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UNMASKING WESTERN SCIENCE: CHALLENGING
THE ARMY CORPS OF ENGINEER'S REJECTION OF THE
ISLE DE JEAN CHARLES TRIBAL ENVIRONMENTAL
KNOWLEDGE UNDER APA ARBITRARY AND
CAPRICIOUS REVIEW

Charquia Wright *

INTRODUCTION

The law masks as natural what is chosen; it obscures the consequences of social selection as inevitable. The result is that the distortions in social relations are immunized from truly effective intervention, because the existing inequities are obscured and rendered nearly invisible. The existing state of affairs is considered neutral and fair, however unequal and unjust it is in substance.¹

The principle that law masks as natural what is chosen, is abundantly clear in the 2013 United States Army Corps of Engineers' decision to build a levee that would not protect southern Louisiana's Isle de Jean Charles Band of the Biloxi-Chitimacha-Choctaw Tribe (The Isle de Jean Charles Tribe).² This was essentially a decision to flood out Isle de Jean Charles in its entirety in order to mitigate flood damages in the regions protected by the levee. The areas immediately outside of the protected zone will be inundated by the flood waters diverted from the protected area.³ The Army Corps of Engineers justified this decision by saying there was not a naturally occurring ocean ridge close enough to the Isle de Jean Charles hard enough to support the levee, and without such a structure the project would have been cost-prohibitive.⁴ Further analysis reveals that they came to this conclusion without adequately considering the Isle de Jean Charles Tribe's oceanography expertise. Had the Army Corps of Engineers taken seriously the information provided to it by the Isle de Jean Charles Tribe,

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¹ Cheryl I. Harris, *Whiteness as Property*, in *CRITICAL RACE THEORY: THE KEY WRITINGS THAT FORMED THE MOVEMENT* 276, 287–88 (Kimberlé Crenshaw et al. eds., 1995).

² See THE ASSISTANT SECRETARY OF THE ARMY, MORGANZA TO THE GULF OF MEXICO, LA, FINAL REVISED PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (2013) [hereinafter ASSISTANT SECRETARY].

³ *Id.* at 79–81.

⁴ See discussion *infra* Part I.

they would have found a ridge sufficient for supporting a levee. If the court system does not intervene, the Army Corps of Engineers' decision will amount to nothing short of a cultural genocide.⁵

Given that levee construction has not yet started,⁶ the Tribe still has a chance at mitigating and reversing the damage to ancestral lands through legal remedies. This Essay uses the Isle de Jean Charles Tribe as a case study for how existing administrative law jurisprudence can be used to incorporate Traditional Environmental Knowledge (TEK) into environmental policy decisions.⁷ A growing body of scholarship theorizes how TEK could be incorporated into administrative environmental decision making.⁸ Most notably, Anthony Moffa explains that “there remains an important space in administrative rulemaking for the consideration of ways

⁵ See Adam Creppelle, *The United States First Climate Relocation: Recognition, Relocation, and Indigenous Rights at the Isle De Jean Charles*, 6 BELMONT L. REV. 1, 22 (2018) (noting that “[n]early all of the UNDRIP's 46 articles are relevant to the Isle de Jean Charles relocation,” including its provision against genocide); ASSISTANT SECRETARY, *supra* note 2, at 914 (“[T]he potential for irreparable harm exists for unique cultures, languages, and traditions that may be lost if the community is broken up, such as in the case of the Isle de Jean Charles.”).

⁶ ASSISTANT SECRETARY, *supra* note 2, at 235, 681. The 2013 EIS projected that construction would begin in 2015 and would span at least 15 years, *id.*, yet, as of 2018, construction still has not begun. See Times-Picayune Editorial Board, *Eighteen Years Is Long Enough to Wait for Morganza Levee*, NOLA.COM (Aug. 22, 2018), https://www.nola.com/opinions/article_843e1b0d-4adc-5db9-94ce-ce60785d9184.html [https://perma.cc/NG69-LVSN].

⁷ Traditional Environmental Knowledge goes by several names, including Traditional Ecological Knowledge, indigenous knowledge, folk ecology, ethno-ecology, customary law, and knowledge of the land. Anthony Moffa, *Traditional Ecological Rulemaking*, 35 STAN. ENVTL. L.J. 101, 106 (2016). In this Essay, Traditional Environmental Knowledge will be used.

