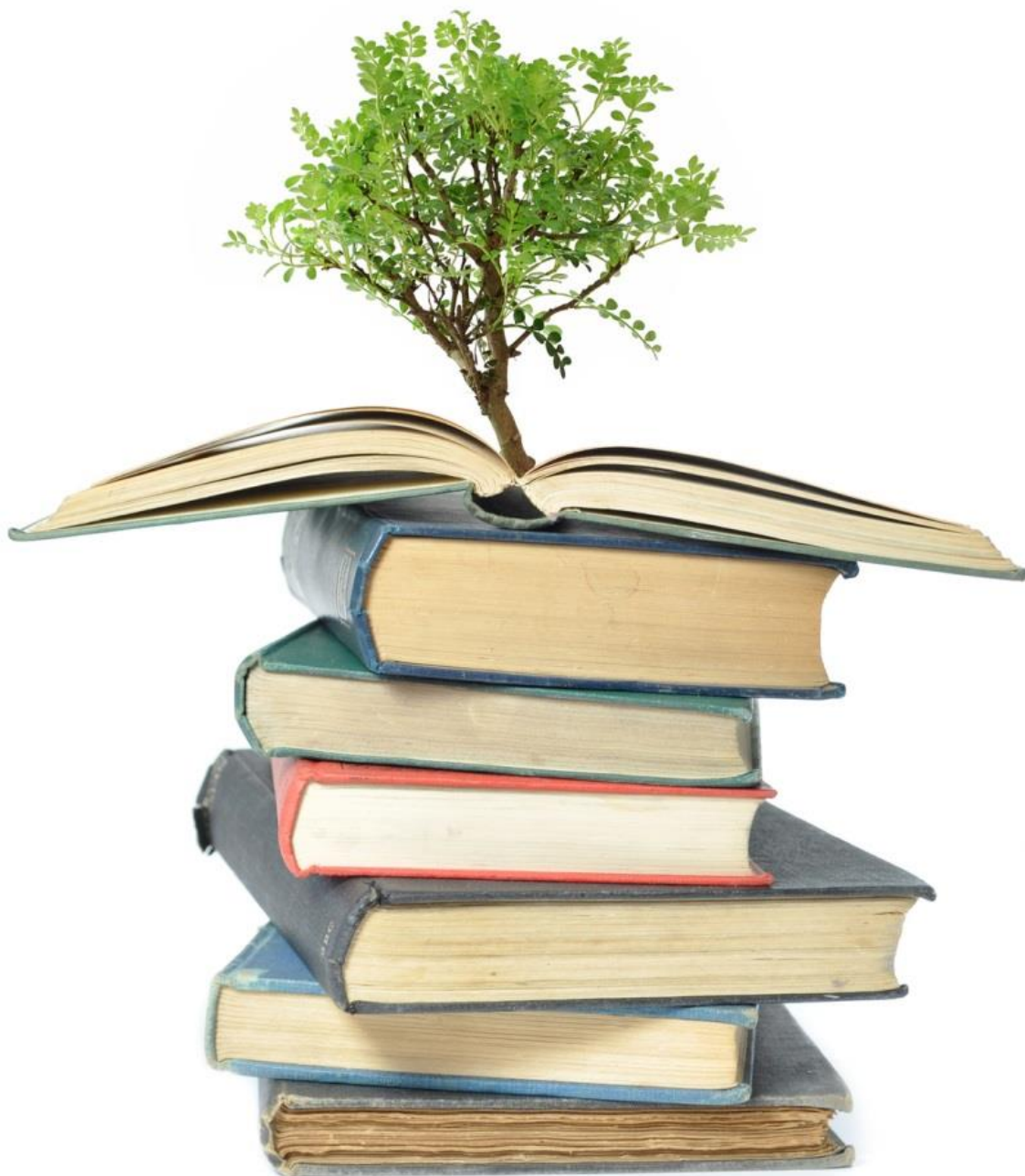




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**EMBRACING ENGAGEMENT: THE CHALLENGES AND
OPPORTUNITIES FOR THE ENERGY INDUSTRY AND TRIBAL
NATIONS ON PROJECTS AFFECTING TRIBAL RIGHTS AND
OFF-RESERVATION LANDS**

*Jeanette Wolfley**

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It may be hard for us to understand why these Indians cling so tenaciously to their lands and traditional tribal way of life. The record does not leave the impression that the lands of their reservation are the most fertile, the landscape the most beautiful or their homes the most splendid specimens of architecture. But, this is their home—their ancestral home. There, they, their children, and their forebears were born. They, too, have their memories and their loves. Some things are worth more than money and the costs of a new enterprise.¹

INTRODUCTION

Prior to European emigrants' arrival, Indian nations exercised sovereignty over all the lands of this continent. Once the United States government began to exercise its authority and military might, original or aboriginal lands of tribes were reduced to four percent.² The federal government used treaties, executive orders, and statutes to extinguish the original Indian title to land. In exchange for the millions of acres ceded to the United States, the federal government reserved lands—reservations—for tribes' permanent homelands. However, this formal conveyance of lands through treaties did not sever tribes' familial, spiritual, and cultural ties to their original lands.

As part of the treaty process, tribal leaders reserved the right to hunt, fish, and gather on areas located off the reservation of ceded lands. Today, many tribes continue to hold valuable treaty rights and exercise their reserved rights to hunt, fish, and gather on their original land base. Tribal sacred sites, cultural resources, and rights guaranteed by treaties may lie within lands located adjacent to present-day reservation lands. Indian nations are critical stakeholders in oil and gas pipeline projects and activities located near their present-day reservations, ceded lands, and in or near aboriginal lands that were occupied by Indian ancestors prior to the treaty-making era. These lands are still an integral part of the tribes' subsistence activities and spiritual life. Addressing these issues requires special attention to the unique interests and rights of tribes—something that has not always taken place in the federal consultation process.

The aim of this article is fourfold. Part I reviews the litigation resulting from the clash at the Standing Rock Sioux Tribe's Reservation. The clash occurred between the Standing Rock and Cheyenne Sioux tribes and the Houston-based company, Energy Transfer Partners, L.P., and the United

1. Fed. Power Comm'n v. Tuscarora Indian Nation, 362 U.S. 99, 142 (1960) (Black, J., dissenting) (citation omitted).

2. See DAVID H. GETCHES ET AL., FEDERAL INDIAN LAW 20 (3d ed. 1993) ("In all, Native American groups hold about 4.2% of the land in the United States.").

States government over an easement crossing treaty lands and the affected tribal resources.³ The aftermath created a great divide between tribal governments, the federal agencies who seek to approve such easements, and the energy companies. Part II discusses the vital treaty rights that are held by Indian tribes and the importance of considering cultural resources in energy-infrastructure projects. In the future, there will be new and renewed rights of way for energy-infrastructure development crossing tribal lands or affecting treaty hunting, fishing, and gathering rights; water resources and habitats; and cultural resources. Part III reviews the implementation of international regimes of conventions, human rights principles, best business practices, and social-corporate-responsibility standards to address energy-industry activities and conduct adversely impacting indigenous peoples and communities. These international regimes serve as a basis for domestic companies engaging with tribal governments.

This article concludes, in Part IV, by recommending that the energy industry engage separately with tribal governments to build relationships prior to any infrastructure development, and proposes standards or norms be incorporated to address the issues raised in the Dakota Access Pipeline (DAPL) controversy and other scenarios involving tribes, the energy industry, and the federal government. There is no doubt that building a bridge between energy developers and tribal governments is a complex undertaking and involves many issues that must be resolved; however, conversations about equity, access, respect, and the shared dignity of all human beings are necessary.

I. STANDOFF AT STANDING ROCK⁴

The Great Sioux Nation (Nation) inhabited an expansive part of the northern Great Plains—stretching from Montana and Wyoming in the west, through the Dakotas and Nebraska, and reaching as far east as Minnesota, Iowa, and Wisconsin.⁵ Over time, treaties, cession agreements, and

3. See generally Rebecca Hersher, *Key Moments in the Dakota Access Pipeline Fight*, NPR (Feb. 22, 2017, 4:28 PM), <https://www.npr.org/sections/thetwo-way/2017/02/22/514988040/key-moments-in-the-dakota-access-pipeline-fight> (providing background for the major events in the clash).

4. Walter E. Stern, *Dakota Access Controversy: Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers, Policy Review of Federal Government's Tribal Consultation Obligations, and Why This Matters to Us*, MODRALL SPERLING (Nov. 22, 2016), <https://www.modrall.com/2016/11/22/dakota-access-controversy-standing-rock-sioux-tribe-v-u-s-army-corps-of-engineers-policy-review-of-federal-governments-tribal-consultation-obligations-and-why-this-matters-to-us/> [<https://perma.cc/Y6CT-5BGJ>].

