cautious as usual in developing policies and defining their rights in airspace since water law, being encapsulated within American jurisprudence, after all, does not always work in their favor. Future research could dig deeper into the ways tribes have overcome obstacles in water law as guidance for how tribes can similarly overcome obstacles in air law. For instance, the ongoing debates about defining "natural quiet" suggest how tribes can prepare for future debates over issues in airspace by defining or measuring certain aspects of airspace according to their own ideologies and epistemologies. Toward the end of the next chapter, I revisit some of the current and forthcoming issues tribes useful for thinking more about how tribes are currently quantifying, measuring, transferring, or transforming the use of their rights in airspace through their own systems of knowledge production.

CHAPTER 4

FINDINGS: STRATEGIES, FUTURE THREATS AND POSSIBILITIES IN TRIBAL AIRSPACE

The Sun

We now send greetings and thanks to our eldest Brother, the Sun. Each day without fail he travels the sky from east to west, bringing the light of a new day. He is the source of all the fires of life. With one mind, we send greetings and thanks to our Brother, the Sun.

Now our minds are one.

Kionhkehnéhkha Karáhwa

Onen nón:wa ehnón:we nentsitewate'nikonraié:ra'te ne tsi karonhiá:te rorihwató:ken éhtho tehaiahiá:khons ne tshionkwahtsí:'a kionhkehnéhkha karáhkwa. Ne tehoswa'thé:ton tsi niaonkwenonhákie tánon'ne ro'tariha'tonhákie ne tsi ionhontsiá:te ne ne skén:nen tsi akontonhahtén:ti ne tsi nahó:ten shonkwaienthó:wi. Ne tsi nentsitewá:iere enska tsi entewahwe'nón:ni ne onkwa'nikón:ra tánon' tentshitewanonhwerá:ton ne tshionkwahtsí:'a kionhkehnéhkha karáhkwa.

Éhtho niiohtónha'k ne onkwa'nikón:ra.[265]

265. *Thanksgiving Address: Greetings to the Natural World*.

CASE STUDY FINDINGS

Like the Sun "bringing the light of a new day," the tribes mentioned throughout this paper worked tirelessly to restore their inseparable connections to land, air, and water. They also brought the "light of a new day" through hope and promise of future expansions of tribal airspace sovereignty whether or not it was their original intention. In this section, I will compare findings from each case study to provide insight into some of the ways in which tribes are likely to be more victorious in the future. To compare each study, I focus on their similarities and differences in consultation and political strategies. For comparing consultation processes, I explain how these cases illustrate different understandings of meaningful consultation and explain how the cases express mutual benefits of improving consultation based on suggestions from Troy Eid's "Beyond the Dakota Access Pipeline: Working Effectively with Indian Tribes on Energy Projects" and Thomas King's *Cultural Resource Laws and Practice*. For analyzing each study's political strategies and their successes, I turn to Laura Evans's *Power from Powerlessness*. This analysis will highlight the tribes' achievements in asserting their airspace sovereignty despite a deficit of legal standing in domestic air law. Looking further into the future, I will end this chapter with a discussion on the potential threats and possibilities in tribal airspace that to provoke thought and dialogue about which issues tribes may wish or need to consider in their near futures.

Meaningful Consultation

By comparing consultation at Standing Rock to consultation at the Grand Canyon, the stark differences expose the FAA's reluctance and last-resort attitude toward meaningfully engaging with tribes. The NoDAPL Movement occurred after much of the consultation at the Grand Canyon National Park took place. As the second case study shows, the FAA had already made steps to improve their consultation efforts with tribes

before NoDAPL. This means that the FAA already knew that a laundry list of meetings with the tribe is not adequate proof of meaningful consultation. In fact, they used the exact same defensive argument they gave the Hualapai Tribe in *Coalition v. FAA* as they gave the Standing Rock Sioux nation. Since the FAA already proved their ability to engage in more meaningful consultation with tribes, tribes can hold them up to this same standard.

Differences in consultation in these case studies reveal four main areas in which the FAA improved consultation at the Canyon but failed to meet the same standard of consultation at Standing Rock. At the Canyon, the FAA made greater efforts to 1) work with the tribes' schedules, 2) invite more active participation and collaboration in modifying and proposing alternative routes, and 3) address all of the tribes' interests and concerns, and prioritize tribal interests and concerns as part of their trust obligation.

The FAA made far more attempts to work with the Grand Canyon Working Group's schedule than with the Standing Rock Sioux Tribe's schedule. Previous to NoDAPL, the consultation process at the Grand Canyon was more flexible as shown by how tribes would reschedule meetings as needed and federal agents would hand-deliver items to members of the group when they could not attend meetings.[266] There is not much proof of the federal agencies (NPS and FAA) prioritizing one group's availability over another like there is at Standing Rock when the FAA prioritized Dakota Access' project schedule.[267] In the Cheyenne River's comment made in 2018 to the Corps about the remand process, they claim, "the Corps is actively engaging with Defendant Dakota Access, LLC ("Dakota

266. 2012 FEIS Draft.

267. *See* "Standing Rock Sioux Tribe Warns of 'Same Mistakes' With New Dakota Access Study," Indianz.com, last modified March 7, 2018, https://www.indianz.com/News/2018/03/07/standing-rock-sioux-tribe-warns-of-same.asp.

Access") to prepare a remand document, including allowing Dakota Access's schedule to dictate the proposed remand timeline. This disparity puts the Tribe at a distinct disadvantage."[268] It is important that consultation has a component of flexibility to allow everyone's voice to be heard for more effective planning and overall satisfaction with the outcome even if all parties do not necessarily reach a resolution. King states, "Generally speaking, I think flexibility is vital, as long as it advances, rather than detracts from, the purpose of the process."[269] Consultation was in both the FAA and Dakota Access's best interest at Standing Rock because it can advance decision-making more effectively and sustainably. As the second case study shows, the FAA's engagement in tribal consultation correlated with their progress in reducing noise pollution in the Canyon. In the case of NoDAPL, a lack of consultation by federal agencies drove the tribe toward protest as the only outlet for voicing their concerns did more to derail construction of the pipeline than it did to advance it. If the Army Corp, FAA, and Dakota Access had formed a working group or agreements with the tribe, it could have resulted in a plan that met all of their interests: financial, religious, and environmental.

Concerning the mutual benefits of consultation, federal agencies and companies prove to gain more from meaningful consultation than the lawsuits that result from their failure to uphold NEPA's Section 106, presidential orders and other laws and policies. With this said, engaging in meaningful consultation also benefits their reputations more. Eid mentions this incentive in suggesting, "Companies should monitor the process and encourage individualized interaction with tribal officials—not group informational

268. Status Report Regarding Remand.
269. King, *Cultural Resource Laws and Practice*, 89.

meetings, mass mailings, or unfocused 'outreach' that are less likely to withstand judicial review."[270] For the Standing Rock Sioux Tribe, their experience of consultation with the Army Corp appeared more in the form of a "notification" of the DAPL plan than as "consultation" between Dakota Access and the Tribe. King warns, "Don't mix up consultation with notification, or holding public hearings, or public relations. Consultation means talking with people, trying to resolve whatever issues need to be resolved, and trying to reach agreement about it."[271] The Army Corps' laundry list of dates they tried to contact the Tribe is proof of "notification," not "consultation." Meaningful consultation, as the second case study shows, invites more tribal participation in the process of rulemaking through mapping, defining and redefining terms, and proposing new alternatives. What occurred at Standing Rock and the early stages of reducing noise pollution at the Grand Canyon was "poor" consultation because government actions occurred too soon, too late, or not at all. Meaningful consultation with Standing Rock Sioux nation participation would have looked more like all interested parties sitting at the table together (Transfer Energy Partners, Standing Rock Sioux tribal council, Morton County, North and South Dakota state representatives, non-Native allottees, etc.) to discuss the plan for DAPL *before* the construction vehicles move in, *before* receiving building permits, and *before* law enforcement officials get involved. It is true that such consultation would have stalled the development project, but protest stalled the project as well with far fewer parties satisfied with the outcome.

With more participation, there would have been more opportunity for the FAA and Army Corp to recognize their trust obligations to the Standing Rock Sioux nation as the

270. Eid, "Beyond the Dakota Access Pipeline."
271. King, *Cultural Resource Laws and Practice*, 88.

second case study indicates. At the Grand Canyon, the FAA's recognition of their trust obligation through consultation agreements with tribes led them to expand protections to tribal land and airspace. In the supplemental environmental assessment, under the "Consultation and Scoping" section, the FAA acknowledged, "The mandate of the Overflights Act does not extend to areas of the Grand Canyon located outside the boundaries of the GCNP. Although the scope of the mandate is limited to the GCNP, the FAA recognizes its responsibility under applicable environmental laws to consider impacts on potentially affected resources outside the GCNP."[272] Here, the FAA is justifying their expansion of areas to environmentally assess as a part of their trust responsibility and legal responsibility to uphold cultural resource management laws. If the FAA used the same reasoning at Standing Rock, they would have been able to open the skies to water protectors and the media as their obligation to defend them from aerial trespass and to protect their cultural resources and freedom of the press.