⁸ See, e.g., *id.* at 104 (“This Article examines the implications of an increased role for TEK in United States agency decision making. Specifically, it contemplates where TEK might substantively and procedurally fit and, most importantly, whether a final agency action based on TEK would survive judicial scrutiny.”); Symposium, *Traditional Ecological Knowledge in Environmental Decisionmaking*, 49 ENVTL. L. REP. 10309, 10309 (2019) (a transcript of a panel discussion concerning “challenges that indigenous peoples face in defending the legitimacy of, and intellectual property in, TEK; how policymakers can modify existing laws and regulations to better incorporate TEK; and the potential for TEK to meet today's most pressing environmental challenges”); Garrit Voggesser et al., *Cultural Impacts to Tribes from Climate Change Influences on Forests*, 120 CLIMATIC CHANGE 615, 623 (2013) (“Tribal involvement in agency resource management and climate change initiatives could include monitoring for species changes in forest habitats, using TEK to understand how culturally-important species may be shifting in composition or distribution, and developing adaptive strategies for fire and forest management.”); see also *Hopi Tribe v. Trump*, No. 17-CV-2590 TSC, 2019 WL 2494161 (D.D.C. Mar. 20, 2019) (Tribes using the APA to protect the Bears Ears National Monument).

of understanding that differ from traditional Western norms.”⁹ This Essay builds on that scholarship by asserting that the Army Corps of Engineers acted arbitrarily and capriciously in contravention of the Administrative Procedure Act (APA) by refusing to incorporate TEK into the cost-benefit analysis it used to justify flooding the Isle de Jean Charles. Part I will define TEK in more depth and explain how the rejection of TEK was used to endanger and epistemologically subordinate the Isle de Jean Charles Tribe. Part II illustrates why this subordination is actionable under the APA as an arbitrary and capricious abuse of administrative power.

I. THE ARMY CORPS OF ENGINEERS IGNORED TRIBAL ENVIRONMENTAL KNOWLEDGE WHEN DETERMINING THE COSTS AND BENEFITS OF FLOODING THE ISLE DE JEAN CHARLES

The Isle de Jean Charles Tribe is a federally unrecognized Native American tribe.¹⁰ They have made national news as America’s first “climate refugees.”¹¹ Ninety-eight percent of the island has been submerged in the Gulf of Mexico due to anthropogenic land subsidence caused mostly by oil exploration and global warming.¹² Amidst the man-made crisis ravaging this island, the Army Corps of Engineers decided to exclude this vulnerable community from the protection of the Morganza levee, scheduled to be built by 2035. Although the Army Corps of Engineers couched its decision to exclude the tribe from the aegis of the

⁹ Moffa, *supra* note 7, at 104.

¹⁰ *Summary Under Criteria and Evidence for Amended Proposed Finding Against Federal Acknowledgement*, BUREAU OF INDIAN AFFAIRS (May 22, 2008) [hereinafter BUREAU OF INDIAN AFFAIRS (2008)].

¹¹ Ted Jackson, *On the Louisiana Coast, A Native Community Sinks Slowly into the Sea*, *Yale Environment* 360 (Mar. 15, 2018), <https://e360.yale.edu/features/on-louisiana-coast-a-native-community-sinks-slowly-into-the-sea-isle-de-jean-charles> [<https://perma.cc/82P7-V6MA>]. CBS This Morning, *Disappearing Louisiana Island Could Create America’s 1st Climate Change Refugees*, YOUTUBE (Aug. 23, 2019), <https://www.youtube.com/watch?v=t-uRB26a-sg> [<https://perma.cc/36WC-URM5>]. The rhetoric of that relocation is telling; news media outlets and scholars alike have consistently characterized the Isle de Jean Charles Tribe as America’s first “climate refugees.” JULIE K. MALDONADO, *SEEKING JUSTICE IN AN ENERGY SACRIFICE ZONE: STANDING ON VANISHING LAND IN COASTAL LOUISIANA* 98 (2019). This label has been criticized as diverting attention “away from the underlying cause of both climate change and displacement,” which, by and large have been driven by settler colonialist policies. *Id.* Furthermore, this label frames local residents as “agent-less victims” and makes anthropogenic climate resettlement seem as though it was a part of the natural order of things, absolving government and corporate entities of their role in destroying the environment. *Id.* It deemphasizes the anthropogenic nature of the issue, making it appear as though this community is an unfortunate victim of an inevitable event caused by a diffuse and unidentifiable source acting on the environment broadly and not targeted groups. *Id.*

¹² *See supra* note 11.

levee in terms of costs and benefits, closer analysis reveals that the costs and benefits rhetoric masks an arbitrary and capricious decision-making process that subjugates TEK. This sort of rhetoric portrays subordination as the unfortunate yet inevitable result of naturally-occurring ocean topography instead of the Army Corps of Engineers' willful ignorance of local oceanography expertise. Their decision is sure to wipe out this resilient community, which has resisted state sponsored genocide for the past several centuries.¹³

During the Indian Removal era, many survivors of the Trail of Tears sought refuge in the secluded marshes of the Isle de Jean Charles in southern Louisiana.¹⁴ They travelled as far south as they could in order to avoid torture and capture by American colonizers.¹⁵ The current tribal residents of the Isle de Jean Charles are descendants of Native American refugees to this area.¹⁶

In addition to the millennia's worth of environmental knowledge the survivors of the Trail of Tears brought with them to southern Louisiana from their original ancestral lands, they amassed two centuries worth of TEK about the lands and waters in southern Louisiana. The Intergovernmental Panel on Climate Change defines TEK as "a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment."¹⁷ In the Isle de Jean Tribe, this knowledge has been passed down from older generations to present Tribal members. Like many Indigenous Peoples' knowledge practices, it:

focus[es] on adaptive management and nonequilibrium systems—subjects that Western science has largely understudied, but TEK has addressed from time immemorial. Federal and state agencies have only come to this ecosystem management approach in the last few decades, and thus TEK could help advance their policy agendas more rapidly.¹⁸

¹³ MALDONADO, *supra* note 11 at 60–77.