5. See Complaint for Declaratory and Injunctive Relief ¶ 8, *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 255 F. Supp. 3d 101 (D.D.C. 2017) [hereinafter *Standing Rock Complaint*].

congressional laws dramatically reduced the Nation's rights of use and occupancy over the area to which it held aboriginal title.⁶

In the Fort Laramie Treaties of 1851⁷ and 1868,⁸ the Nation ceded to the United States large portions of its aboriginal lands, but negotiated a provision guaranteeing the Nation and its members certain off-reservation rights, such as “the privilege of hunting, fishing, or passing over any of the tracts of country” on lands ceded to the United States.⁹ Following the Fort Laramie Treaties, Congress enacted a number of statutes further reducing the Great Sioux Reservation.¹⁰ The Act of March 2, 1889 divided the 1868 Treaty lands into several small reservations, including the current reservations for the Standing Rock Sioux and Cheyenne River Sioux tribes.¹¹ The Act effectively dissolved the Great Sioux Reservation. Importantly here, the 1889 Act also “preserved all provisions of the Fort Laramie Treaties that were ‘not in conflict’ with the [1889 Act].”¹² The Act also set the eastern boundaries of the Standing Rock and Cheyenne River reservations as “the center of the main channel” of the Missouri River.¹³

In 1944, Congress enacted the Pick–Sloan Flood Control Act authorizing the construction of various dams along the Missouri River.¹⁴ The Pick–Sloan project by the Army Corps of Engineers (Corps) flooded hundreds of thousands of the best Native lands along the Missouri River.¹⁵ Congress also enacted seven statutes authorizing takings of certain tribal lands for specific dam projects.¹⁶ Two of these statutes acquired lands of the Standing Rock and Cheyenne River tribes for the construction of Oahe Dam and the creation of Oahe Lake.¹⁷ The Acts contained important

6. *Id.*

7. *See generally* Treaty of Fort Laramie with Sioux, etc., 11 Stat. 749 (1851) (discussing the territory of the Sioux and Dahcotah Nation).

8. *See generally* Treaty with the Sioux Indians, 15 Stat. 635 (1868) (creating union between the tribes).

9. Treaty of Fort Laramie with Sioux, etc., 11 Stat. 749 (1851).

10. Memorandum from Hilary C. Tompkins, Solicitor, Dep’t of the Interior, on Tribal Treaty and Environmental Statutory Implications of the Dakota Access Pipeline to Sec’y of the Dep’t of the Interior 6 (Dec. 4, 2016) [hereinafter DOI Solicitor’s Dakota Access Memo].

11. Indian Appropriations Act of 1889 (Act of Mar. 2, 1889), ch. 405, 25 Stat. 888.

12. *Id.* at 896.

13. *Id.* at 889.

14. Pick–Sloan Flood Control Act, Pub. L. No. 78-534, 58 Stat. 887 (1944).

15. BYRON DORGAN, PROVIDING FOR COMPENSATION TO THE LOWER BRULE AND CROW CREEK SIOUX TRIBES OF SOUTH DAKOTA FOR DAMAGE TO TRIBAL LAND CAUSED BY PICK-SLOAN PROJECTS ALONG THE MISSOURI RIVER, S. REP. NO. 110–505, at 2 (2008); Peter Capossela, *Impacts of the Army Corps of Engineers’ Pick-Sloan Program on the Indian Tribes of the Missouri River Basin*, 30 J. ENVTL. L. & LITIG. 143, 156–57 (2015); MICHAEL L. LAWSON, DAMMED INDIANS, THE PICK-SLOAN PLAN AND THE MISSOURI RIVER SIOUX, 1944–1980 29 (Univ. Okla. Press ed., 1982).

16. Act of Dec. 22, 1944, Pub. L. No. 78-534, 58 Stat. 887.

17. Act of Sept. 3, 1954, Pub. L. No. 776, 68 Stat. 1191, 1193–94 (constructing and creating the Cheyenne River Oahe); Act of Sept. 2, 1958, Pub. L. No. 85-915, 72 Stat. 1762.

provisions guaranteeing the Tribes' hunting, fishing, and grazing rights on the taken lands. The Act provides:

After the Oahe Dam gates are closed and the waters of the Missouri River impounded, the said Indian tribe and the members thereof shall be given exclusive permission, without cost, to graze stock on the land between the water level of the reservoir and the exterior boundary of the taking area. The said tribal council and the members of said Indian tribe shall be permitted to have, without cost, access to the shoreline of the reservoir, including permission to hunt and fish in and on the aforesaid shoreline and reservoir, subject, however, to regulations governing the corresponding use by other citizens of the United States.¹⁸

Despite the passage of congressional acts following the 1868 Fort Laramie Treaty, the Sioux Tribes did not cede their long-standing cultural affiliations to the affected lands. Nor did Congress expressly extinguish any of these treaty rights.¹⁹ Nothing in the takings statutes had any impact on the reservation boundaries of the Standing Rock and Cheyenne River Tribes. This means that the successors to the Great Sioux Nation retain long-standing cultural affiliations in the several states as well as the off-reservation rights reserved by treaty.²⁰ The DAPL crosses the 1851 Treaty Reservation and traditional territories of the tribes, land to which the Tribes continue to have strong cultural, spiritual, and historical ties.²¹

The DAPL transports crude oil from the Bakken region in North Dakota across four states to facilities in Illinois,²² a roughly 1200-mile route that traverses primarily through private lands as well as the 1851 Treaty land and traditional territories of the Tribes.²³ Dakota Access constructed its

18. Act of Sept. 3, 1954, Pub. L. No. 776, 68 Stat. 1191, 1194; *South Dakota v. Bourland*, 508 U.S. 679, 689 (1993); Act of Sept. 2, 1958, Pub. L. No. 85-915, § 10 72 Stat. 1762, 1764.

19. Act of Sept. 2, 1958, Pub. L. No. 85-915, § 10 72 Stat. 1762, 1764.

20. Standing Rock Complaint, *supra* note 5, ¶ 40.

21. *Id.* ¶ 9 (“Since time immemorial, the Tribe’s ancestors lived on the landscape to be crossed by the DAPL. The pipeline crosses areas of great historical and cultural significance to the Tribe, the potential damage or destruction of which greatly injures the Tribe and its members. The pipeline also crosses waters of utmost cultural, spiritual, ecological, and economic significance to the Tribe and its members.”).

22. Hersher, *supra* note 3.

23. ENERGY TRANSFER PARTNERS, DAKOTA ACCESS, CRUDE OIL PIPELINE PROJECT IOWA INFORMATIONAL MEETINGS 5 (2014); *see also* Carly Sue, *Dakota Access Pipeline: What You Need to Know*, Nat’l Geographic: Educ. Blog (Sept. 5, 2016), <https://blog.education.nationalgeographic.com/2016/09/05/dakota-access-pipeline-what-you-need-to-know/> [https://perma.cc/85RF-BNYK] (stating the spiritual and cultural importance of the land to the tribes).

pipeline without having the requisite permit under the Missouri River.²⁴ The DAPL, however, crosses federally regulated waters of the United States under the Corps' jurisdiction at least 204 times, each of which the Corps evaluated individually rather than cumulatively as requested by the Tribes.²⁵

The pipeline crosses the Missouri River in two locations directly upstream of the Standing Rock Reservation, and under the river at Lake Oahe.²⁶ During the initial scoping process, the Corps met with the citizens of the City of Bismarck about the proposed location of the pipeline, which was about ten miles northeast of the City.²⁷ Based upon the City's objections, the Corps rerouted it to 0.5 miles north of the Standing Rock Sioux Reservation.²⁸ Dakota Access sought to obtain authorizations through section 404 of the Clean Water Act (CWA), the Mineral Leasing Act, and the Rivers and Harbors Act.²⁹ Dakota Access utilized the Corps' Nationwide Permit 12 (NWP 12) process, which grants an exemption from environmental review required under the CWA by treating the pipeline as a series of small construction sites. A NWP 12 permit authorizes pipeline crossings of regulated waters where the activity is a single and complete project and will disturb no more than a half-acre of waters of the United States.³⁰ The Tribes argued that NEPA should have been applied to the entire pipeline project before issuing any of the Nationwide Permits to Dakota Access.

Given the required Corps approvals, the Corps was obligated to consult with affected tribes in accordance with consultation obligations. This includes those under section 106 of the National Historic Preservation Act (NHPA),³¹ even though the impacted areas were outside existing

24. Rob Capriccioso, *Senators Allege DAPL Builder Didn't Have Permit to Build Under Lake Oahe*, INDIAN COUNTRY TODAY (Apr. 7, 2017), <https://indiancountrymedianetwork.com/news/politics/senators-dapl-builder-no-permit/> [https://perma.cc/2NTF-TGZ3].