One of the main problems causing poor consultation is an overall mindset toward the process and what it represents to federal agencies and corporations. Many agencies and corporations view tribal consultation as a tedious, burdensome, costly, and long or endless process in which they are required by law to fulfill, often through bare minimum efforts. King urges for a change in this mindset: "Despite what some consultants think, [the] purpose [of consultation in Section 106 of NHPA] is not to keep them [consultants] employed. Despite what some archaeologists think, its purpose is not to require archaeological surveys. And despite what some architectural preservationists think, its

272. 2000 FSEA at 1-6.

purpose is not to keep old buildings standing."[273] He also declares that the purpose of consultation is not to drain the bank, burden parties of interest, or delay processes of development with bureaucracy. Instead, consultation is a necessary process for reaching an agreement about proposed actions that raise concerns among diverse parties of interest. Consultation is meant to offer a space where diverse parties can voice many concerns and propose alternative solutions in order to reach an agreement. As the second case study expressed, more efforts to consult meaningfully through community-planning techniques and collaborative rulemaking produce more sustainable outcomes by fostering creative problem-solving.

Political Successes

Professor of Public Affairs Laura Evans provides an analysis for how tribes maneuver in the peripheral[274] to build their political network and to gain experiences that will help them locate "receptive" spaces[275] for "particular, unexpected, and unobtrusive political gains."[276] Evans' scholarship serves as a useful resource for evaluating how tribes have strategically improved their agency and voice in airspace through agenda-setting and community-planning.[277] Both cases of which demonstrate progress in strengthening tribal airspace sovereignty. Even though neither case dramatically reformed American jurisprudence to recognize or define tribal airspace sovereignty does not mean that their efforts were not a success. For the Standing Rock nation, exercising their tribal airspace

273. King, *Cultural Resource Laws and Practice*, 85.

274. Laura E. Evans, *Power from Powerlessness: Tribal Governments, Institutional Niches, and American Federalism* (New York: Oxford University Press, 2011), 5.

275. Ibid., 8.

276. Ibid., 202.

277. Ibid., 204.

sovereignty was not even a priority; it was a necessary byproduct of defending their water and Indigenous rights. This does not mean to suggest that just any political action can strengthen tribal airspace sovereignty, but these studies do suggest that exercising sovereignty, regardless of the intention to do so or not, is inherent and the rights are implied.

Evans's evaluation of success through capacity-building, maneuverability, innovation, activism, and advocacy are perfect for discussing the advancements these tribes made in expanding the scope of their sovereignty. One of the ways both studies show capacity-building is through taking steps to educate themselves in aerospace technology, airspace regulations, and by developing and managing their own aerospace industries. Drone pilots like Dewey at Standing Rock illustrated one of the ways Indigenous peoples are creatively and innovatively using aerospace technology for media, education, documentary, and other practical purposes to provide for their communities. Similarly, the Hualapai and Navajo each have airports they use for different types of aerospace industries, but both provide economic growth and mobility for their communities. These are just a few of many examples in which American Indians are building and adapting their expertise of technology through their Indigenous knowledge.

Evans mentions how a strategic legacy, leadership, partnerships, and access are also factors in evaluating success.[278] A *strategic legacy* passes on an accumulation of strategies and experiences a nation has gained over time to each succeeding generation, which can help improve their perceptibility of culturally compatible opportunities for nation

278. Ibid., 203-05.

building.[279] Secondly, strong tribal *leadership* depends on the strengths of its community members to problem-solve and grow more self-sufficient.[280] Third, *partnerships* are evaluated through tribes' ability to form institutional niches with outside groups that provide support but do not interfere with their political agenda.[281] Finally, *access* to different government forums, officials, positions, and other political arenas (federal, state, local, or international) are included in an evaluation of tribes' political success.[282] She also claims that underlying these is a certain political environment that does not necessarily deny the growth of their legacy, leadership strength, or partnerships, but it does play a major role: "Even in remarkably hostile environments, creativity and insight enable victories. In supportive environments, creativity and insight can support the flourishing of collaboration and joint-problem-solving."[283] These case studies similarly express how tribes can triumph even in the most hostile environments. Peaceful activism at Standing Rock occurred in a particularly hostile environment, but as Evans states, the water protectors' "creativity and insight enabled victories."[284] Drone activism sparked interest and dialogue across Indian Country relating to the possible applications drones could serve for problem-solving. Tribes quickly began using drones for public safety, agriculture, cultural resource management, and more. In the second case study, the environment was also hostile but slightly less so than at Standing Rock because there were times when the FAA acknowledged and even supported tribal airspace sovereignty.

279. Ibid., 204.
280. Ibid.
281. Ibid., 5.
282. Ibid., 7.
283. Ibid., 204.
284. Ibid.

Last, but not least, Evans reflects an overall mindset of capacity-building in tribal politics by stating, "If you'll never fully control the lever of outside power, you need to develop another set of levers within your own control."[285] Since tribes are expected to follow federal air laws and regulations, even though they have their own governments and jurisprudence, they have no easy control over legal reform. This dominance of American jurisprudence does not render tribes entirely powerless, but, for now, it does limit their ability to govern their airspace without legal protection or justification. Based on Evans research on tribal political pathways from seeming powerlessness to power, her findings contribute encouragement for tribes to build and apply their strategic legacies in air law while it is still under development.

Another encouragement comes from the existing legal foundations that federal Indian laws and policies provide, including but not limited to water law doctrines. The application of a water rights lens to each of these studies represented how the Winters doctrine and other principles (pertaining to their priority date, change-of-use, nonuse, transferability of rights, and quantification of rights) indicate a pre-existing legal foundation that could *mostly* apply to establishing and defining tribal air rights. The federal government's failure to draw these connections between property laws exposes their apathy and reluctance toward addressing tribal concerns at Standing Rock. A primary reason why the Morton County courts did not draw these connections is that they did not apply a constitutional lens or federal Indian law lens, let alone property law to water protectors use of drones in tribal airspace.[286] At the federal court level, these lenses were also not applied

285. Ibid., 203.

286. Another reason could be due to border town-related disputes over jurisdiction and socioeconomics.

to the Hualapai's petition against the FAA in the second case study, but the FAA did do a better job of treating their air rights in the Canyon more like water rights and other federal Indian rights.

Since exercising tribal airspace sovereignty is a more transparent and prominent goal of the tribes in the second case study than the first study, the expectations for the courts to recognize inherent tribal sovereignty and implied rights is much higher, *especially* in the federal court system as opposed to the county courts. It was also easier for the FAA to imagine and recognize tribal air rights when tribes were exhibiting those rights through the management and development of their airspace than it was for the FAA to recognize tribal rights to manage and defend their airspace at Standing Rock. For one, the FAA and tribes adjacent to the Canyon shared a common goal: improving the safety of national airspace, which appealed to the FAA's primary reason for existence.[287] The progress the tribal nations made in the second case study to gain the FAA's favor by appealing to their mission is evident in the way the FAA took steps to expand protections to tribal cultural resource properties and by issuing an exception for the Hualapai Tribe. It should be noted that even though water protectors could not appeal to the FAA's interest in safety, they still made incredible progress by defeating the county court's arguments against their constitutional and treaty rights to exercise freedoms of speech and the press in tribal airspace. Together, the tribes from these case studies exhibit promising movement toward a greater presence in airspace, which is encouraging for strengthening tribal de jure sovereignty in domestic air law.

287. This statement does not mean to say that safety was not one of the water protectors' goals, because defending themselves from law enforcement officers' and the FAA's regulation of airspace did become a goal later, rather, safety did not prove to be the FAA's goal at the time as evident in their use of no-fly zones for banning the media.

This thesis intends to inspire tribes and policymakers to further research and develop air law with Indigenous perspectives, concerns, and interests at the forefront. I urge them that now is a prime time to establish a strong presence in airspace before domestic aviation law divests power from tribal governments and individual property owners and before the FAA makes any more formal attempts to erase indigeneity from airspace. The FAA's slow response to the rise in recreational and commercials drone use expresses their struggle to anticipate and preempt issues of safety and privacy. The FAA still struggles to clearly and definitively define 'privacy' and the 'aircraft exceptions' which means they will likely have an even more difficult time applying these terms and concepts to matters of tribal airspace.[288] Therefore, tribes will want to be well-prepared to articulate their rights and concerns in airspace rather than leaving the FAA alone to clarify their tribal air rights and status for them. One of many steps toward articulating tribal airspace sovereignty is to gain experience in managing, developing, and policing their tribal airspace. Along the way, tribes must be wary of the threats and possibilities that advancements in aerospace technology presents as evident at Standing Rock. Since drone law has begun to expand in the last two decades rapidly, the next two sections will go into greater detail on some of the potential threats and possibilities that drones pose tribes or that tribes are currently encountering.