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ Moffa, *supra* note 7, at 106–07. Fikret Berkes, "perhaps the most prolific scholar of TEK issues," penned this definition of TEK, which was adopted by the Intergovernmental Panel on Climate Change. *Id.*

¹⁸ *Id.* at 110 (internal citations omitted).

The accuracy of TEK from Indigenous Peoples is well-documented.¹⁹ Sadly, there are many examples of Western scientists foolishly ignoring TEK and wasting inordinate amounts of time and money confirming facts that have already been relayed to them by Indigenous Peoples.²⁰ Yet, scholars of various disciplines have recognized that the value that this information adds to environmental science and decision-making is indispensable because, “the nature of ecosystems and their inherent complexity is a poor match for conventional deductive, reductionist science. Therefore, it has been hypothesized that TEK with its holistic approach might be able to offer insights into complex, nonlinear systems.”²¹ This precept was clearly not observed by the Army Corps of Engineers when it ignored the Isle de Jean Charles elders concerning possible levee placements. According to interviews taken by anthropologist Julie K. Maldonado, Tribal elders instructed the Army Corps of Engineers as to the exact location of a nearby oceanic ridge, suitable for levee building.²²

¹⁹ *Id.* at 109 (“The 1980s and 1990s saw a marked increase in scholarly discussion of TEK and acknowledgement of its usefulness to environmental stewardship. Perhaps as a result of this growing interest and attention, researchers now generally agree that ‘involvement of local people and their local, traditional, or indigenous forms of knowledge in decision making is critical.’ Despite this consensus among academics, policymakers have nonetheless been reluctant to fully embrace TEK as a substantive basis for decisions. The current state of the environment suggests that must change.”) (internal citations omitted).

²⁰ In southern Louisiana, an anthropologist recorded one such instance involving a tribe neighboring the Isle de Jean Charles Tribe, called the Pointe-au-Chien Tribe. MALDONADO, *supra* note 11, at 102. In that instance, an elder took two scientists on a boat ride in order to examine the Gulf and measure water depth to excavate tribal property. *Id.* The scientists needed to know the depth of the water in a certain area. *Id.* The elder informed them numerous times that the water was 5 feet deep. *Id.* Despite having this information, the scientists fiddled with their equipment, making several failed attempts to measure the water depth. *Id.* When the scientists finally measured the depth, they confirmed that it was 5 feet deep. *Id.*; see, e.g., U.S. DEP’T OF AGRIC., INDIGENOUS STEWARDSHIP METHODS AND NRCS CONSERVATION PRACTICES 8 (2010) (“[I]n the late 1980s Inupiat hunters in Barrow, Alaska, told the International Whaling Commission (IWC) that there were thousands of Bowhead whales in the Pacific Ocean, while the IWC estimated only 600 to 1,800. It took a decade and \$10 million in studies and scientific research for scientists to confirm that the population was actually closer to 10,000 whales, plenty for the Inupiat to hunt for their subsistence way of life.”) (internal citation omitted); Voggesser et al., *supra* note 8, at 617 (“Tribes utilized fire to increase the predictability of resources, as well as to increase ecosystem resilience.”); John Keeley, *Fire Management Impacts on Invasive Plants in the Western United States*, 20 CONSERVATION BIOLOGY 375, 375 (2006) (When settlers stopped using fire regimes in this way, invasive species and uncontrollable wildfires began to destroy the biodiversity of the ecosystem).

²¹ Leonard J. S. Tsuji & Elise Ho, *Traditional Environmental Knowledge and Western Science: In Search of Common Ground*, 22 CANADIAN J. NATIVE STUD. 327, 347 (2002).

²² MALDONADO, *supra* note 11, at 114–15.