25. Stern, *supra* note 4.

26. Gregor Aisch & K.K. Rebecca Lai, *The Conflicts Along 1,172 Miles of the Dakota Access Pipeline*, N.Y. TIMES, <https://www.nytimes.com/interactive/2016/11/23/us/dakota-access-pipeline-protest-map.html> [https://perma.cc/U2SX-RGJX] (last updated Mar. 20, 2017).

27. Amy Dalrymple, *Pipeline Route Plan First Called for Crossing North of Bismarck*, BISMARCK TRIBUNE (Aug. 18, 2016), http://bismarcktribune.com/news/state-and-regional/pipeline-route-plan-first-called-for-crossing-north-of-bismarck/article_64d053e4-8a1a-5198-a1dd-498d386c933c.html [https://perma.cc/9GKD-5PP8].

28. *Id.*

29. Press Release, U.S. Army Corps of Eng'rs, No Decision Yet Regarding Water Crossings for Dakota Access Pipeline (May 3, 2016) (on file with U.S. Army Corps of Engineers); *Dakota Access Pipeline FAQ's*, U.S. ARMY CORPS ENGINEERS, www.usace.army.mil/Dakota-Access-Pipeline/FAQs/ [https://perma.cc/X8SJ-XZEE] (last visited Mar. 22, 2018).

30. U.S. ARMY CORPS OF ENG'RS, 2017 NATIONWIDE PERMITS, GENERAL CONDITIONS, DISTRICT ENGINEER'S DECISION, FURTHER INFORMATION, AND DEFINITIONS 5, 7 (2017).

31. 54 U.S.C. § 306108 (2012); see 36 C.F.R. § 800.15(f) (2017) (defining consultation as "the process of seeking, discussing, and considering the views of other participants, and

reservation boundaries. The Corps also owed fiduciary duties to the tribes and other tribal governments.³² The trust responsibility itself, apart from any specific treaty, statute, or agreement, creates legally enforceable duties for federal officials in their dealings with Indian tribes.³³ As part of implementing its trust responsibilities to tribal governments under numerous federal laws, executive orders, and guidance documents, federal agencies must consult with tribes when they take actions affecting tribal interests, lands, etc.³⁴

The Corps asserted that the Standing Rock Sioux Tribe was unresponsive to initial requests for comments and that, when the Tribe expressed concerns or opposition, they were included in its decision.³⁵ Standing Rock alleged the opposite and argued that, as a tribal government, they should have been meaningfully engaged in the early stages of the pipeline planning due to the pipeline's close proximity to the Reservation and to locations with cultural, social, and religious significance to the Tribe.³⁶

On July 27, 2016, immediately after the Corps released the final Environmental Assessment and Mitigated Finding of No Significant Impact,³⁷ the Standing Rock Sioux Tribe filed suit in United States District Court for the District of Columbia.³⁸ The complaint alleged two main arguments. First, that in issuing the permit, the Corps failed to comply with

where feasible, seeking agreement with them regarding matters arising in the section 106 process"); 36 C.F.R. § 800.2(a)(4) (requiring consultations "be appropriate to the scale of the undertaking"); 36 C.F.R. § 800.2(c)(2)(ii)(A)–(E) (requiring consultations "commence early in the planning process" and agencies "provide the Indian tribe...a reasonable opportunity to identify its concerns about historic properties, advise on the identification of historic properties and participate in the resolution of adverse effects." Further, agencies must negotiate and reach mutual consent on agreements regarding historic and cultural property issues, and allow tribal governments to participate in the resolution of adverse effects to such resources); *Pueblo of Sandia*, 50 F.3d 856, 862 (10th Cir. 1995) (holding that the U.S. Forest Service violated the NHPA by failing to take reasonable efforts to identify historic properties).

32. *United States v. Mitchell*, 463 U.S. 206, 225 (1983).

33. *Nw. Sea Farms v. U.S. Army Corps of Eng'rs*, 931 F. Supp. 1515, 1519–20 (W.D. Wash. 2001) (holding the fiduciary "duty extends to the Corps in the exercise of its permit decisions" in the case of the Dakota Access pipeline); *United States v. Santa Fe Pac. R.R. Co.*, 314 U.S. 339, 347 (1941); *United States v. Creek Nation*, 295 U.S. 103, 109 (1935); *Shoshone Tribe v. United States*, 299 U.S. 476, 498 (1937).

34. *Parravano v. Babbitt*, 70 F.3d 539, 546 (9th Cir. 1995) ("[The] trust responsibility extends not just to the Interior Department, but attaches to the federal government as a whole."); see also Mary Christina Wood, *Indian Land and the Promise of Native Sovereignty: The Trust Doctrine Revisited*, 1994 UTAH L. REV. 1471, 1491 (1994) (discussing the promise of the trust doctrine to protect tribal interests); *Seminole Nation v. United States*, 316 U.S. 286, 296–97 (1941) (finding the Supreme Court has consistently recognized that the United States "is something more than a mere contracting party" with Indian tribes and has "charged itself with the moral obligation of the highest responsibility and trust" to those tribes).

35. *Standing Rock v. U.S. Corps of Eng'rs*, 205 F. Supp. 3d 4, 15, 18 (D.D.C. 2016)

36. *Id.* at 33.

37. U.S. ARMY CORPS OF ENG'RS, DECISION DOCUMENT, NATIONWIDE PERMIT 12 (2012).

38. See generally *Standing Rock Complaint*, *supra* note 5.

NHPA section 106 and “abdicated its statutory responsibility to ensure that . . . undertakings [such as DAPL] do not harm historically and culturally significant sites.”³⁹ Second, the complaint alleged that in issuing “multiple federal authorizations needed to construct the pipeline in certain designated areas along the pipeline route,” the Corps failed to comply with the NHPA and the National Environmental Policy Act (NEPA).⁴⁰

On September 9, 2016, the district court denied the injunction sought by the Tribe.⁴¹ Hours later, the Department of Justice, the Department of the Army, and the Department of the Interior issued a joint statement following the court’s order and pending appeal.⁴² It stated in part:

The Army will not authorize constructing the Dakota Access pipeline on Corps land bordering or under Lake Oahe until it can determine whether it will need to reconsider any of its previous decisions regarding the Lake Oahe site Therefore, construction of the pipeline on Army Corps land bordering or under Lake Oahe will not go forward at this time. . . . In the interim, we request that the pipeline company voluntarily pause all construction activity within 20 miles east or west of Lake Oahe.⁴³

On December 4, 2016, the U.S. Department of the Interior Solicitor, Hilary Tompkins, submitted an M-opinion analyzing the responsibility of the federal government with regard to the Tribes’ legal rights.⁴⁴ The Interior Solicitor advised the Corps that the environmental assessment and finding of no significant impact for the pipeline did not adequately consider tribal treaty rights and required more than “a dismissive note that a project is situated off-reservation.”⁴⁵ Also in December 2016, after extensive analysis and input from the Tribe and other tribes throughout the United States, the Corps committed to prepare a full Environmental Impact Statement (EIS). The full EIS would address the Tribe’s treaty rights, alternative pipeline routings outside of the Tribe’s treaty areas, and oil-spill risks.⁴⁶

39. *Id.* ¶ 2.

40. *Id.* ¶ 3.

41. Hersher, *supra* note 3.

42. Press Release, Joint Statement, Dep’t of Justice, Dep’t of the Army & Dep’t of the Interior, Regarding Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers (Sept. 9, 2016), <https://www.justice.gov/opa/pr/joint-statement-department-justice-department-army-and-department-interior-regarding-standing>.

43. *Id.*

44. DOI Solicitor’s Dakota Access Memo, *supra* note 10, at 1.

45. *Id.* at 22.

46. Plaintiff Standing Rock Sioux Tribe’s Memorandum in Support of Its Motion for Partial Summary Judgment at 1, *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng’rs*, 239 F. Supp. 3d 77 (D.D.C. 2017) [hereinafter Plaintiff’s Memorandum].