288. Chad J. Pomeroy, "All Your Air Right Are Belong to Us," *Northwestern Journal of Technology and Intellectual Property* 13, no. 3 (2015): 279-280. "The very concept of privacy is relative, and the definition of privacy (and the concomitant prohibitions arising from violations thereof) must be reasonable to society, so some parameters must be established." The 'aircraft exception' refers to the FAA's categorization of surveillance drones as aircraft. However, Pomeroy's thesis argues the "common law exception [to define surveillance drones as aircraft] is not applicable to drone surveillance" because surveillance drone do not usually benefit the whole society the way a highway does their benefits surely do not outweigh a private property owner's beneficial use of the land.

THREATS

As shown in the first case study, surveillance or spy drones are becoming more commonly used in security and public safety sectors. Police drones and commercial drones used by private security are emerging all over the United States. Following the Dakota Access pipeline, citizens of the United Houma Nation and other protectors of Bayou Lafourche have spotted surveillance drones near the Bayou Bridge Pipeline in Louisiana.[289] The use of surveillance drones at these sites show a preemptive move on the government's part to deter protest and to scout out opposition because drones were never used for constructing pipelines prior to the protests at Standing Rock. Now that drones are becoming more common in these situations, especially relating to Indigenous rights, the threats are also growing. As the first example will demonstrate, the potential adverse effects of drone technology on Indigenous nations and their rights demands further research and action to secure hunting and fishing rights. The second example, on the other hand, serves to bring awareness to how hackers pose a potential threat to drone pilots. Being mindful of these

289. Alleen Brown, "'The Scales Are Tipped': Emails Show Louisiana's Close Relationship with Oil Industry, Monitoring of Pipeline Opponents," *Intercept*, last modified March 1, 2018, https://theintercept.com/2018/03/01/louisiana-bayou-bridge-pipeline-protest/. Brown writes about TigerSwan's activity at both construction sites in North Dakota and Louisiana and how the security firm is using aerial surveillance to preempt social protest in Louisiana: "The security firm [TigerSwan], run by former special operations military members, used infiltrators, aerial surveillance, and propaganda to attempt to suppress the protest movement. In Louisiana, TigerSwan is appealing a state regulatory board decision that denied the company a permit to operate." Also, *see* Fire River Films, "Bayou Bridge Pipeline," Mt Triumph Baptist Church Environmental Fund, United Houma Nation, and Louisiana Bucket Brigade, accessed April 15, 2019, http://fireriverfilms.com/bayoubridge/.

potential threats could prove useful to tribes as they define or clarify their statuses and rights in airspace through various strategies, legal or otherwise.

Hunting and Fishing Rights

As the second case study reveals, privately-operated drones present a potential threat to marine and wildlife, meaning a potential threat to tribal hunting and fishing rights as well. Arizona and other state regulations have begun to explicitly ban "using a drone to pursue, disturb, harass or locate wildlife."[290] The use of drones is found and defined as unethical hunting practice. The previous ban on aircraft supports this ban on drones because the FAA categorizes drones as a type of (unmanned) aircraft. More research is necessary and relevant to see how unmanned aircraft systems impact fishing and hunting rights. Hilde Toonen and Simon Bush's article, for instance, investigates how monitoring, control, and surveillance (MCS) systems, see Figure 7 for examples, are becoming a tool for improving governance over the high seas.[291]

290. Besty Lillian, "Arizona Game and Fish Dept.: Drones Can't Be Used in Pursuit of Wildlife," *Unmanned Aerial Online*, last modified January 4, 2016, https://unmanned-aerial.com/arizona-game-and-fish-dept-drones-cant-be-used-in-pursuit-of-wildlife.

291. Hilde M. Toonen and Simon R. Bush, "The Digital Frontiers of Fisheries Governance: Fish Attraction Devices, Drones And Satellites," *Journal of Environmental Policy and Planning* (2018), DOI: 10.1080/1523908X.2018.1461084, 2.

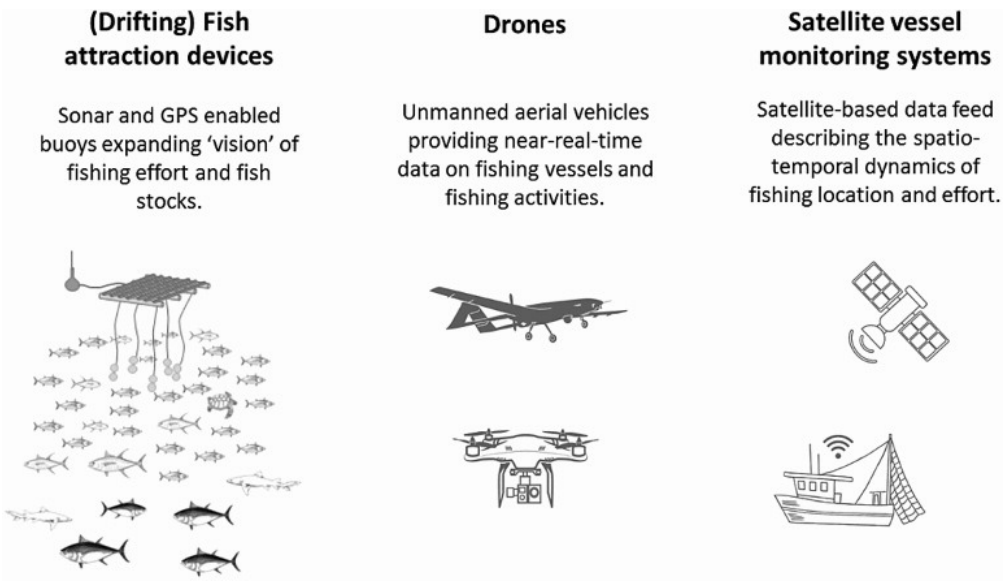

Figure 7. Three Cases of Monitoring, Control and Surveillance Technologies[292]

While improving surveillance over illegal, unreported and unregulated fishing activities in the high seas, these instruments also pose a threat to water and maritime rights: "The rise of MCS technologies represents a second wave of control over the oceans based on the remote collection and control of information."[293] Hoonen and Bush's article provokes research into the specific impacts this technology has on Indigenous fishing rights. Further research with an Indigenous lens or framework and maritime and water lenses would be useful for evaluating and anticipating threats to tribal food sovereignty. From further research and action on these topics, tribes can preempt securing their access to fish and game before drones potentially interfere with these rights.

Safety and Security

Cybersecurity is another threat, but not one that drones necessarily pose. Rather, cybersecurity threatens drone operators. Tribes that wish to use drones for collecting data

292. Ibid., 2.
293. Ibid., 3.

should keep this threat in mind, particularly if they wish to use drones to protect their traditional cultural properties or other resources. Storing sensitive data on drones could make their knowledge and intellectual property, such as the location of sacred sites,[294] vulnerable to hackers. Aviation law professor Joseph Vacek warns that there is a lack of security standards for protecting Unmanned Aircraft Systems against cyber-attacks and a lack of liability for those committing the attacks.[295] With all technologies come their own set of vulnerabilities. Osage Nation's Skyway36 plan, to promote and expand aerospace educational opportunities, is a perfect way to get ahead of any threats that pose tribal uses of drone and other automation technology. Their educational plan also offers a space in which drone technology can be utilized within an Indigenous framework. Such space leads to the limitless possibilities of drone technology. Wildcat states that "Indigenous realism, [is] a living system of knowledge…deep experiential knowledge[,] that is capable of change and innovation, the ability to figure out what works in a particular place for the people of that place."[296] If a particular application of drones does not represent or respect

294. Exec. Order No. 13007, Indian Sacred Sites, 61 CFR 267771 (1996).

295. Joseph Vacek, "The Next Frontier in Drone Law: Liability for Cybersecurity Negligence and Data Breaches for UAS Operators," abstract, *Campbell Law Review* 39, no. 1 (2017), 135. "Under current law, UAS operators are effectively relieved of liability for negligence in the data chain beyond flight activity," (164) meaning they are not liable for the final two links in the data chain. The four links are the following: "(1) drone operation itself, (2) in-flight data collection, (3) post-flight data processing, and (4) data use, dissemination, and storage" (139). However, UAS operators are liable for not protecting their data. They should be aware that "[v]ulnerabilities in this data chain include [packet] sniffing [through intercepting data traffic], spoofing [signals (i.e., GPS) or hacking], snooping [or listening to unencrypted frequencies], and sabotage" (141-4). Also, they must keep in mind "the more a dataset or information packet travels and the more Internet contact occurs, the higher the exposure to software viruses or malware" (147). The FAA has authority from the 4th Amendment and Privacy Act to regulate the first and second links, but struggles to define "stored communications" (151)

296. Wildcat, *Red Alter!*, 70.

the tribes' religious or cultural principles, then they can opt out of using it for such purposes. Some tribes may wish to use Wildcat's formula: 3C/E=T as a way for weighing the technological harms or benefits for their community.[297] For some tribes, they have proposed certain limitations to drone-use to avoid disrupting their landscapes and soundscapes and to respect the rights to privacy within their communities. These restrictions show how tribes are combatting some of these threats by combining Western and Indigenous technological systems, or fully innovating their own uses of drone technology, for problem-solving and capacity-building.