However, the Army Corps of Engineers did not consider this information.²³ Regarding the location of the ridge, an Isle de Jean Charles Tribal council member explained:

If they had listened to the elders and went where they said, they would have found a ridge because there's a ridge that runs up through there. They said after doing a soil sample, cost-ratio it wasn't worth it . . . if they'd listened to the old people they would've found what they was looking for.²⁴

Instead of including the Isle de Jean Charles within the Morganza levee, the Army Corps of Engineers decided to build a smaller ring levee—a smaller earthen levee that can only mitigate against category 1 and 2 hurricanes—around the island.²⁵ Even though the ring levee has slowed the land subsidence to some degree,²⁶ “many felt that, based on where the [earthen ring] levee was placed, it was really put there to protect the Louisiana Department of Wildlife and Fisheries’ land on the north side of the Island.”²⁷ Notwithstanding the mitigating effects of the smaller levee, locating the Isle de Jean Charles outside of the zone protected by the Morganza levee will create more flooding on the Island than if the

²³ *Id.*

²⁴ *Id.* In a letter to the Honorable Albert P. Naquin, Chief of the Isle de Jean Charles Band of the Biloxi-Chitimacha-Choctaw tribe, James Johnson, a representative of the planning division of the United States Army Corps of Engineers, informed Chief Naquin that the flood mitigation levee that the U.S. planned to build in order to protect vulnerable Gulf Coast states from increasingly devastating hurricanes would not be aligned to protect any part of the Isle de Jean Charles. Letter from James Johnson, Rep., Army Corps of Engineers, to Hon. Albert P. Naquin, Chief, Isle de Jean Charles (Feb. 9, 2000) (on file with author). In the words of Johnson, “[t]he additional cost of such a levee alignment would not be economically justified.” *Id.* Had the tribe received federal recognition as an Indian Tribe, they likely would have had more success negotiating with the Army Corps of Engineers. Marisa Katz, *Staying Afloat: How Federal Recognition as a Native American Tribe Will Save the Residents of Isle de Jean Charles, Louisiana*, 4 LOY. J. PUB. INT. L 1, 8 (2003) (“Where maintaining a livelihood on Isle de Jean Charles for several generations does not hold enough clout, obtaining federal recognition for the Biloxi-Chitimacha-Choctaw tribe will provide leverage when negotiating with the Corps of Engineers. Federal recognition offers the real possibility of staying home, and solves a dilemma the rest of the residents of Terrebonne Parish will never have to face, because they will be protected by the Morganza-to-the-Gulf levee system.”).

²⁵ Katz, *supra* note 24, at 6 (“[T]he smaller levee has kept some high tides at bay and saltwater out of the wetlands, strengthening the soil and enabling vegetation to re-emerge. The federal levee, designed at fifteen feet, would be substantially more effective and more beneficial to the welfare and general condition of the island.”) (internal citation omitted).

²⁶ *Id.*

²⁷ MALDONADO, *supra* note 11, at 114–15.

Morganza levee had never been built.²⁸ The blatant disregard for the Isle de Jean Charles' TEK is emblematic and constitutive of the epistemological and sociopolitical subordination that Indigenous Peoples, including the Isle de Jean Charles tribe, have faced for centuries.²⁹

By making it seem as though costs and benefits dictated that the Isle de Jean Charles be excluded from the levee-protected area, the Army Corps of Engineers used science and law to mask a negligent cultural genocide as an unfortunate yet natural consequence of ill-omened oceanic topography.³⁰ The underlying assumption is that science and cost-benefit analyses are objective, yet here it is clear that these mechanisms are being applied in ways that not only erase indigenous knowledge, but also erase indigenous culture under the guise of scientific objectivity.

This sort of masking is a long-standing trend in Western science. This masking is further entrenched where the law fails to recognize "the constitutive role that the knowledge practices and supporting infrastructures commonly relegated to the realm of science and technology play in providing form and substance to the field."³¹ In the case of the Isle de Jean Charles Tribe, it appears possible to unmask the Army Corps of Engineers cost benefit analysis by resorting to legal recourse. Nonrecognition of TEK in this instance is reviewable under the APA's arbitrary and capricious standard.

II. THE ARMY CORPS OF ENGINEERS COST BENEFIT ANALYSIS WAS ARBITRARY AND CAPRICIOUS

The Army Corps of Engineers is authorized by statute to carry out a hurricane and storm damage mitigation project along the Louisiana coastline.³² The National Environmental Policy Act of 1969 (NEPA) requires agencies carrying out "[f]ederal actions significantly affecting the quality of the human environment" to produce an Environmental Impact Statement in order to ensure that agency decisions are predicated upon accurate information about the environment:³³

NEPA promotes its sweeping commitment to "prevent or eliminate damage to the environment and biosphere" by focusing Government and public attention on the

²⁸ See ASSISTANT SECRETARY, *supra* note 2, at 79–81.

²⁹ See *infra* notes 60–65.

³⁰ See generally Harris, *supra* note 1 at 287–88 ("The law masks as natural what is chosen...").

³¹ William Boyd, *Ways of Seeing in Environmental Law: How Deforestation Became an Object of Climate Governance*, 37 *ECOLOGY L.Q.* 843, 847 (2010).

³² Water Resources Development Act of 2007, Pub. L. No. 110-114, § 1001.