On January 18, 2017, the Corps initiated the preparation of an EIS by publishing a notice of intent and opening public comment.⁴⁷ On January 20, 2017, President Trump issued an Executive Order “expediting environmental reviews and approvals for high priority infrastructure projects”⁴⁸ together with two Presidential Memoranda, including one regarding DAPL.⁴⁹ On February 7, 2017, the Corps abruptly terminated the public comment period and announced that it would grant Dakota Access the easement to cross Lake Oahe.⁵⁰ The termination decision contained no additional analysis of the Tribe’s treaty rights, alternative routes, or oil-spill risks.⁵¹ Rather than taking steps to fulfill its fiduciary duties to the Tribe, the Corps simply dismissed them. On February 7, 2017, the Corps notified members of Congress and others of its “intent to grant an easement” for a term of 30 years under section 185.⁵² The Corps granted the easement, and a few months later the oil began flowing through the Dakota Access pipeline.⁵³

On June 14, 2017, Judge Boasberg issued a 91-page opinion on the parties’ cross-motions for summary judgment.⁵⁴ Judge Boasberg held that the Corps failed to adequately consider under NEPA the impacts of an oil spill on the Standing Rock Sioux Tribe.⁵⁵ Specifically, their treaty hunting and fishing rights, or environmental justice, or the degree to which the DAPL effects are likely to be highly controversial.⁵⁶ The court remanded the matter to the Corps forcing them to address the violations and to reexamine the inadequate sections of its environmental analysis and its

47. Notice of Intent to Prepare an Environmental Impact Statement in Connection with Dakota Access, LLC’s Request for an Easement to Cross Lake Oahe, North Dakota, 82 Fed. Reg. 5543, 5543 (Jan. 18, 2017).

48. Exec. Order No. 13,766, 82 Fed. Reg. 8657 (Jan. 24, 2017).

49. *Presidential Memorandum Regarding Construction of the Dakota Access Pipeline* (Jan. 24, 2017), <https://www.whitehouse.gov/the-press-office/2017/01/24/presidential-memorandum-regarding-construction-dakota-access-pipeline> [https://perma.cc/BG5Y-WXEB] [hereinafter *Presidential Memorandum*].

50. Response of Dakota Access, LLC in Opposition to Plaintiff Standing Rock Sioux Tribe’s Motion for Summary Judgement at 14, *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng’rs*, 239 F. Supp. 3d 77 (D.D.C. 2017).

51. Plaintiff’s Memorandum, *supra* note 46, at 17.

52. See, e.g., Letter from Paul D. Cramer, Deputy Assistant Sec’y of the Army, Installations, Hous., & P’ship to Raul Grijalva, Ranking Member, House of Rep. Comm. on Nat. Res. (Feb. 7, 2017).

53. Hersher, *supra* note 3; Merrit Kennedy, *Crude Oil Begins to Flow Through Controversial Dakota Access Pipeline*, NPR (June 1, 2017, 5:23 PM), <https://www.npr.org/sections/thetwo-way/2017/06/01/531097758/crude-oil-begins-to-flow-through-controversial-dakota-access-pipeline>.

54. *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng’rs*, 255 F. Supp. 3d 101, 120–21 (D.D.C. 2017).

55. *Id.* at 147.

56. *Id.* at 112.

approval of the DAPL.⁵⁷ The court requested additional briefings from the parties on the remedy during the remand to the Corps' review.⁵⁸

With regard to the Fort Laramie Treaty hunting and fishing rights, the court found that the Tribe's Department of Game, Fish, and Wildlife Conservation submitted comments on the Draft Environmental Assessment (EA) and explained that many tribal members rely on fishing and hunting of animals that drink from the Oahe shoreline.⁵⁹ The court noted that the Corps' "cursory nod" failed to acknowledge the potential effects of an oil spill on tribal resources.⁶⁰ The court stated that the Corps to identify the risks of a spill to wild and aquatic life, all resources impacting the Tribe's treaty rights.⁶¹

The court also held that the EA violated Environmental Justice Executive Order 12,898 and NEPA.⁶² The use of a half-mile buffer was not reasonable and too limited because it failed to analyze the oil pipeline impacts on potentially affected minority and low-income populations.⁶³ The half-mile buffer is typically used in transportation projects and natural gas pipelines.⁶⁴ The court notes the Environmental Protection Agency (EPA) advised the Corps that the assessment of the impacts should "correspond to the impacts of the proposed project instead of only the area of construction disturbance," but the Corps did not accept the EPA's advice.⁶⁵ The Corps' limited review would only cover construction impacts, not spill impacts, downstream. The court noted that the EA is "silent" on the cultural practices and social and economic factors of the Tribe; therefore, the EA did not properly consider the environmental-justice implications of the pipeline on the tribal community.⁶⁶

Meanwhile, the litigation continues in federal court. The impact of the DAPL standoff, litigation, and political maneuvering is significant. It has created a ripple effect throughout Indian Country and has deeply affected federal-tribal relations, Native-non-native relations in North Dakota, and tribal-energy industry relations. Tribal opposition to energy-infrastructure development will likely continue in the future as energy rights of way are renewed or new easements are proposed.⁶⁷ Alternatively, tribes and energy

57. *Id.*

58. *Id.* 147–48.

59. *Id.* at 134.

60. *Id.*

61. *Id.* at 147–48.

62. *Id.* at 140.

63. *Id.* at 138–40.

64. *Id.* at 138.

65. *Id.*

66. *Id.* at 140.

67. Heather Saucier, *Protesting Pipelines Is Becoming a Growing 'Industry,'* (Sept. 19, 2017),

companies may seek to resolve their differences in face-to-face engagement and communicate and collaborate on off-reservation matters.

II. PROTECTING THE SOLEMN PROMISES MADE IN TREATIES

This part explains the reserved rights of tribal nations and land ethics. In DAPL, and across the country, tribes seek to protect their land base, tribal sovereignty, and treaty rights because Native peoples have irreplaceable political and territorial histories and cultural identities. Their rural communities have been, and still are, confronted in different degrees by environmentally damaging energy projects for their rich natural resources or as a corridor for transmission of fossil fuels. These projects would not be tolerated in more populated regions. Control over tribal territories and the rights reserved by treaties are key components of tribal self-determination and cultural survival. Recognition and respect for these tribal interests are paramount to begin discussions and potential resolution of disputes with the energy industry.

A. Reserved Treaty Rights

In *Standing Rock Sioux*, the court recognized the Tribe's historic Fort Laramie Treaty rights, determined that the Corps failed to adequately assess the impacts of the DAPL on these vital treaty-reserved rights, and remanded for further assessment by the Corps.⁶⁸ This contemporary judicial review of treaties demonstrates their continued importance in tribal societies and how these bargained-for promises—reserving rights such as water, hunting, fishing, and gathering—impact society's view of oil and gas pipeline construction. Federal law does not permit abrogation of Indian treaty rights, absent express congressional authorization.⁶⁹ Accordingly, energy companies seeking rights of way must not interfere with the off-reservation treaty rights of tribes. It is also incumbent upon the United States in federal agency decision-making to protect or accommodate Indian treaty rights when reviewing applications for easements that seek to either cross treaty-reserved lands or affect treaty-reserved rights.

http://www.rigzone.com/news/oil_gas/a/151792/Protesting_Is_Becoming_A_Growing%20_Industry/?al=HG2 [https://perma.cc/324R-EM3Q]

68. Presidential Memorandum, *supra* note 49; Carla F. Fredericks, *Operationalizing Free, Prior and Informed Consent*, 80 ALBANY L. REV. 429, 472–77 (2017).

69. *Menominee Tribe v. United States*, 391 U.S. 404, 413 (1968).

Indian treaty rights to hunt, fish, and gather are property rights protected under federal law.⁷⁰ Treaties are bargained-for agreements entered into between Indian tribes and the United States pursuant to the United States Constitution.⁷¹ This clause grants the President the power to negotiate treaties subject to ratification by two-thirds of the Senate.⁷² Over 700 treaties were negotiated with Indian tribes, and about 400 remain in force today.⁷³ These treaties establish the federal-tribal relationship and reserve and protect numerous tribal rights. Nearly all treaties promised a permanent homeland and federal promises to provide food, clothing, and services to tribes.⁷⁴

In *United States v. Winans*, one of the first treaty fishing cases, the Supreme Court confirmed that hunting, fishing, and gathering rights were vital to tribal life.⁷⁵ The court stated that these activities “were not much less necessary to the existence of the Indians than the atmosphere they breathed.”⁷⁶ In *Winans*, the Court held that tribal members possess an easement of access over privately held land as necessary to the exercise of treaty hunting, fishing, and gathering rights and that an access easement was necessarily implied from the treaties’ specific reservation of fishing rights at usual and accustomed places.⁷⁷ These hunting, fishing, and gathering rights are considered reserved treaty rights and have been consistently protected from shifting patterns of property ownership and development.⁷⁸

The importance of these traditional tribal practices was paramount in treaty negotiations where tribes sought to retain these rights when they signed treaties and agreements ceding ownership to their land to the United States. Indeed, treaties reserving hunting, fishing, and gathering rights over previously owned tribal lands do not constitute a “grant of rights to the Indians, but a grant of right[s] from them,—a reservation of those not granted.”⁷⁹ Treaty-reserved rights on off-reservation lands are similar to easements running with burdened lands and include easements to access

70. *Washington v. Wash. State Commercial Passenger Fishing Vessel Ass’n*, 443 U.S. 658, 707–08 (1979) (holding that Indians have the implied rights necessary to exercise a treaty’s explicit or substantive provisions); *Lac Courte Oreilles Band of Lake Superior Chippewa Indians v. Voight*, 700 F.2d 341, 352 (7th Cir. 1983); see *Menominee*, 391 U.S. at 413 (finding treaty property rights remain unless there is an explicit congressional abrogation).