POSSIBILITIES

In this section, I wish to highlight different applications of drones for cultural resource management, Indian education, and language revitalization; public safety and security; economic development, nation- and community-building; and food sovereignty. Alongside each category of drone application, I identify some tribes' outstanding uses of drones or their potential application of drones to current tribal community planning projects.

Cultural Resource Management: Ute Mountain Ute Tribe

While being mindful of how drones can store data, drone technology has the potential to remap the landscape. THPO departments and tribal community planners have already begun using drones as geographic information system (GIS) tools for analyzing cultural preservation and economic development projects. The analytical and educational potential drones present are endless. The Ute Tribal Historic Preservation Office, for

297. Ibid., 130-131.

example, has partnered with PaleoWest Archaeology to preserve their cultural sites by providing a virtual reality experience for people online so they could reduce the amount of foot-traffic in the area.[298] Drones are presenting incredible opportunities for tribes to protect and preserve their landscapes and, consequently, to educate the public. This drone function is also useful for businesses to take three-dimensional aerial shots of property for real estate, promotional, or other materials. Cultural centers are especially finding drones useful as an educational tool for teaching youth about their cultural landscapes and expanding elders' visibility and accessibility of hard-to-reach sacred sites.[299] The next tribe builds and deploys unmanned aircraft for cultural resource management as well but with a focus on drone activism.

Public Safety and Security: Navajo Nation

Drones are not only useful for protecting and preserving cultural property, but intellectual, personal, and real property too. Some chapters of the Navajo Nation have been implementing police drones as a public safety resource, which is especially beneficial for departments that lack the labor force to cover their entire jurisdiction. Drones have the ability to expand the ground-based controller's sight of an area otherwise tricky or dangerous to physically access. Due to their sight range and ability to store and collect data,

298. Francisco Mirava, "Native Tribe Resorts to Drones to Study Their Archaeological Sites," last modified August 23, 2018, https://www.panamatoday.com/life-style/native-tribe-resorts-drones-study-their-archaeological-sites-7654.

299. *See* K.M. Smith, "Indigenous People are Deploying Drones to Preserve Land and Traditions," Discover, last modified December 11, 2017, http://blogs.discovermagazine.com/crux/2017/12/11/indigenous-drone-land-traditions/#.XJXnBxNKjOQ. This interest is reflected in Dewey's statement to *Discover Magazine*: "Using 360-degree drone technology, Dewey also hopes to give Paiute elders a virtual tour of the places that mean so much to them and their people."

districts such as Crown Point and Shiprock have established drone programs and obtained FAA certification as a tool within their crime scene investigation (CSI) sections.[300] See Figure 8 for the current FAA certification process for public safety departments.[301]

300. Jason Axelrod, "Learning To Fly: When a Public Agency Adopts a Drone for Its Work, Other Agencies Within the Government Are Likely to Want to Use It," last modified January 7, 2019, https://www.americancityandcounty.com/2019/01/07/learning-to-fly/.

301. Toni Gibbons, "Navajo County Public Works Adopts Policy for Drone Use," *Tribune*, last modified February 20, 2018, https://tribunenewsnow.com/navajo-county-public-works-adopts-policy-for-drone-use/. The Navajo Nation approved a policy called "Use of small Unmanned Aircraft Systems (UAS)" on February 13, 2018, which outlines remote pilot certification requirements and includes a privacy clause. Tony Gibbons cites a statement from the privacy clause: "'UAS shall not intentionally be used to monitor or capture data of individuals in areas where there is a reasonable expectation of privacy, in absence of a valid search warrant or as otherwise restricted by law'" and lists potential drone uses found throughout the policy: "surveying and inspection of roads, signage and striping, structures, washes and waterways; documenting roadway projects and programs before, during and after; county activities, projects or programs; disasters, including public emergency and E911; education and training; and community partnerships."

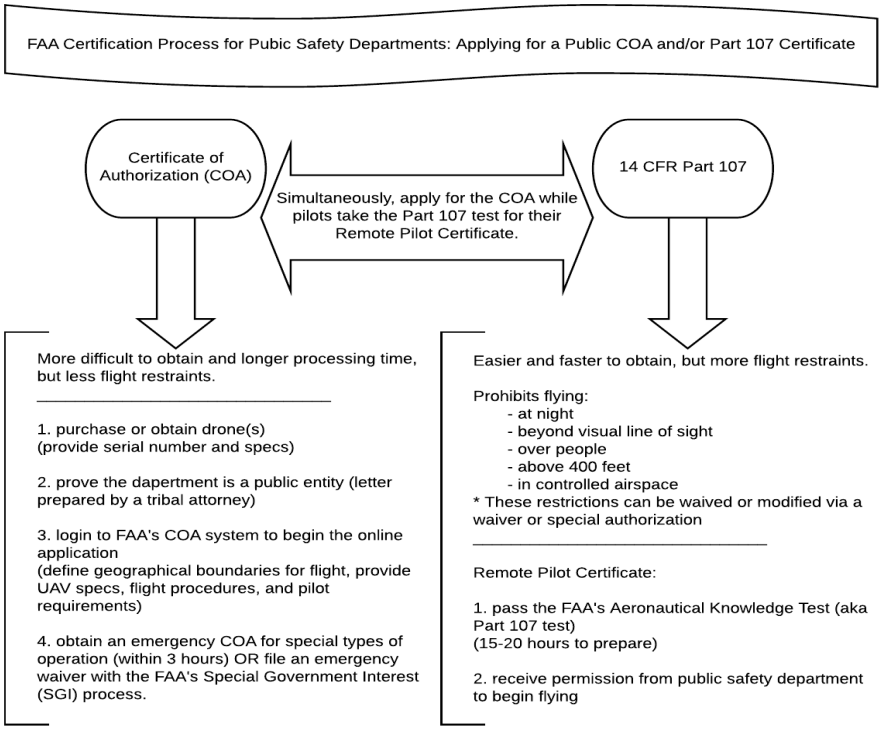

Figure 8. FAA Certification Process for Public Safety Departments[302]

Night or thermal vision-equipped drones can also help officers gain visibility in dark or wooded areas. Advancements in drone technology and capabilities are growing at a rapid pace making their applications limitless. Drones can be brought to the scene of a crime or emergency to track perpetrators, assist in issuing citations (enforcing speed limits and other traffic violations), collect visual and audio evidence for court, collect images for vehicle accident investigations, transport medical supplies, assist in search and rescues, investigate or recreate crime scenes, survey environmental disasters, and find missing persons.[303] A bonus to using unmanned aircraft is that responders do not have to risk their own lives in the process of providing emergency and disaster relief. Knowing that drones can also bring

302. Zacc Dukowitz, "Applying for a Public COA vs. Part 107 Certification for Police and Fire Departments," Drone Pilot Ground School, Last modified May 16, 2018, https://www.dronepilotgroundschool.com/coa-part-107/.

303. Sarah E. Kreps, *Drones: What Everyone Needs to Know* (New York: Oxford University Press, 2016).

harm to both tribal law enforcement officials and citizens, the Navajo Nation is taking steps to collect information about drone sightings and uses on the reservation. On May 3, 2018, Risk Management Program Supervisor II Shawnevan Dale published a memorandum with an attached questionnaire "requesting all Navajo Nation Programs, Departments, Division and Chapters to report the use of Drones within their respective programs":

> Drones are used by Law Enforcement, Facilities Management Departments and Utility Companies. They are a safer alternative to hazardous work environment. Drones also pose a threat to privacy, liability and property damage. Therefore, it is imperative that the Navajo Nation programs, departments and programs report to Risk Management any and all drone activity (Owned, rented or leased).[304]

The Navajo Nation is quickly implementing unmanned aircraft, and forming policies to create safety standards and conduct across chapters. So, whether the public safety sector or private sector uses drones, there is enormous potential for financial gain. The next tribe leases drones to nearby local and state law enforcement departments for revenue but is headway in a new project that will do much more than leasing the aircraft.

Education and Employment: Osage Nation

The Osage Nation in Oklahoma will be leaders in the drone and automation industry with their two-year plan, called Skyway36, to renovate the former Tulsa Downtown Airpark. Skyway36 will allow propeller traffic and UAS to fly in-and-out of the airpark and will house small shops, research labs, classrooms, and a conference center. These

304. Program Supervisor II Shawnevan Dale to Navajo Nation Programs and Departments and Divisions, May 3, 2018, Navajo Nation, Risk Management Program, Unmanned Aircraft Systems Liability – Drones, http://www.nnemaildist.navajo-nsn.gov/Portals/35/Announcements/2018/aug/Drone%20Questionaire%202019.pdf.

facilities will promote automated and aerospace technologies through manufacture, trade, and education. In the process, Osage is forming long-term partnerships with numerous local institutions and governments as a strategy for capacity- and nation-building.