³³ 42 U.S.C. § 4332(C)(i) (2012).

environmental effects of proposed agency action. By so focusing agency attention, NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct. Similarly, the broad dissemination of information mandated by NEPA permits the public and other government agencies to react to the effects of a proposed action at a meaningful time.³⁴

Review of the Army Corps of Engineers' decision not to examine the exact location of the ridge indicated by the Isle de Jean Charles Tribe would be controlled by the APA's "arbitrary and capricious" standard.³⁵ The APA proscribes any final agency action³⁶ that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law."³⁷ The 2013 Environmental Impact Statement issued by the Army Corps of Engineers would be the relevant final agency action if an arbitrary and capricious challenge were brought against the Corps.³⁸

An agency violates the arbitrary and capricious standard when it: [R]elie[s] on factors which Congress has not intended it to consider, *entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.*³⁹

When the challenged action is a scientific judgment, the U.S. Supreme Court and the D.C. Circuit, among other federal courts, in practice have accorded "super-deference" to agency expertise.⁴⁰ Irrespective of this

³⁴ Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 371 (1989) (citing 42 U.S.C. § 4321); Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).

³⁵ See Marsh, 490 U.S. at 375–76.

³⁶ See *id.*

³⁷ 5 U.S.C. § 706(2)(A) (2019).

³⁸ Marsh, 490 U.S. at 375–76 (concluding that the determination of whether an Environmental Impact Statement should be supplemented is controlled by the arbitrary and capricious standard of § 706(2)(A)).

³⁹ Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (emphasis added).

⁴⁰ Moffa, *supra* note 7, at 136 (citing Baltimore Gas & Electric Co. v. Nat. Res. Def. Council, Inc., 462 U.S. 87, 103 (1983)) ("When examining this kind of scientific determination . . . a reviewing court must generally be at its most deferential."); Catawba Cty. v. EPA, 571 F.3d 20, 41 (D.C. Cir. 2009) (quoting City of Waukesha v. EPA, 320 F.3d 228, 247 (D.C. Cir. 2003)) ("Of particular note in this challenge, we give 'an extreme degree of deference to [EPA] when it is evaluating scientific data within its technical expertise.'");

tendency, agency action may still be considered arbitrary and capricious if the agency “fail[s] adequately to consider a relevant and significant aspect of a problem”⁴¹

The D.C. Circuit, the federal circuit court most often charged with administrative appeals, applied this standard in *American Farm Bureau Federation v. EPA* where it held that the Environmental Protection Agency (EPA) acted arbitrarily and capriciously by only considering long-term exposure studies to an air pollutant when setting the National Ambient Air Quality Standards.⁴² In arriving at this conclusion, the D.C. Circuit held that the EPA “did not adequately explain why . . . the studies of short-term exposure were not at all relevant,” leaving the public vulnerable to carcinogenic air pollutants.⁴³

Similarly, in the case of Isle de Jean Charles Tribe, the Army Corps of Engineers did not adequately explain why it ignored TEK indicating the existence of a levee-conducive ridge. The only reasoning given in the 2013 Environmental Impact Statement was that including the tribe within the proposed levee alignment would be cost-prohibitive.⁴⁴ Although the report concedes that alternatives to resettlement should be favored over resettlement of the Isle de Jean Charles Tribe,⁴⁵ it does not explain why no credence was given to the information indicating the location of a ridge near the Isle de Jean Charles.

The Army Corps of Engineers may argue that levee reconnaissance “requires a high level of technical expertise,” and that the court must defer to “the informed discretion of the responsible federal agencies.”⁴⁶

Emily Hammond Meazell, *Super Deference, the Science Obsession, and Judicial Review as Translation of Agency Science*, 109 MICH. L. REV. 733 (2011).

⁴¹ *Am. Farm Bureau Fed’n v. EPA*, 559 F.3d 512, 520 (D.C. Cir. 2009) (citing *Chamber of Commerce of U.S. v. SEC*, 412 F.3d 133, 140 (D.C. Cir. 2005)); see also *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 43 (“[T]he agency must examine the relevant data and articulate a satisfactory explanation for its action.”).

⁴² *Am. Farm Bureau Fed’n*, 559 F.3d at 520.

⁴³ *Id.*

⁴⁴ ASSISTANT SECRETARY, *supra* note 2, at 293 (“Isle de Jean Charles is located entirely outside of the proposed levee alignment and would likely experience induced flooding during storm events when the protection (levee) system is closed. While this raises a potential EJ [environmental justice] issue, with respect to alternative protection alignments and induced flooding, neither of the alternatives to the No Action Alternative authorized for study under the PAC represents a separate alignment that would include this community. Providing hurricane risk reduction for Isle de Jean Charles has been determined in previous Corps of Engineers analyses to be cost prohibitive.”).

⁴⁵ *Id.* at 626 (“Buyout options should include relocation of intact communities where the potential for irreparable harm exists for unique cultures, languages, and traditions that may be lost if the community is broken up, such as in the case of the Isle de Jean Charles.”).