71. U.S. CONST., art. II, § 2, cl. 2.

72. *Id.*

73. MATTHEW L.M. FLETCHER, PRINCIPLES OF FEDERAL INDIAN LAW 150 (2017).

74. See CHARLES F. WILKINSON, AMERICAN INDIANS, TIME, AND THE LAW: NATIVE SOCIETIES IN A MODERN CONSTITUTIONAL DEMOCRACY 14–15 (1987) (providing an overview of the promises in treaties).

75. *United States v. Winans*, 198 U.S. 371, 371 (1905).

76. *Id.* at 381.

77. *Id.*

78. *Id.* at 381–82.

79. *Id.* at 381.

hunting, fishing, and gathering sites.⁸⁰ Accordingly, “reserved rights on off-reservation lands do not require the tribe to have title to the underlying land.”⁸¹

Once these off-reservation rights are reserved by treaty or agreement, the rights survive subsequent tribal cession of the land, unless the rights are clearly and plainly extinguished.⁸² These treaty-reserved rights are property rights within the meaning of the Fifth Amendment; Congress and the courts cannot take these rights without providing compensation.⁸³ Treaty language reserving hunting, fishing, and gathering rights are to be construed according to the Indian law canons of construction.⁸⁴ For example, treaties are to be interpreted liberally in favor of Indians, treaty ambiguities are to be resolved in Indians’ favor, and treaties are to be interpreted as Indians would have understood them.⁸⁵

Additionally, aboriginal or original Indian title includes the right to hunt, fish, and gather.⁸⁶ These rights remain in the tribe unless it has been granted to the United States by treaty, abandoned, or extinguished by statute.⁸⁷ The power to extinguish aboriginal title rests exclusively with the United States,⁸⁸ and if title to land is extinguished, the rights to hunt, fish, and gather are extinguished unless reserved by treaty, statute, or executive order.⁸⁹

80. See *id.* (“[The treaties] imposed a servitude upon every piece of land as though described therein.”).

81. COHEN’S HANDBOOK OF FEDERAL INDIAN LAW § 18.02 (Nell Jessup Newton ed., 2012); see also *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 202 (1999) (finding that although the Tribe ceded title to their land they did not give up usufructuary rights to hunting, fishing, and gathering); *Lac Courte Oreilles Band of Lake Superior Chippewa Indians v. Voight*, 700 F.2d 341, 352 (7th Cir. 1983) (“Treaty-recognized rights of use, or usufructuary rights, do not necessarily require that the tribe have title to the land.”); *United States v. Michigan*, 471 F. Supp. 192, 213 (6th Cir. 1979) (discussing reserved fishing rights).

82. *Mille Lacs Band of Chippewa Indians*, 526 U.S. at 197; see Charles F. Wilkinson & John M. Volkman, *Judicial Review of Indian Treaty Abrogation: “As Long as Water Flows, or Grass Grows upon the Earth” – How Long a Time Is That?*, 63 CALIF. L. REV. 601, 637–38 (1975).

83. *Muckleshoot Indian Tribe v. Hall*, 698 F. Supp. 1504, 1510 (W.D. Wash. 1988).

84. *Mille Lacs Band of Chippewa Indians*, 526 U.S. at 194 n.5, 196, 200.

85. *County of Oneida v. Oneida Indian Tribe*, 470 U.S. 226, 247 (1985); *Carpenter v. Shaw*, 280 U.S. 363, 367 (1929); *Jones v. Meehan*, 175 U.S. 1, 10–11 (1899) (“[T]he treaty must therefore be construed, not according to the technical meaning of its words to learned lawyers, but in the sense in which they would naturally be understood by the Indians.”).

86. *Mitchell v. United States*, 34 U.S. 710, 732–35 (1835) (finding aboriginal or original Indian title refers to land claimed by virtue of possession and tribal exercise of sovereignty). See generally Guy Carlton, *The Law of Native American Hunting, Fishing and Gathering Outside of Reservation Boundaries in the United States and Canada*, 39 CAN.–U.S. L.J. 69, 69 (2015) (discussing aboriginal title as applied to off-reservation hunting, fishing, and gathering rights).

87. *United States v. Santa Fe Pac. R.R. Co.*, 314 U.S. 339, 347 (1941).

88. *Id.*; see *Mille Lacs Band of Chippewa Indians*, 526 U.S. at 202–03 (explaining that such extinguishment must be clearly expressed in a treaty or statute).

89. See generally *Jones v. Meehan*, 175 U.S. 1 (1899) (expressing that use and conveyance language must be specific in order to continue use of the land in ways prior afforded).

In 1908, in *Winters v. United States*, the Supreme Court held that when the federal government set aside land for the Gros Ventre and Assiniboine Sioux tribes of the Fort Belknap Indian Reservation in Montana, it impliedly reserved sufficient water from the Milk River to fulfill its purpose for creating the Reservation.⁹⁰ The purpose was to provide a permanent tribal homeland with an agricultural economy.⁹¹ Department of Interior's Indian Water Office criteria for Indian Water Rights Settlements recognize that "Indian water rights are vested property rights for which the United States has a trust responsibility, with the United States holding legal title to such water in trust for the benefit of the Indians."⁹²

Since *Winters*, courts addressing tribal-reserved water rights for fisheries have recognized habitat protection as the basis for Indian-reserved water rights.⁹³ In the *United States v. Adair* and *Colville Confederated Tribes v. Walton* (*Walton I*) decisions, the Ninth Circuit recognized that the reserved treaty rights to fish on rivers and to gather aquatic plants require the presence of sufficient water to maintain the rivers, lakes, and other waterways upon which the plants and fisheries depend.⁹⁴ These Indian-reserved rights are property rights with a "priority date of time immemorial,"⁹⁵ and thus, are superior in rank to any water rights created under other state or federal law.⁹⁶ Federal and state agencies, as well as private parties, may not interfere with these *in situ* water rights.⁹⁷ Neither states nor private property owners may bar tribal access to areas subject to treaty hunting, fishing, and gathering rights.⁹⁸ This principle also applies to federal agencies.⁹⁹

B. Tribal Land Ethics

90. *Winters v. United States*, 207 U.S. 564, 577 (1908).

91. *Id.*

92. Criteria and Procedures for Indian Water Rights Settlements, 55 Fed. Reg. 9223 (Mar. 12, 1990).

93. Joint Bd. of Control of Flathead, Mission & Jocko Irrigation Dists. v. United States, 832 F.2d 1127, 1132 (9th Cir. 1987) (reversing the trial court's refusal to issue an injunction to protect tribal water rights for fish); Kittitas Reclamation Dist. v. Sunnyside Valley Irrigation Dist., 763 F.2d 1032, 1033 (9th Cir. 1985) (holding that the district court acted appropriately in ordering the release of water to protect the fishery habitat); *United States v. Adair*, 723 F.2d 1394, 1415 (9th Cir. 1983).

94. *Adair*, 723 F.2d at 1415; *Colville Confederated Tribes v. Walton* (*Walton I*), 647 F.2d 42, 48 (9th Cir. 1981).

95. *Adair*, 723 F.2d at 1414.

96. *Id.* at 1415.

97. *Id.* at 1418.

98. *United States v. Winans*, 198 U.S. 371, 381-82 (1905).

99. *Confederated Tribes of the Umatilla Indian Reservation v. Alexander*, 440 F. Supp. 553, 553-54, 556 (D. Or. 1977) (discussing that the Army Corps of Engineers may not construct a dam that will destroy fishing stations without express authorization by Congress).

In addition to treaty rights and water and habitat protection, tribes have legitimate ties to water and land resources that are part of their traditions. For some tribal peoples, their creation stories are tied to large water bodies, rivers, or lands.¹⁰⁰ Thus, there is a special relationship with water and it is sacred to them. For example,

[w]hen [tribal people] say “water is life,” they are speaking in terms of their Creation story, where they originated, and thus give respect and reverence to their place of origin. They also mean that water is a living being or spirit that has healing powers. Finally, they know that all human and non-human beings must have water to survive.¹⁰¹

The Dakota, Lakota, and Nakota speaking people involved in the DAPL dispute have strongly voiced opposition to the DAPL because of the risk of it polluting water sources critically tied to their cultures and their very being.¹⁰² Tribes have vastly different traditional perspectives about land than the majority of society.¹⁰³ The tribal ethic is grounded in a deep respect for all of nature.¹⁰⁴ Tribal ceremonies renew the Earth, so in turn the Earth will continue to support tribes.¹⁰⁵ Great respect for the creation, and all those beings that are part of the creation, reaffirms the relationship between humans and the creation. Annual ceremonies, therefore, are practiced at areas that may occur off-reservation where the tribal people emerged from the land or water.¹⁰⁶ This deep relationship with ancestral homelands for religious communion, identity, and family ties continues to sustain tribal communities.¹⁰⁷ The many landscapes located on aboriginal lands are the holy lands of tribes.¹⁰⁸ Accordingly, tribal people have a spiritual duty to protect these holy lands and safeguard the relationship between the people and Earth, its creator, for future generations.¹⁰⁹

100. For example, as a member of the Shoshone-Bannock Tribes, the author knows her Tribal origin story is tied to water, and many tribes have similar creation stories connected to the Earth, sky, or waters of the universe.