Their interest in promoting aerospace education reflects the seventh principle because they are thinking about how they can pave a future for subsequent generations throughout their community planning process. The Osage Nation clearly recognizes how instrumental drone technology is becoming in people's everyday lives by seizing the opportunity to become experts in the industry. In Kevin Canfield's interview for *Tulsa World* with the nation's director of information services, Mark Kirk expressed the exciting potential for invigorating youth interest in areas of science, technology, engineering, and math (STEM). For one, the project seeks to partner with Tulsa Community College, Oklahoma State University, and ArdentMC "to grow interest in Geospatial Information System (GIS) careers" which will also promote "a local employment pipeline." These educational and employment aspects of project Skyway36 promise many positive outcomes for the Osage Nation and the surrounding communities. The airpark will give also give Osage space to brainstorm and test ways in which they would like to utilize new technology in a way that reflects their traditional values or even ways they could combine new technologies with traditional technologies. The next tribe exhibits this by using unmanned aircraft as "green tech."

Environmental "Green Tech": Hawaiian and Alaskan Natives

Green tech is used to protect and restore the earth. The use of unmanned aircraft for agriculture, ecology, and renewable energy are becoming prevalent and versatile. These drones can be utilized for evaluating the health of crops, herding livestock, tracking climate

change, monitoring deforestation,[305] maintaining wind turbines and solar panels,[306] and more! Hawaiian and Alaskan Native nations are involved, together and individually, on green tech projects involving drone technology. For example, Geophysical Institute's Alaska Center for Unmanned Aircraft Systems Integration (ACUASI) at the University of Alaska Fairbanks (UAF) manages "one of six official FAA test sites in the United States" for testing UAS in different climates.[307] This test site, Pan-Pacific UAS Test Range Complex, has several partners and teams with states (Oregon and Hawaii), tribes ("VDOS, Inc. on behalf of the Confederated Tribes of Warm Springs"), and businesses (Pendleton Airport and NearSpace, Inc.).[308] UAF also awarded a fellowship to graduate student Richard Buzard in 2018 to work with tribal and city officials on mapping and monitoring flooding and shoreline erosion in Fairbanks, Alaska. [309] In addition to monitoring coastal changes, a recent Biological Opinion published in 2018 describes the limitations and uses of drones for taking aerial surveys to "monitor for marine mammals in the Level B

305. *See* K.N. Smith, "Indigenous People are Deploying Drones to Preserve Land and Traditions," *Discover Magazine*, last modified December 11, 2017, http://blogs.discoverm agazine.com/crux/2017/12/11/indigenous-drone-land-traditions/#.XJXoshNKjOR. This article discusses how Central and South American Indigenous nations are using drones for activism, as criminal evidence, and for monitoring deforestation by corporate entities.

306. *See* Katie Fehrenbacher, "How Drones Are Lowering the Cost of Clean Energy," GreenBiz, last modified March 15, 2018, https://www.greenbiz.com/article/how-drones-are-lowering-cost-clean-energy. In this article, drones are being used for de-icing, inspecting, and changing parts on wind turbines and solar panels. Aerones, co-founded by Dainis Kruze, is one company producing high-tech drones with a unique design for de-icing these machines.

307. Alaska Center for Unmanned Aircraft Systems Integration (ACUASI), "Alaska Test Site (PPUTRC)," University of Alaska Fairbanks, accessed March 22, 2019, http://acuasi.alaska.edu/pputrc.

308. Ibid.

309. Paula Dobbyn, "Alaskan Receives Digital Coast Fellowship," University of Alaska Fairbanks, last modified June 4, 2018, https://alaskaseagrant.org/2018/06/04/alaskan-receives-digital-coast-fellowship/.

harassment zones created by pile driving, pipe driving, and slope shaping and armament activities during the open-water season."[310] This document also notes how UASs are a safer alternative to manned aircraft. UASs still disturb and have other impacts on the "subjects" they survey, but less so than manned aircraft overflights.

Green drones present some of the best opportunities for tribes to incorporate their Indigenous knowledge systems and frameworks into the use of this technology. As Wildcat suggests, "First, we can prevent the destructive side of technology from overshadowing its constructive features by incorporating ideas and concepts like the nature-culture nexus in practices of evolution."[311] Wildcat's quote implies one of the ways Western technological uses differ from Indigenous ones. While Westerners may view technology as a personal resource to simplify life by accomplishing everyday tasks, an Indigenous perspective views technology as a community resource driven by cultural and traditional knowledge. With access to their knowledge systems,[312] tribes can innovate and utilize technological systems for contemporary application.

310. Department of Commerce, National Oceanic and Atmospheric Administration, "Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion: Liberty Oil and Gas Development and Production Plan Activities, Beaufort Sea, Alaska," Juneau, Alaska, 2018, https://alaskafisheries.noaa.gov/sites/default/files/biological-opinion-liberty-beaufort073118.pdf. This quote is found on page 30 as well as a note on how UAS are a safer alternative to manned aircraft overflights: "UASs, operating under autopilot and mounted with GPS and imaging systems, have been used and evaluated in the Arctic (Koski et al. 2009) and have the potential to replace traditional manned aerial surveys and provide an improved method for monitoring marine mammal populations."

311. Wildcat, *Red Alert!*, 127.

312. Ideally, *access* in which is complete and unadulterated by Western colonial ideological systems or which is decolonized and re-indigenized.

CONCLUDING REMARKS

American Indian and Alaska Native tribes have made many strides in asserting their sovereignty and clarifying their political status in maritime, civil rights, environmental, family, criminal law and more. Air law is still in its early stages of development, so American Indian air rights are particularly ambiguous. However, tribal rights and status in air, water, and maritime law all began as ambiguous and strengthened over time, which is why these bodies of law reveal several possible trajectories of tribal air law. The strides tribes have made to clarify their rights each contribute to a larger strategic legacy in which tribes can gain knowledge and expertise not only form their communities but also from other tribes making the journey. This legacy provides useful insight into the different spaces where tribes can choose to expand their tribal sovereignty in federal Indian law and policy. In return, the power tribes gain in these bodies of law forms insurmountable proof of the US government's capacity to recognize and reaffirm a broader scope of tribal sovereignty.

International law is an area that can provide more assistance to the efforts of expanding tribal sovereignty in air (aviation) law. Deloria states, "the argument against sovereignty is without solid foundation in contemporary international practice,"[313] which is evident in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).[314] This declaration "establishes a universal framework of minimum standards

313. Deloria, *Behind the Trail of Broken Treaties*, 176.

314. United Nations Declaration on the Rights of Indigenous Peoples, G.A. Dec. 61/295, Annex, UN Doc. A/RES/61/295, at art. 46 (Sept. 13, 2007). Article 46 maintains and supports Indigenous nations' territoriality and sovereignty: "Nothing in this Declaration may be interpreted as implying for any State, people, group or person any right to engage in any activity or to perform any act contrary to the Charter of the United Nations or construed as authorizing or encouraging any action which would dismember

for the survival, dignity and well-being of the indigenous peoples of the world and it elaborates on existing human rights standards and fundamental freedoms as they apply to the specific situation of indigenous peoples."[315] Thus, the protections in this document could prove useful for protecting tribal interests and concerns in airspace as it pertains to their physical and spiritual well-being, housing and economic conditions, education, and other areas of human and Indigenous rights. Similarly, future research could explore the potential legal protections in international aviation law to strengthen tribal airspace sovereignty and the legal standing of the Sky World.[316] The International Civil Aviation Organization (ICAO), for instance, provides international "oversight in the areas of safety and security" for all persons as well as the environment.[317] Henceforth, international law could possibly fill in any gaps that domestic property law (e.g., water and air law) cannot as shown by some of the limitations in applying a water law lens to each case study.

Additionally, from a lens of international maritime law, the US government can reaffirm tribal airspace sovereignty by applying an international status that distinguishes tribal air rights from other citizens' property rights in airspace.[318] For example, an Exclusive Economic Zone (EEZ) grants a sovereign state special rights to explore and

or impair, totally or in part, *the territorial integrity or political unity of sovereign and independent States* [emphasis added]."

315. United Nations, Department of Economic and Social Affairs, "United Nations Declaration on the Rights of Indigenous Peoples," accessed April 13, 2019, https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html.

316. United Nations, International Civil Aviation Organization, "About ICAO," accessed April 11, 2019, https://www.icao.int/about-icao/Pages/default.aspx.