⁴⁶ *Marsh v. Or. Nat. Res. Def. Council*, 490 U.S. 360, 377 (1983) (citing *Kleppe v. Sierra Club*, 427 U.S. 390, 412 (1976)); see also *Baltimore Gas & Electric Co. v. Natural Resources*

However, this argument does not stand when the underlying agency action is arbitrary and capricious, as is true here where the Army Corps of Engineers entirely failed to consider information that would materially alter its decision.⁴⁷

In a similar vein, they may also argue that, “[w]hen specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.”⁴⁸ Given that the Army Corps of Engineers did not explain its disregard of TEK at all in its 2013 impact statement, it is unlikely that a court would be willing to accord them unyielding discretion to defer to its own experts in this scenario. Here, a court is more likely to hold that:

[C]ourts should not automatically defer to the agency's express reliance on an interest in finality without carefully reviewing the record and satisfying themselves that the agency has made a reasoned decision based on its evaluation of the significance—or lack of significance—of the new information. A contrary approach would not simply render judicial review generally meaningless, but would be contrary to the demand that courts ensure that agency decisions are founded on a reasoned evaluation “of the relevant factors.”⁴⁹

Detractors may attempt to argue that had the Army Corps of Engineers relied on TEK in this scenario, it would have led to challenges to the agency decision under the arbitrary and capricious clause for relying on nonexpert opinions which could be classified as “factors which Congress has not intended it to consider.”⁵⁰ However, the Supreme Court and Circuit Courts have “upheld agency action that attempts to navigate through scientific uncertainty and deals with unknown future events” as a “policy judgment . . . within the bounds of reasoned decisionmaking.”⁵¹ Courts have not, however given agencies carte blanche to make unreasonable and unjustified decisions, such as the decision of the Corps to totally disregard TEK.⁵² Therefore, any argument that reliance on TEK would have led to an adverse court ruling is likely to fail.

Defense Council, Inc., 462 U.S. 87, 103 (1983) (“When examining this kind of scientific determination . . . a reviewing court must generally be at its most deferential.”).

⁴⁷ *Marsh*, 490 U.S. at 377.

⁴⁸ *Id.* at 378.

⁴⁹ *Id.*

⁵⁰ 5 U.S.C. § 706(2)(A) (2019).

⁵¹ Moffa, *supra* note 7, at 137.

⁵² *See supra* note 41 and accompanying text.

While the Army Corps of Engineers' most promising defense may be the statute of limitations, they are not likely to succeed if the youth of the Isle de Jean Charles bring the APA claim as a class. APA claims generally have a six-year statute of limitations.⁵³ The Environmental Impact Statement at issue was released in May of 2013, which means that the statutory time period ran out in May of 2019. However, an exception to the six-year statute of limitation exists for persons under legal disability.⁵⁴ Therefore, it is plausible that members of the Isle de Jean Charles who are currently minors may be able to bring an action against the Army Corps of Engineers for needlessly deciding to flood out their ancestral lands.⁵⁵ The youth members of the Isle de Jean Charles Tribe as a class have suffered an even more egregious harm than the adult members of the tribe because they will never be able to fully experience their culture on their ancestral lands.⁵⁶

Given that this levee is not scheduled for completion until at least 2035,⁵⁷ a remedy allowing the Isle de Jean Charles to be included in the

⁵³ 28 U.S.C. § 2401(a) (2019) (“[E]very civil action commenced against the United States shall be barred unless the complaint is filed within six years after the right of action first accrues. The action of any person under legal disability or beyond the seas at the time the claim accrues may be commenced within three years after the disability ceases.”)

⁵⁴ *Id.*

⁵⁵ The recent 9th Circuit decision in *Juliana v. United States*, 947 F.3d 1159 (9th Cir. 2020) reversing and remanding a district court decision which granted youth plaintiffs standing under the APA is inapposite. In the 9th Circuit decision, the court held that Plaintiffs could not bring a constitutional claim under the APA against multiple agencies for depriving them of Fifth Amendment due process rights to a “climate system capable of sustaining human life” because “the APA only allows challenges to discrete agency decisions.” *Id.* at 1164, 1167. This meant that a claim denouncing “the totality of various government actions” could not be sustained. *Id.* The claim discussed in this Essay is distinguishable because it is a claim against a single agency. See Michael C. Blumm & Mary Christina Wood, “*No Ordinary Lawsuit*”: *Climate Change, Due Process, and the Public Trust Doctrine*, 67 AM. UNIV. L.R. 1, 1 (2017) (“On November 10, 2016, just two days after the election of President Donald Trump, the federal district court in Oregon handed down *Juliana v. United States*. This remarkable decision refused to dismiss a lawsuit brought by youth plaintiffs who claimed that the federal government's fossil fuel policies over the years, which have produced an atmosphere with dangerous levels of greenhouse gases (GHGs), violated the federal public trust doctrine (PTD) and their federal constitutional rights to due process and equal protection.”).