101. Jeanette Wolfley, *Biagaweit: Securing Water from the Mighty River in the Snake River Basin Adjudication*, 52 IDAHO L. REV. 313, 316 (2016).

102. Standing Rock Complaint, *supra* note 5, ¶ 9.

103. See Frank Pommersheim, *The Reservation as Place: A South Dakota Essay*, 46 U. MICH. J.L. REFORM 417, 419 (2013) (discussing the impacts a lack of consultation can have on a tribe).

104. Elizabeth Ann Kronk Warner, *Working to Protect the Seventh Generation: Indigenous People as Agents of Change*, 13 SANTA CLARA J. INT'L L. 273, 278 (2015).

105. See generally *id.* (discussing how all honored areas are subject to ceremonies).

106. *Id.*

107. See generally Rebecca Tsosie, *Tribal Environmental Policy in an Era of Self-Determination: The Role of Ethics, Economics, and Traditional Ecological Knowledge*, 21 VT. L. REV. 225, 228 (1996) (discussing the significance of the land to American Indian nations).

108. *Id.*

109. *Id.*

For centuries, native peoples inhabited and flourished in their aboriginal and cultural landscapes where creation stories formed their very being and natural world. The mountains, foothills, canyons and meadows provided shelter from winter storms and summer heat, sustained herds of game animals, plants and medicines, and served as places for tribal gatherings, and religious celebrations. These were the landscapes that had been shaped by thousands of years of native use and habitation.¹¹⁰

The continuing link between the tribal communities and their holy lands is critical to Native people's continuing political and social wellbeing, cultural identity, and tribal sovereignty. Tribes "have a special relationship with their land and water[,] which they see as imbued with a spirituality and sacredness not generally understood by others."¹¹¹ The land and water for them is more than just a habitat or political boundary; it is the basis of the tribes' origin, social organization, economic system, and cultural identification. And it is threats to the land and water, and thereby to tribal lifestyle, that prompts and guides the tribal efforts to protect and preserve the water for present and future generations.

Today, Native people face many challenges to protect and preserve their spiritual traditions. The traditions of laws, customs, and languages play a critical role in tribal ways of life. Without this basic understanding and respect for these tribal traditions, there is nothing that the written law can do to preserve tribal histories, oral literatures, sciences, artistic traditions, or their very being.

For indigenous tribal people of the United States, creation stories, songs, prayers, and traditional ecological knowledge and wisdom teach them to visualize and understand the connections between the physical environment, the spiritual values that create and bind a tribal community, and the social welfare of the community.¹¹² Tribal people are taught a system of values that induce a profound attitude of respect for the natural forces that give life to the complex world of which they are but a small part.¹¹³ This traditional ecological knowledge held by indigenous peoples of the United States will continue to be the beacon for tribal ways of life and will guide tribal peoples into the next century.

110. Jeanette Wolfley, *Reclaiming a Presence in Ancestral Lands: The Return of Native Peoples to the National Parks*, 56 NAT. RES. J. 55, 55 (2016).

111. Wolfley, *supra* note 101, at 316.

112. Jeanette Wolfley, *Ecological Risk Assessment and Management: Their Failure to Value Indigenous Traditional Ecological Knowledge and Protect Tribal Homelands*, 22 AM. INDIAN CULTURE AND RES. J. 151, 152 (1998).

113. *Id.* at 159–60.

The protection of tribal treaty-reserved rights is a vital concern of tribes across the United States. The solemn promises to protect these rights by the United States is even more important today because of the increase in oil and gas production and the shipping of oil and gas across tribal lands. Tribes, as witnessed in the DAPL conflict, will not sacrifice their treaty rights, which secured the right to hunt, fish, gather, protect water habitats, and preserve water resources for cultural vitality. They will fulfill their responsibility to steward the land and water for future generations.

III. THE ENERGY INDUSTRY'S SOCIAL RESPONSIBILITIES

So, what value would there be for the energy industry to engage with and adopt voluntary principles of discourse with tribal governments? There are several reasons companies should seek such engagement. The decision to do so supports respect for tribal sovereignty, promotes overall engagement and cooperation, and encourages community collaboration for other potential projects.¹¹⁴ While tribes do not expect a corporation to owe loyalty to these tribal values, corporations have good reason to consider these issues. From an industry perspective, active engagement may decrease future litigation risks, expedite projects, reduce costs, and address the negative public perception of industry not considering public or tribal interests.¹¹⁵ Certainly, conflict with communities increases reputation and legal risks for industry companies. Reputation is an energy industry company's lifeblood because it is the key to attracting quality partners, gaining the opportunity to extract and distinguish one company from another, generating revenue, and paying dividends to its stockholders.¹¹⁶ Media reports, lawsuits, and activist campaigns bring international attention to the negative effects of a company's projects and can taint reputations.

The DAPL is a prime example of the adverse consequences that can result from not engaging tribal communities and the public. The nine-month standoff attended by thousands of protestors at the rural tribal community and the litigation by the Standing Rock and Cheyenne River Sioux tribes brought international attention to the Dakota Access project.¹¹⁷ During this

114. David M. Schraver & David H. Tennant, *Indian Tribal Sovereignty*, 75 ALBANY L. REV. 133, 174 (2012).

115. See SHIFT & INST. FOR HUMAN RIGHTS & BUS., OIL AND GAS SECTOR GUIDE ON IMPLEMENTING THE UN GUIDING PRINCIPLES ON BUSINESS AND HUMAN RIGHTS 8 (2013).

116. See generally David B. Spence, *Corporate Social Responsibility in the Oil and Gas Industry: The Importance of Reputational Risk*, 86 CHI.-KENT L. REV. 59 (2011) (discussing examples of corporate liability and the impacts a negative reputation can have on a business).

117. Complaint of Energy Transfer Equity ¶ 10, *Energy Transfer Equity v. Greenpeace Int'l. et al.*, No. 1:17-cv-00173-CSM (D.N.D. Aug. 22, 2017).

period, three international banks divested their money from the DAPL project, and U.S. cities closed their accounts in banks supporting the company.¹¹⁸ Energy Transfer Partners has felt the sting of this publicity and loss of revenue, so much so that Energy Transfer Partners has filed a \$300 million Racketeer Influenced and Corrupt Organization lawsuit in the federal court of North Dakota against Greenpeace and other environmental groups for their activism against the DAPL project.¹¹⁹ The 187-page complaint alleges the environmental groups tainted its reputation causing it to lose billions of dollars.¹²⁰ The aftermath of such controversies necessitates public relations campaigns to repair the damage, which are expensive endeavors that take up significant managerial time.¹²¹

Finally, companies that make enemies out of the populations affected by their projects experience higher corporate and political risks.¹²² The disruption or loss of a project may reduce a company's profitability, asset values, and stock price. Well-diversified companies also suffer, due to the ripple effects such events can have on a company's reputation.¹²³

In addition to ruining a company's reputation, tribal and community opposition can cause significant other risks including: (1) reduced access to capital; (2) increased construction costs and delays; (3) reduced access to critical project labor and material inputs; (4) operational delays and increased production costs; (5) reduced demand for products (particularly name-brand consumer items); and (6) increased costs of post-hoc mitigation of environmental and social impacts.¹²⁴ "Moreover, community resistance can have adverse impacts on corporate operations beyond the scope of an individual project, including negative impacts on stock prices, brands, and reputations, and greater difficulty in securing financing, insurance, and community cooperation in future projects."¹²⁵

Involving tribal communities in an engagement process can produce significant benefits for a company, the region, and the environment. Tribal support can save time, which can yield significant monetary benefits. For a

118. Bill Chappell, *2 Cities to Pull More than \$3 Billion from Wells Fargo over Dakota Access Pipeline*, NPR (Feb. 8, 2017, 2:18 PM), <http://www.npr.org/sections/thetwo-way/2017/02/08/514133514/two-cities-vote-to-pull-more-than-3-billion-from-wells-fargo-over-dakota-pipeline> [https://perma.cc/P4P7-WKZQ] (reporting that Norway's DNB Bank, Dutch company ING, and BNP Paribas of France divested their money from the DAPL project, and the cities of Seattle, Los Angeles, San Francisco, Davis, and Santa Monica closed their accounts with Wells Fargo Bank.).