317. Ibid.

318. Stone, *Should Trees Have Legal Standing?*, 125-126. Territorial sovereignty and Exclusive Economic Zones (EEZ) identify areas under the authority of nations states and coastal states in international maritime law. For more possible statues, *see* Deloria, *Behind the Trail of Broken Treaties*, 168, 177-9, 182-3, 255.

exploit "the waters superjacent to the seabed and of the seabed and its subsoil" and jurisdiction over "the protection and preservation of the marine environment."[319] Meanwhile, Christopher Stone suggests a *Guardian for the Ocean* to ask for a reinforcement of accountability to the natural world in legal practice.[320] Stone's proposal requires implementing a monitoring system of the ocean's health through research and imposing a legislative advisory function that oversees compliance with treaties.[321] The FAA and EPA already operate monitoring systems to improve air quality and safety, but, as this thesis argues, there needs to be more compliance with treaties and federal Indian laws and policies.[322] Stone explain, "[t]he need [for reform] arises from the open access status of the common areas," which is also why air law needs development and reform with tribes in mind.[323] When no one possesses the open seas, but everyone shares them, the seas are vulnerable to misuse or abandonment. The same can be said about the skies. Though the National Airspace System is not considered "open" because the US government claims dominance over the NAS, Western views of airspace do not reinforce a sense of communal ownership or responsibility to the airspace. If anything, responsibility is given to the FAA and EPA to care for the skies, but they cannot and should not do it alone.

319. Convention on the Law of the Sea, October 12, 1982, 1833 UNTS 392 at Part V, Article 56.

320. Stone, *Should Trees Have Legal Standing?*, 101.

321. Ibid.

322. For tribes that did not sign treaties with the Unites States, federal agencies must still see the intent to protect tribes from threats in airspace and to prevent government actions from negatively impacting tribes in federal Indian and cultural resource management law. Order 1210.10 require the FAA, for example, to respect treaties and other rights, which include those rights described in the Constitution and these bodies of law.

323. Stone, *Should Trees Have Legal Standing?*, 101.

Tribes have the right and responsibility to manage the skies, which natural law reflects.[324] However, tribal law does not always reflect the principles of natural law. As Pavlik suggests "that they [modern tribal governments] should call together constitutional conventions, or some other more traditional means of assembly, enlist the aid of tribal elders and spiritual leaders, and dramatically rewrite or amend their constitutions to reflect traditional values, including the recognition of the rights of the natural world and all of its living and nonliving entities."[325] As mentioned at the beginning of this thesis, a handful of tribal governments have begun this process of improving the legal standing of the skies in tribal law. Pavlik also "suggest[s] that various Native rights organizations such as the National Congress of American Indians (NCAI) offer their expertise in helping them to draft new constitutions or to amend existing ones."[326]

In addition to Pavlik's suggestions, tribal nations should also demand more consultation efforts from federal agencies and corporations so they can represent and convey the legal standing of the natural world. Better yet, forming partnerships with federal agencies and corporations before tribal consultation is legally necessary, could prove useful for preventing government action from causing immense or irreparable harm to tribal communities or the natural world. Through forming partnerships in cultural and natural resource management and reforming tribal law, tribal nations should reflect cultural principles and values like the one Wildcat conveys: "We ought to think of ecosystems and

324. Pavlik, "Should Trees Have Legal Standing in Indian Country?," 20. Natural law refers to not man-made or written laws, but rather the laws that govern many tribal societies on the basis that "all entities had rights." Pavlik says, "There was no need to formally record these laws as they were handed down by the oral tradition and were known by every tribal member."

325. Pavlik, "Should Trees Have Legal Standing in Indian Country?," 22-23.

326. Ibid., 23.

environments as our natural communities – full of our relatives,"[327] because only with this type of mindset can the skies truly be cared for.

In the process of improving nature's legal standing in American and tribal jurisprudence, the history of air quality management expresses some obstacles to prepare for along the way. Looking at how tribes clarified their rights in air quality management under the Clean Air Act of 1970 and in *Nance v. EPA* (1981) hints toward some of the future challenges tribes may face in arguing for more regulatory power from the FAA.[328] Tribes faced several opposing arguments in the process of gaining EPA responsibilities by concerned states and neighboring tribes: 1) tribal air quality management is "unnecessary and possibly immoral" because it grants "minority" higher authority to impose regulations over others (non-tribal members or communities), and 2) "tribal value judgement might affect economic development in the area."[329] To counter the first argument, *Nance* supports the claim that tribes are not a "minority" and they have an inherent right to manage their environment for the wellbeing of their citizens regardless of the size of their land base.[330] Wilcat says, "We may not need a weatherman to know which way the wind blows, but we do need persons and peoples with vision to exercise an indigeneity that extends our ancient

327. Wildcat, *Red Alert!*, 123.

328. Clean Air Act, 42 U.S.C. § 7401 et seq. (1970); *Nance v. Environmental Protection Agency*, 645 F.2d 701 (9th Cir. 1981).

329. Grijalva, "Winds of Change," 118.

330. Grijalva references how Congress defends tribal "treatment-as-a-state" to manage air quality in *Nance* as "consistent with inherent tribal sovereignty." Ibid., 113. He also states how both Congress and the EPA declined to impose a "an arbitrary minimum size for local determinations" because tribes "varied greatly in size." Ibid., 119. In *Nance*, the EPA approved the tribe's request for designation by declaring how tribes "may draw classification boundaries in any way it chooses – by entire air quality control regions, along county lines, or even along smaller subcounty lines." *See* H.R. Rep. No. 95-294 at 147 (1977).

relationship to the wind in new ways."[331] In other words, no matter how small the land size may seem, Indigenous peoples' visions are larger than life. They have big, often similar and unifying, ideas about how to be stewards with the land, air, and water since their relationships to the earth have lasted countless generations. This cumulating knowledge and the mindset mentioned in the previous paragraph are why it is vital for environmentalists and policymakers to make space for everyone to hear Indigenous voices.

Indigenous voices must be heard and weighed heavily. Too much is lost or compromised by the time legislation is finally passed to protect tribal interests. The mootness doctrine makes it extra challenging for tribes to prevent trespassing or damages without overwhelming proof of a clear violation of their airspace before their cases are ripe.[332] Rather than waiting for cases to become ripe, as evident in *Coalition v. FAA* and *Association v. FAA*, it is the Indigenous way to plan a future they wish to enact seven generations ahead. This method of planning is referred to as the Seven Generations Principle and Indigenous Futurisms.[333] Some tribes are making preparations for the futures they envision, while some are not entirely aware or with the capacity to prepare for the imminent changes to their airspace. The colonial agenda's efforts to pre-occupy tribal communities and governments with Anglo-Saxon legal principles, issues of identity politics, and processes of decolonization are largely to blame for making it difficult for tribes to focus on nation building, indigenization, and their futures.

331. Wildcat, *Red Alert!*, 96.

332. American jurisprudence supports the legal principles of 'moot' and 'ripe' in U.S. Const., art. III.

333. Indigenous Corporate Training Inc., "What is the Seventh Generation Principle?," last modified May 29, 2012, https://www.ictinc.ca/blog/seventh-generation-principle. For more on the Seventh Generation Principle, see Wildcat, *Red Alert!*, 126.

Now appears to be an opportune time for many tribes to exercise and assert their airspace sovereignty. With compounding legal experience and expertise, tribes have a large toolkit to "develop another set of levers within [their] own control," as Evans puts it.[334] This is not to say that *now* is the best time for all tribes to define and clarify their airspace sovereignty or even to use the same approach. Even though this thesis mentions many different tribes, I also do not intend to suggest a pan-Indian approach to exercising tribal airspace sovereignty or even a primarily legal approach. On the contrary, I hope to celebrate and bring attention to the diverse strategies used to indigenize airspace in a turbulent body of law at times when tribes have created or located receptive spaces. The tribes referenced throughout this chapter, in particular, represent the various ways tribes assert and expand their sovereignty through and beyond legal means. Acknowledging this aspect is crucial in a legal study because tribal sovereignty is both de jure and de facto. My hope for this thesis is to provide tribes with some guidance and inspiration for taking their next steps toward strengthening and clarifying their air rights in whichever space and by whatever means that best suits their visions for the future. This possibilities for exercising tribal airspace sovereignty and expanding the scope of sovereignty are truly infinite. The sky's the limit, and the sky is limitless.