⁵⁶ MALDONADO, *supra* note 11, at 98 (A member of a neighboring tribe facing similar environmental degradation commented “Without the land, our community will be separated. Our younger generations is leaving. Pretty soon we’re going to be just an elderly community. The land, at least what’s left is what keeps our community together. If we scatter into other communities we will lose our Indian bloodline. We want our children to be able to stay in the community to keep the Tribe going.”); see also *infra* Conclusion.

⁵⁷ ASSISTANT SECRETARY, *supra* note 2, at 235, 681. The 2013 EIS projected that construction would begin in 2015 and would span at least 15 years, *id.*, yet, as of 2018, construction still has not begun. See The Times-Picayune Editorial Board, *Eighteen Years is Long Enough to Wait for Morganza Levee*, NOLA.COM (Aug. 22, 2018, 12:29 p.m.),

levee protection area is still feasible. Including the Isle de Jean Charles within the levee-protected region would allow the root the systems on the island—which help hold the soil together—to recover from saltwater intrusion, thereby reversing the rapid land subsidence.⁵⁸ Additional flood mitigation and land restoration efforts will be able to reverse some of the damage caused by years of ill-advised anthropocentric Western policies that ignore TEK.⁵⁹

CONCLUSION

They probably want this island to diminish because we're moving into other communities and so the kids that we have will marry into the community and eventually the Indians are wiped out. Ask in Pointe-au-Chien and Dulac, wherever the Indians are at, they're going to move into these other communities and well, south Louisiana won't have any more Indians. So yeah, I think that Andrew Jackson is going to get his way. He's going to wipe out the Indians. Those that will still exist will be those that are federally recognized because they have their little reservation. Our reservation here is the one we have. We moved here so we wouldn't be captured by the Whites and sent to Oklahoma. . . . I wondered what they'd do if we asked to move to Oklahoma.

-Chief Albert of the Isle de Jean Charles

Historically, the members of the Isle de Jean Charles Tribe have been discriminated against and subordinated through local,⁶⁰ state, and federal

https://www.nola.com/opinions/article_843e1b0d-4adc-5db9-94ce-ce60785d9184.html
[<https://perma.cc/37PL-WKEJ>].

⁵⁸ Katz, *supra* note 24 at 6 (“[T]he smaller levee has kept some high tides at bay and saltwater out of the wetlands, strengthening the soil and enabling vegetation to re-emerge. The federal levee, designed at fifteen feet, would be substantially more effective and more beneficial to the welfare and general condition of the island.”).

⁵⁹ COASTAL PROTECTION AND RESTORATION AUTHORITY OF LOUISIANA, LOUISIANA’S COMPREHENSIVE MASTERPLAN FOR A SUSTAINABLE COAST (2012), <http://coastal.la.gov/2012-coastal-master-plan/> [<https://perma.cc/G2BF-4CVR>]; MALDONADO, *supra* note 11, at 104 (“State reports have concluded that without restoration and flood mitigation actions, much of the coastal tribes’ lands would be gone before 2050, including all of the Isle de Jean Charles. Yet, the communities have thus far been mostly left out of state-led restoration, mitigation, and hurricane protection plans”).

⁶⁰ MALDONADO, *supra* note 11, at 118 (“In 2009, making another attempt for relocation, Chief Albert spoke at a Terrebonne Parish Council meeting about raising funds to purchase an available property in Bourg, approximately 20 miles north of the Island. But after less than five minutes the Council silenced him. A Parish Council member stood up and raised the concern of the property values decreasing if the tribal community moved to Bourg, a predominantly Anglo-American community. Theresa (Pointe-au-Chien) had attended the meeting and described how the Councilmember stood up and said what happen to the property if ‘those people’ moved in.”).

policies ranging from segregated Indian schools,⁶¹ to private acts of discrimination,⁶² to denial of Federal Indian Recognition over technicalities,⁶³ to being targeted as an energy sacrifice zone,⁶⁴ and now to being flooded out by the Army Corps of Engineers.⁶⁵

As a result of man-made forces, 98% of the Isle de Jean Charles, which once measured 22,400 acres, is currently submerged in the Gulf of Mexico, and only a few families remain on 320-acre strip of land.⁶⁶ Instead of mitigating this damage, the Army of Corps of Engineers is worsening it by needlessly excluding the island from the levee protected area, thereby inundating the remaining above-water portion of the island with the flood waters diverted from the levee-protected zone. The residents of the Isle de Jean Charles, a vast majority of whom are members of the Isle de Jean Charles Tribe, have been forced to relocate as a result.⁶⁷ The genocidal overtones of the knowledge practices employed by the Army Corps of Engineers and many other federal agencies should not be ignored. Subordination of Indigenous knowledge practices compounds the false narrative of indigenous invisibility,⁶⁸ by marginalizing expertise that should be central to environmental policymaking at all levels.