119. Complaint of Energy Transfer Equity, *supra* note 117, ¶ 388.

120. *Id.* ¶ 1.

121. Lisa J. Laplante & Suzanne A. Spears, *Out of the Conflict Zone: The Case for Community Consent Processes in the Extractive Sector*, 11 YALE HUM. RTS. & DEV. L.J. 69, 73 (2008).

122. *Id.*

123. *Id.*

124. STEVEN HERZ ET AL., DEVELOPMENT WITHOUT CONFLICT, THE BUSINESS CASE FOR COMMUNITY CONSENT 13 (2007).

125. *Id.*

large-scale infrastructure pipeline project, the total costs of engaging the affected tribal communities and gaining their consent are likely to be extremely small relative to the total project costs.¹²⁶ Moreover, a proven track record of harmonious tribal community relations can make future interactions with communities much easier and can help an energy company navigate other projects.

Reducing a community's feelings of disempowerment and economic distress can also alleviate community opposition. A 2000 study by the World Bank Group called "Voices of the Poor" found that the poor feel that their voices are not heard and that they have no control over the events that have the greatest impact on their lives.¹²⁷ The study documented that when communities feel excluded from participating in decision-making processes and have grievances regarding energy-industry projects, they may oppose projects that are detrimental to all stakeholders.¹²⁸ Thus, while energy-industry companies must address the negative impacts of their own operations, they also must address certain features of the communities in which they operate if they wish to avoid community opposition in the future. The risk the industry faces is a more organized and more mobilized opposition, which will make it arduous for corporations to meet their responsibilities to their shareholders.

Beginning in the 1990s, as a part of risk management, numerous corporate-social-responsibility principles, standards, best business practices, and human rights mechanisms have been employed by oil and gas companies in their international work with indigenous peoples and governments who did not have well-developed legal regimes.¹²⁹ The energy industry and other multi-national corporations

have been the subject of widespread criticism for human rights abuses they are alleged to have committed or to have had the ability to prevent. From remote indigenous communities in Nigeria, the Far East and Colombia to the streets of Seattle, Quebec City and Genoa, voices calling for corporate accountability have grown more persistent.¹³⁰

126. *Id.*

127. DEEPA NARAYAN ET AL., VOICES OF THE POOR: CAN ANYONE HEAR US? 229 (2000).

128. *See id.* at 15 (discussing poverty related studies).

129. *See, e.g.*, Spence, *supra* note 116, at 76–78 (explaining the trend toward socially responsible business practices).

130. Bennett Freeman et al., *A New Approach to Corporate Responsibility: The Voluntary Principles on Security and Human Rights*, 24 HASTINGS INT'L & COMP. L. REV. 423, 424 (2001).

Today, international energy industry companies call upon a range of corporate social responsibility initiatives, standards, and tools to help them manage community relations responsibly. Many major companies have codes of conduct in place. The current wave of corporate responsibility focuses on engagement of affected communities and stakeholders.¹³¹ The mechanisms developed in the international arena in response to international non-governmental organizations, indigenous peoples, and governments are explored to consider their application to energy companies in the United States that affect tribal nations.

A. Corporate Social Responsibility

Corporate social responsibility (CSR) is gaining more support in the business world.¹³² CSR is based on the idea that companies owe duties to communities and stakeholders beyond those enshrined in the law.¹³³ “The word ‘responsibility’ implies a duty to someone or something; the use of the word ‘social’ as a modifier implies that companies owe duties to society at large.”¹³⁴ CSR is not new. Firms have always given company money to charitable organizations. Indeed, charitable philanthropy was the first wave of CSR methods.¹³⁵ For more than two decades now, heavily-regulated companies have explored ways in which they could move beyond compliance, particularly with respect to the environmental impacts of their actions. The second generation of CSR has called for social engagement of local communities and building relationships with countries and corporations.¹³⁶ CSR assists in moving away from opposition and toward constructive engagement. CSR enables the parties to discuss and resolve a wide variety of issues beyond the environment, such as human rights violations, cultural rights, land issues, and general societal impacts.

A variety of joint initiatives addressing human rights issues in the business context have emerged, including the United Nations Global Compact.¹³⁷ In an address to the World Economic Forum on January 31,

131. See generally GLOBAL REPORTING INITIATIVE, THE EARTH CHARTER, GRI AND THE GLOBAL COMPACT: GUIDANCE TO USERS ON THE SYNERGIES IN APPLICATION AND REPORTING (2008) (discussing principles for strategic community investment).

132. See, e.g., PAC. CONT’L, THE IMPORTANCE OF CORPORATE SOCIAL RESPONSIBILITY 2 (2013) (describing the benefits of CSR practices).

133. See *id.* (emphasizing that the long-term health of a company relies on a focus of people, planet, and profit).

134. Spence, *supra* note 116 at 62.

135. *Id.*

136. See generally Doreen McBarnet, *The New Corporate Accountability: Corporate Social Responsibility Beyond Law, Through Law*, FOR LAW in THE NEW CORPORATE ACCOUNTABILITY: CORPORATE SOCIAL RESPONSIBILITY AND THE LAW 9–58 (McBarnet, et al. eds. 2007).

137. Our Mission, U.N. GLOBAL COMPACT, <https://www.unglobalcompact.org/what-is-gc/mission> [<https://perma.cc/H8CM-ZB8M>] (last visited Mar. 24, 2018).

1999, U.N. Secretary-General Kofi Annan extended an invitation to business leaders to join the Global Compact.¹³⁸ The Global Compact brought companies together with U.N. agencies, governments, labor, and civil society to support ten principles in the areas of human rights, labor, the environment, and anti-corruption.¹³⁹

Through policy dialogues, mutual learning, engagement, and collective action, this initiative seeks to advance responsible corporate citizenship so that business can be part of the solution to the challenges of globalization.¹⁴⁰ In practice, this means making sure that a company identifies, prevents, mitigates, and accounts for any negative impacts it may have on society and the environment. This establishes a culture of integrity and compliance. Despite nearly 9,000 companies and 4,000 non-businesses, and other stakeholders operating in more than 70 countries, it is important to keep in mind that commitments to the Global Compact's Principles are non-binding.¹⁴¹ Therefore, to be effective, they must rely on public accountability, transparency, and the enlightened self-interest of companies.¹⁴² Even though each principle is followed by implementation recommendations, opponents find them inconsequential, even misleading, because they lack proper enforcement mechanisms and are too general to generate accountability. Again, the lack of independent monitoring and enforcement via sanctions highlight the limited ambition, and therefore, impact, of this initiative in protecting against corporate abuse of human rights. The United Nations expressly acknowledges that it has neither the mandate, nor the capacity, to monitor and verify corporate practices.¹⁴³

138. The U.N. Glob. Compact Office, *The Global Compact Leaders Summit*, 2 (Oct. 2004).

139. *The Ten Principles of the UN Global Compact*, U.N. GLOBAL COMPACT <https://www.unglobalcompact.org/what-is-gc/mission/principles> [<https://perma.cc/9EGA-ZBAJ>] (last visited Mar. 30, 2018) (showing that the U.N. Global Compact's ten principles are derived from the Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the U.N. Convention Against Corruption); see also David Kinley & Junko Tadaki, *From Talk to Walk: The Emergence of Human Rights Responsibilities for Corporations at International Law*, 14 VA. J. INT'L L. 931, 951, 972 (2004) (stating the focus of the ten principles highlighted in the U.N. Global Compact).

140. See generally The U.N. Glob. Compact Office, *After the Signature: A Guide to Engagement in the United Nations Global Compact* 13, 17, 26 (Jan. 2012) (discussing sector-wide business initiatives on human rights).

141. *Our Participants*, U.N. GLOBAL COMPACT, <https://www.unglobalcompact.org/what-is-gc/participants/> [<https://perma.cc/SMJ8-X4LA>] (listing those entities participating in the Global Compact); Kinley & Tadaki, *supra* note 139, at 951.

142. The U.N. Glob. Compact Office & Secretariat of the Org. for Econ. Co-operation & Dev., *The UN Global Compact and the OECD Guidelines for Multinational Enterprises: Complementarities and Distinctive Contributions* 3, 6 (Apr. 26, 2005).

143. Joshua Karliner et al., *The United Nations Sits in Suspicious Company*, N.Y. TIMES (Aug. 10, 2000), <http://www.nytimes.com/2000/08/10/opinion/the-united-nations-sits-in-suspicious-company.html> [<https://perma.cc/EKM4-S23G>].