334. Evans, *Power from Powerlessness*, 203.

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APPENDIX A

ORDER 1210.20 POLICY

ORDER 1210.20

American Indian and Alaska Native Tribal Consultation
Policy and Procedures
January 28, 2004

7. POLICY.

a. American Indians And Alaska Natives have played an important role in our Nation's history and culture. The Federal government has a unique legal and political relationship with Federally Recognized Tribes, which are domestic dependent nations, subject to the protection of the United States. In turn, the Federal government has a moral duty of the highest responsibility and rust for resources held by the Federal government for federally Recognized Tribes and their members. The Federal government must act in good faith and loyally to the best interests of American Indians and Alaska natives, among these being their interest in self-government. The Department of Interior, Bureau of Indian Affairs maintains the current list of Federally Recognized Tribes.

b. In conducting activities, running programs, and fostering relationships with American Indian and Alaska Native Tribes, to the extent practicable and allowed by law, FAA will:

1. Adhere to the principles of government-to-government consultation, including honoring tribal treaty and other rights, and respect for the right of Federally Recognized Tribes to represent their respective interests;

2. Consult with American Indian and Alaska Native Tribes before taking any actions that may significantly or uniquely affect them. In addition, assure the concerns of Federally Recognized Tribes about potential impacts on trust resources on tribal rights are properly addressed in agency policies, programs, and activities;

3. Respect American Indian and Alaska Native preferences in Federal grants and contracting, subject to eligibility;

4. Ensure nondiscrimination in employment of and services to American Indians and Alaska Natives;

5. Assess the environmental impact of FAA activities on Tribal resources and consider Tribal interests before taking action;

6. Cooperate with the General Services Administration and the Bureau of Indian Affairs in identifying to Tribes any FAA owned property subject to disposal;

7. Use FAA authorities, consistent with the ONEDOT approach, to help Federally Recognized Tribes in improving their aviation enterprises and provide safe and efficient access to the Nation's transportation system while strengthening self-government by Federally Recognized Tribes;

8. Respond to the concerns of American Indian and Alaska Native Tribes for environmental justice, children's safety and environmental health risks, occupational health and safety, and other environmental problems;

9. Consult with Federally Recognized Tribes as appropriate and provided by law and policy, on proposed actions that may affect American Indian and Alaska Native archaeological sites, graves, traditional cultural places, and American Indian and Alaska Native sacred sites. And protect where necessary and as allowed by law the confidentiality of information about these historic and archaeological sites. Grant access to and ceremonial use of sacred sites on Federal and American Indian and Alaska Native lands, and avoid to the extent practical American Indian and Alaska Native sacred sites when locating and operating FAA facilities;

10. Engage in Departmental efforts to understand and respond to transportation concerns of American Indian and Alaska Native Tribes related to aviation activities. Foster increased awareness by other agencies, state departments of transportation, local aviation authorities, and the aviation industry of these concerns;

11. Foster opportunities in aviation education and research for American Indian and Alaska Natives;

12. include Tribal colleges and universities in FAA educational, research, and program activities. This may include efforts such as providing FAA personnel as temporary instructors and providing surplus property and equipment as may be allowed by law;

13. Integrate information about Federal law and policies on relations with American Indian and Alaska Native Tribes into agency training and professional development opportunities;

14. Respect sovereignty by asking permission from the Federally Recognized Tribes before entering Tribal lands; and

15. Respond in a timely manner to requests for government-to-government consultations with officials of Federally Recognized Tribes.

APPENDIX B

1851 TREATY OF FORT LARAMIE (HORSE CREEK TREATY)

1851 Treaty of Fort Laramie (Horse Creek Treaty)

Articles of a treaty made and concluded at Fort Laramie, in the Indian Territory, between D. D. Mitchell, superintendent of Indian Affairs, and Thomas Fitzpatrick, Indian agent, commissioners specially appointed and authorized by the President of the United States, of the first part, and the chiefs, headmen, and braves of the following Indian nations, residing south of the Missouri River, east of the Rocky Mountains, and north of the lines of Texas and New Mexico, viz, the Sioux or Dahcotahs, Cheyennes, Arrapahoes, Crows, Assinaboines, Gros-Ventre, Mandans, and Arrickaras, parties of the second part, on the seventeenth day September, A. D. one thousand eight hundred and fifty-one.

ARTICLE I.

The aforesaid nations, parties to this treaty, having assembled for the purpose of establishing and confirming peaceful relations amongst themselves, do hereby covenant and agree to abstain in future from all hostilities whatever against each other, to maintain good faith and friendship in all their mutual intercourse, and to make an effective and lasting peace.

ARTICLE II.

The aforesaid nations do hereby recognize the right of the United States Government to establish roads, military and other posts, within their respective territories.

ARTICLE III.

In consideration of the rights and privileges acknowledged in the preceding article, the United States bind themselves to protect the aforesaid Indian nations against the commission of all depredations by the people of the said United States, after the ratification of this treaty.

ARTICLE IV.

The aforesaid Indian nations do hereby agree and bind themselves to make restitution or satisfaction for any wrongs committed, after the ratification of this treaty, by any band or individual of their people, on the people of the United States, whilst lawfully residing in or passing through their respective territories.

ARTICLE V.

The aforesaid Indian nations do hereby recognize and acknowledge the following tracts of country, included within the metes and boundaries hereinafter designated, as their respective territories [The remaining elements of Article 5 describe the respective territories for the Sioux or Dahcotah Nation; the Gros Ventre, Mandans and Arrickara Nations; the Assinaboine Nation; the Blackfoot Nation; the Crow Nation and the Cheyenne and Arrapahoe Nations.]

ARTICLE VI.

The parties to the second part of this treaty have selected principals or head-chiefs for their respective nations, through whom all national business will hereafter be conducted, do hereby bind themselves to sustain said chiefs and their successors during good behavior.

ARTICLE VII.

In consideration of the treaty stipulations, and for the damages which have or may occur by reason thereof to the Indian nations, parties hereto, and for their maintenance and the improvement of their moral and social customs, the United States bind themselves to deliver to the said Indian nations the sum of fifty thousand dollars per annum for the term of ten years, with the right to continue the same at the discretion of the President of the United States for a period not exceeding five years there- after, in provisions, merchandise, domestic animals, and agricultural implements, in such proportions as may be deemed best adapted to their condition by the President of the United States, to the distributed in proportion to the population of the aforesaid Indian nations.

ARTICLE VIII.

It is understood and agreed that should any of the Indian nations, parties to this treaty, violate any of the provisions thereof, the United States may withhold the whole or a portion of the annuities mentioned in the preceding article from the nation so offending, until in the opinion of the President of the United States, proper satisfaction shall have been made.

In testimony whereof the said D. D. Mitchell and Thomas Fitzpatrick commissioners as aforesaid, and the chiefs, headmen, and braves, parties hereto, have set their hands and affixed their marks, on the day and at the place first above written.

APPENDIX C

1868 TREATY OF FORT LARAMIE

Lieutenant General William T. Sherman, General William S. Harney, General Alfred H. Terry, General O. O. Augur, J. B. Henderson, Nathaniel G. Taylor, John G. Sanborn, and Samuel F. Tappan, duly appointed commissioners on the part of the United States, and the different bands of the Sioux Nation of Indians, by their chiefs and headmen, whose names are hereto subscribed, they being duly authorized to act in the premises.

ARTICLE I.

From this day forward all war between the parties to this agreement shall for ever cease. The government of the United States desires peace, and its honor is hereby pledged to keep it. The Indians desire peace, and they now pledge their honor to maintain it.

If bad men among the whites, or among other people subject to the authority of the United States, shall commit any wrong upon the person or property of the Indians, the United States will, upon proof made to the agent, and forwarded to the Commissioner of Indian Affairs at Washington city, proceed at once to cause the offender to be arrested and punished according to the laws of the United States, and also reimburse the injured person for the loss sustained.

If bad men among the Indians shall commit a wrong or depredation upon the person or property of nay one, white, black, or Indian, subject to the authority of the United States, and at peace therewith, the Indians herein named solemnly agree that they will, upon proof made to their agent, and notice by him, deliver up the wrongdoer to the United States, to be tried and punished according to its laws, and, in case they willfully refuse so to do, the person injured shall be reimbursed for his loss from the annuities, or other moneys due or to become due to them under this or other treaties made with the United States; and the President, on advising with the Commissioner of Indian Affairs, shall prescribe such rules and regulations for ascertaining damages under the provisions of this article as in his judgment may be proper, but no one sustaining loss while violating the provisions of this treaty, or the laws of the United States, shall be reimbursed therefor.

ARTICLE II.

The United States agrees that the following district of country, to wit, viz: commencing on the east bank of the Missouri river where the 46th parallel of north latitude crosses the same, thence along low-water mark down said east bank to a point opposite where the northern line of the State of Nebraska strikes the river, thence west across said river, and along the northern line of Nebraska to the 104th degree of longitude west from Greenwich, thence north on said meridian to a point where the 46th parallel of north latitude intercepts the same, thence due east along said parallel to the place of beginning; and in addition thereto, all existing reservations of the east back of said river, shall be and the same is, set apart for the absolute and undisturbed use and occupation of the Indians herein named, and for such other friendly tribes or individual Indians as from time to time they may be willing, with the consent of the United States, to admit amongst them; and the United States now solemnly agrees that no persons, except those herein designated and authorized so to do, and except such officers, agents, and employees of the government as may be authorized to enter upon Indian reservations in discharge of duties enjoined by law, shall ever be permitted to pass over, settle upon, or reside in the

territory described in this article, or in such territory as may be added to this reservation for the use of said Indians, and henceforth they will and do hereby relinquish all claims or right in and to any portion of the United States or Territories, except such as is embraced within the limits aforesaid, and except as hereinafter provided.