⁶¹ Adam Crepelle, *The United States First Climate Relocation: Recognition, Relocation, and Indigenous Rights at the Isle De Jean Charles*, 6 BELMONT L. REV. 1, 38 (2018) (“The Parishes of Terrebonne and Lafourche segregated blacks, whites, and Indians until the late 1960s. UHN elders remember signs in local businesses stating ‘No Indians Allowed.’”); BUREAU OF INDIAN AFFAIRS, SUMMARY UNDER THE CRITERIA AND EVIDENCE FOR PROPOSED FINDING AGAINST FEDERAL ACKNOWLEDGEMENT OF THE UNITED HOUMA NATION, INC. 39, 241 (1994), https://www.bia.gov/sites/bia.gov/files/assets/as-ia/ofa/petition/056_uhouma_LA/056_pf.pdf [<https://perma.cc/KEC4-VK9W>] [hereinafter BUREAU OF INDIAN AFFAIRS (1994)]; DENISE BATES, THE OTHER MOVEMENT: INDIAN RIGHTS AND CIVIL RIGHTS IN THE DEEP SOUTH 75–76 (2012); Shanondora M. Billiot, *How Do Environmental Changes and Shared Cultural Experiences Impact the Health of Indigenous Peoples in South Louisiana?*, ARTS & SCIENCES ELECTRONIC THESES AND DISSERTATIONS 1080, at 100 (2017), https://openscholarship.wustl.edu/art_sci_etds/1080 [<https://perma.cc/9UF4-HL3U>].

⁶² Billiot, *supra* note 61, at 100.

⁶³ BUREAU OF INDIAN AFFAIRS (1994), *supra* note 61 at 39, 241.

⁶⁴ MALDONADO, *supra* note 11, at 61–62, 72, 139–44 (2019) (defining an energy sacrifice zone as “a place where human lives are valued less than the natural resources that can be extracted from the region”).

⁶⁵ See discussion *supra* Part I.

⁶⁶ See *supra* note 11..

⁶⁷ *Id.*

⁶⁸ Scott Lauria Morgensen, *Settler Homonationalism: Theorizing Settler Colonialism With Queer Modernities*, 16 GLQ: J. LESBIAN AND GAY STUD. 105, 120 (2010) (“Stories of Native absence or disappearance . . . do not erase Native people but produce particular forms of knowledge about Native people, as already or inevitably gone.”).

Should the Isle de Jean Charles Tribe's case be taken up by the courts and decided in their favor, it would require agencies to seriously consider the value of TEK. This would help make environmental policymaking more efficient by facilitating the transition to environmental models that incorporate adaptive management and nonequilibrium systems:

As the priorities of resource management policies shift towards identifying the sustainable yields of interconnected resources and ecosystem services, as well as the resiliency of the ecosystem as a whole, TEK can offer insights in a number of important ways, providing "taxonomic, spatial, temporal, and social/cultural frames of reference." The new paradigm of resource management places a premium on understanding ecosystem dynamics, focusing on adaptive management and nonequilibrium systems--subjects that Western science has largely understudied, but TEK has addressed from time immemorial.⁶⁹

While much has been said about the permissibility of incorporating TEK into environmental decision making,⁷⁰ this Essay posits that in some of these situations, TEK should not be viewed only as permissible, but as mandatory. Further research should investigate other instances when the use of TEK would be considered mandatory. To the extent that such knowledge practices are incorporated into agency decision making, they should be respected so as to not lead to the misappropriation of knowledge practices that are sometimes intertwined with indigenous spirituality and intellectual property.⁷¹

⁶⁹ Moffa, *supra* note 7, at 110.

⁷⁰ See e.g., *id.*; Elizabeth Barrett Ristorph, *Integrating Community Knowledge into Environmental and Natural Resource Decision-Making: Notes from Alaska and Around the World*, 3 WASH. & LEE J. ENERGY, CLIMATE & ENV'T 81, 106 (2012).

⁷¹ See e.g., Joseph P. Brewer II & Elizabeth Ann Kronk Warner, *Protecting Indigenous Knowledge in the Age of Climate Change*, 27 GEO. INT'L ENVTL. L. REV. 585 (2015); Daniel J. Gervais, *Spiritual but Not Intellectual? The Protection of Sacred Intangible Traditional Knowledge*, 11 CARDOZO J. INT'L & COMP. L. 467 (2003); Ameera Haider, *Reconciling Patent Law and Traditional Knowledge: Strategies for Countries with Traditional Knowledge to Successfully Protect Their Knowledge from Abuse*, 48 CASE W. RES. J. INT'L L. 347 (2016); Deepa Varadarajan, *A Trade Secret Approach to Protecting Traditional Knowledge*, 36 YALE J. INT'L L. 371 (2011).