ARTICLE III.

If it should appear from actual survey or other satisfactory examination of said tract of land that it contains less than 160 acres of tillable land for each person who, at the time, may be authorized to reside on it under the provisions of this treaty, and a very considerable number of such persons shall be disposed to commence cultivating the soil as farmers, the United States agrees to set apart, for the use of said Indians, as herein provided, such additional quantity of arable land, adjoining to said reservation, or as near to the same as it can be obtained, as may be required to provide the necessary amount.

ARTICLE VI.

If any individual belonging to said tribes of Indians, or legally incorporated with them, being the head of a family, shall desire to commence farming, he shall have the privilege to select, in the presence and with the assistance of the agent then in charge, a tract of land within said reservation, not exceeding three hundred and twenty acres in extent, which tract, when so selected, certified, and recorded in the "Land Book" as herein directed, shall cease to be held in common, but the same may be occupied and held in the exclusive possession of the person selecting it, and of his family, so long as he or they may continue to cultivate it.

Any person over eighteen years of age, not being the head of a family, may in like manner select and cause to be certified to him or her, for purposes of cultivation, a quantity of land, not exceeding eighty acres in extent, and thereupon be entitled to the exclusive possession of the same as above directed.

For each tract of land so selected a certificate, containing a description thereof and the name of the person selecting it, with a certificate endorsed thereon that the same has been recorded, shall be delivered to the party entitled to it, by the agent, after the same shall have been recorded by him in a book to be kept in his office, subject to inspection, which said book shall be known as the "Sioux Land Book."

The President may, at any time, order a survey of the reservation, and, when so surveyed, Congress shall provide for protecting the rights of said settlers in their improvements, and may fix the character of the title held by each. The United States may pass such laws on the subject of alienation and descent of property between the Indians and their descendants as may be thought proper. And it is further stipulated that any male Indians over eighteen years of age, of any band or tribe that is or shall hereafter become a party to this treaty, who now is or who shall hereafter become a resident or occupant of any reservation or territory not included in the tract of country designated and described in this treaty for the permanent home of the Indians, which is not mineral land, nor reserved by the United States for special purposes other than Indian occupation, and who shall have made improvements thereon of the value of two hundred dollars or more, and continuously occupied the same as a homestead for the term of three years, shall be entitled to receive from the United States a patent for one hundred and sixty acres of land including his said improvements, the same to be in the form of the legal subdivisions of the surveys of the public lands. Upon application in writing, sustained by the proof of two

disinterested witnesses, made to the register of the local land office when the land sought to be entered is within a land district, and when the tract sought to be entered is not in any land district, then upon said application and proof being made to the Commissioner of the General Land Office, and the right of such Indian or Indians to enter such tract or tracts of land shall accrue and be perfect from the date of his first improvements thereon, and shall continue as long as be continues his residence and improvements and no longer. And any Indian or Indians receiving a patent for land under the foregoing provisions shall thereby and from thenceforth become and be a citizen of the United States and be entitled to all the privileges and immunities of such citizens, and shall, at the same time, retain all his rights to benefits accruing to Indians under this treaty.

ARTICLE XI.

In consideration of the advantages and benefits conferred by this treaty and the many pledges of friendship by the United States, the tribes who are parties to this agreement hereby stipulate that they will relinquish all right to occupy permanently the territory outside their reservations as herein defined, but yet reserve the right to hunt on any lands north of North Platte, and on the Republican Fork of the Smoky Hill river, so long as the buffalo may range thereon in such numbers as to justify the chase. And they, the said Indians, further expressly agree:

1st. That they will withdraw all opposition to the construction of the railroads now being built on the plains.

2nd. That they will permit the peaceful construction of any railroad not passing over their reservation as herein defined.

3nd. That they will not attack any persons at home, or travelling, nor molest or disturb any wagon trains, coaches, mules, or cattle belonging to the people of the United States, or to persons friendly therewith.

4th. They will never capture, or carry off from the settlements, white women or children.

5th. They will never kill or scalp white men, nor attempt to do them harm.

6th. They withdraw all pretence of opposition to the construction of the railroad now being built along the Platte river and westward to the Pacific ocean, and they will not in future object to the construction of railroads, wagon roads, mail stations, or other works of utility or necessity, which may be ordered or permitted by the laws of the United States. But should such roads or other works be constructed on the lands of their reservation, the government will pay the tribe whatever amount of damage may be assessed by three disinterested commissioners to be appointed by the President for that purpose, one of the said commissioners to be a chief or headman of the tribe.

7th. They agree to withdraw all opposition to the military posts or roads now established south of the North Platte river, or that may be established, not in violation of treaties heretofore made or hereafter to be made with any of the Indian tribes.

APPENDIX D

COALITION VS. FAA

United States Court of Appeals, District of Columbia Circuit.
GRAND CANYON AIR TOUR COALITION, Petitioner, v. FEDERAL AVIATION ADMINISTRATION, Respondent, Grand Canyon Trust, et al., Intervenors.
Nos. 97-1003, 97-1014, 97-1104, 97-1112 and 97-1279.
Decided: September 04, 1998

III. D.

The Hualapai Tribe also makes what amounts to an argument that the FAA issued its Final Rule too soon, because it failed to consider first whether the establishment of the expanded flight free zones would push aircraft noise off the Park and onto the Hualapai Reservation. The consequences of such a shift, the Tribe contends, would be harm to the Tribe's traditional cultural properties, sacred sites, ongoing religious and cultural practices, natural resources, and economic development. In the Tribe's view, the FAA's failure to consider these consequences, and to consult with the Tribe about them, violated the National Historic Preservation Act, 16 U.S.C. § 470 et seq., NEPA, the APA, and the United States' trust obligation to the Tribe.

We find these arguments unripe for consideration for the same reason we found the County's arguments unripe. Until we know what routes the air tours will take, we simply cannot assess whether, or how much, they will affect the Reservation. Holding off that assessment until the routes are concrete may make our resolution of the dispute unnecessary. See FAA Br. at 39 ("The FAA has committed to ensuring that any new routes that are located above the Hualapai Reservation avoid historic, cultural and religious sites."); id at 45 ("The final routes may well meet many of the Tribe's anticipated [environmental] concerns."). Such a postponement surely will facilitate any review that is necessary. And since the flight free zones have been stayed in the interim, postponement will not injure the Tribe [FN15].

The FAA also has represented that it will continue to consult with the Tribe regarding the location of routes, and to evaluate the noise impact of different routes on the Tribe, during the period prior to issuance of final routes. See Final Rule, 61 Fed.Reg. at 69,306-07; see also FAA Br. at 38-39, 45, 46. Accordingly, if it has not done so already, the FAA still has time to satisfy any consultative obligations it may have before a final plan is implemented [FN16].

The Tribe does not seriously dispute these conclusions. It "recognizes that if the FAA completely removes all routes from tribal lands, it will not be impacted." Hualapai Reply Br. at 6. But it forthrightly states that it filed its current petition because it feared that if had it waited until the FAA promulgated the routes, it would have missed the deadline for petitioning for review of the 1996 rule and hence be foreclosed from obtaining review. This was a perfectly appropriate reason for filing the petition. See *Eagle-Picher Industries, Inc. v. EPA*, 759 F.2d 905, 909 (D.C.Cir.1985). But "our finding of unripeness gives petitioners the needed assurance" that they will not be foreclosed from judicial review when the appropriate time comes. *Public Citizen v. Nuclear Regulatory Commission*, 940 F.2d 679,

683 (D.C.Cir.1991). This is because a "time limitation on petitions for judicial review . can run only against challenges ripe for review." *Baltimore Gas & Elec. Co. v. I.C.C.*, 672 F.2d 146, 149 (D.C.Cir.1982). When the corridors and routes finally are promulgated, the Tribe and the other petitioners will be able to raise issues that specifically arise from the interrelationship between the flight free zones and those routes and corridors.

FN15. The same analysis applies to the Tribe's allegation that overflights that "directly and substantially impair the use of" reservation lands would constitute an unlawful taking of those lands. Until the routes and corridors are established, it is not possible to tell whether there will be overflights that impair the Tribe's use of its lands. And as long as the FAA continues to stay the effective date of the flight free zones, such overflights will not occur.

FN16. In its brief, the Tribe contended that under its trust obligations, the United States was required, but failed, to consult with it on a government-to-government basis while developing the Final Rule. The FAA, however, cited considerable evidence that consultations have occurred. See, e.g., Final Rule, 61 Fed.Reg. at 69,305-07 (outlining consultations with Indian tribes); Environmental Assessment at 4-19 to -21, 4-23 (outlining meetings with Hualapai and other tribes to review impact on historical sites and socio-economic interests of tribes). At oral argument, the Tribe reformulated its argument, conceding that there had been consultations, but contending that they had not been meaningful. See Oral Arg. Tr. at 50-51.