Further, there is some concern as to the credibility of the Global Compact given that it is quite possible for corporations to continue to violate human rights while enjoying the status of signatory to the Global Compact.¹⁴⁴ Some have argued that “the Global Compact is little more than an instrument of rhetoric. It has indeed raised awareness of the issues involved, both within the corporate world and the UN itself, which is an important first step, but it is no more than that.”¹⁴⁵

No United States oil and gas company, and only one mining company, Newmont Mining Group, has adopted the Global Compact principles.¹⁴⁶ Why is it the United States energy industry has chosen not to embrace any of the United Nations principles, particularly principles 7–9, which encourage businesses to: (7) support a precautionary approach to environmental challenges; (8) undertake initiatives to promote greater environmental responsibility; and (9) encourage the development and diffusion of environmentally friendly technologies.¹⁴⁷ After all, these are non-binding voluntary principles that would support an energy industry’s commitment to social responsibility, concern for the environment, and enhance a company’s reputation. Perhaps, it has to do with the United Nations’ overarching goals of global sustainability, climate-change initiatives, promoting low-carbon emissions, and their link to the Global Compact principles for businesses being greener in the future.¹⁴⁸

Certainly, some energy companies in the United States would prefer to do business as usual and not concern themselves with such initiatives. Indeed, the current Administration does not recognize climate change and is unwilling to sign the Paris Agreement to begin addressing the dire environmental issues facing the world.¹⁴⁹ Unfortunately, it appears that until the United States government fully recognizes the adverse impacts of the energy industry on the atmosphere and other natural resources, energy companies are unlikely to embrace the Global Compact principles.

The United Nations further sought to impose human rights norms into corporate-business practices when it adopted the United Nations Norms on Responsibilities of Transnational Corporations and Other Business

144. *Id.*; Danny Kennedy, *Rio Tinto: Global Compact Violator*, GLOBAL POL’Y F., (July 13, 2001), <https://www.globalpolicy.org/component/content/article/225/32159.html> [<https://www.globalpolicy.org/component/content/article/225/32159.html>]; Kinley & Tadaki, *supra* note 139, at 951.

145. Kinley & Tadaki, *supra* note 139, at 951.

146. *Our Participants*, *supra* note 141.

147. The Ten Principles of the UN Global Compact, *supra* note 139.

148. G.A. Res. 70/1, Transforming Our World: The 2030 Agenda for Sustainable Development (Sept. 25, 2015).

149. Michael D. Shear, *Trump Will Withdraw U.S. from Paris Climate Agreement*, N.Y. TIMES (June 1, 2017), <https://www.nytimes.com/2017/06/01/climate/trump-paris-climate-agreement.html> [<https://perma.cc/G2JQ-CMFL>].

Enterprises with Regard to Human Rights (Norms).¹⁵⁰ “The Norms represent a landmark step in holding businesses accountable for their human rights abuses and constitute a succinct, but comprehensive, restatement of the international legal principles applicable to businesses with regard to human rights, humanitarian law, international labor law, environmental law, consumer law, anticorruption law, and so forth.”¹⁵¹ The Norms provide more clarity and credibility than competing and vague voluntary codes by detailing specific obligations *vis-à-vis* rights to equal opportunity, non-discriminatory treatment, security of persons, and labor.¹⁵² The Norms are the first non-voluntary initiative accepted at the international level that go beyond the voluntary guidelines found in the UN Global Compact.¹⁵³ “The Norms have been welcomed by many nongovernmental organizations (NGOs) and others who would like to use the Norms to begin holding large businesses accountable for their human rights violations.”¹⁵⁴ The Norms call upon businesses to adopt their substance as the minimum standards for the company’s own codes of conduct or internal rules of operation and to adopt mechanisms for creating accountability within the company.¹⁵⁵

Businesses must also engage in periodic assessments and the preparation of impact statements. Assessments and impact statements must take into account comments made by stakeholders, and the results of any such assessments must be made available to all relevant stakeholders.¹⁵⁶ In addition, businesses are charged with assessing the human rights impacts of major new projects, and where an assessment shows inadequate compliance with the Norms, the Commentary requires the business to include a plan of action for reparation and redress.¹⁵⁷

Another initiative that expands the reach of human rights commitments beyond the corporation itself is the International Financial Corporation’s

150. Subcomm. on the Promotion & Protection of Human Rights, U.N. Econ. & Soc. Council (ESCOR), Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights, U.N. Doc. E/CN.4/Sub.2/2003/12/Rev.2 (Aug. 26, 2003). See generally *Business for Humanitarian Action*, U.N. GLOBAL COMPACT, <https://www.unglobalcompact.org/take-action/action/humanitarian> [<https://perma.cc/E8WH-TU9U>] (last visited Mar. 30, 2018) (discussing an action plan to integrate humanitarian efforts into business plans).

151. David Weissbrodt & Muria Kruger, *Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights*, 97 AM. J. INT’L L. 901, 901 (2003).

152. *Id.* at 903–07.

153. *Id.* at 903.

154. *Id.*

155. *Id.* at 915–17.

156. *Id.* at 917.

157. Sub-Comm’n, Commentary on the Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights U.N. Doc. E/CN.4/Sub.2/2003/38/Rev.2, ¶ 16(h) (2003).

Equator Principles (Principles).¹⁵⁸ In 2006, a coalition of more than forty of the world's largest private-sector financial institutions, the so-called Equator Principles Banks, agreed to harmonize their environmental and social policies with the International Finance Corporation's policies.¹⁵⁹ The Principles are an industry-wide framework for addressing environmental and social risks in project financing. Today, 92 financial institutions in 37 countries have adopted the Principles.¹⁶⁰ The Principles require developers to prepare assessments addressing involuntary resettlement, the impact on indigenous peoples and communities, human health, pollution, and socioeconomic factors.¹⁶¹ The developers then fully incorporate their results into project decisions by crafting management plans.¹⁶² The Principles also contemplate mitigation, monitoring, baseline studies, participation of affected parties (including indigenous peoples and local NGOs, in the design, review, and implementation of the project), and consideration of environmentally and socially preferable alternatives.¹⁶³ Finally, recognizing that "good stakeholder relations are a prerequisite for good risk management,"¹⁶⁴ the World Bank Group also began requiring project sponsors to engage in "meaningful stakeholder participation" processes in 1992.¹⁶⁵

The United States should adopt and utilize the Equator Principles when reviewing the various pipeline project plans of energy companies that impact tribal communities in this country. Only five United States banks have adopted the principles.¹⁶⁶ Under the Principles, banks and other financial businesses would require the energy industry to prepare assessments on their potential impacts on tribal communities, human health, pollution, and social factors as part of their finance package.¹⁶⁷ The Principles require energy companies to consider a myriad of studies,

158. See, e.g., ALLEN ARTHUR ROBINSON, *THE EQUATOR PRINCIPLES—GUIDELINES FOR RESPONSIBLE PROJECT FINANCING* 1–4 (2005) (outlining various banks' commitments to social and environmental responsibility).

159. David B. Hunter, *Civil Society Networks and the Development of Environmental Standards at International Financial Institutions*, 8 CHI. J. INT'L L., 437, 450 (2008).

160. *EP Association Members & Reporting*, EQUATOR PRINCIPLES, <http://www.equator-principles.com/index.php/members-reporting> [https://perma.cc/E7SC-JPWV] (last visited Mar. 30, 2018).

161. EQUATOR PRINCIPLES FIN. INSTS., *THE EQUATOR PRINCIPLES* 5, 20 (2013).

162. *Id.* at 7.

163. See generally *id.*

164. Laplante & Spears, *supra* note 121, at 69, 82 (2008).

165. *Id.*

166. *EP Association Members & Reporting*, *supra* note 160 (referencing Bank of America Corporation, Citigroup, Inc., Ex-Im Bank, JP Morgan Chase & Co., and Wells Fargo Bank, N.A., as the five banks who have adopted principles).

167. See EQUATOR PRINCIPLES FIN. INSTS., *supra* note 161, at 2 (stating that participating banks will not finance projects that do not adhere to the Equator Principles).

mitigation, and engage in meaningful stakeholder participation processes.¹⁶⁸ Three international financial institutions, Norway's DNB Bank, Dutch company ING, and BNP Paribas of France are all Principle Banks. These banks divested their money in the Energy Transfer Partners DAPL project, perhaps based on their commitment to social responsibility and their concerns regarding the adverse impacts to the tribal communities.¹⁶⁹ On the other hand, Wells Fargo, a United States bank that has adopted the Principles, refused to divest despite requests to do so by cities and the public.¹⁷⁰ This shows that the Principles are discretionary in nature and each financial institution, based on its own standards of social responsibility, may interpret the principles differently.

B. Good Business Principles and Standards

Many international energy corporations pledge to hold themselves to certain global minimum environmental standards, such as the ISO 14000 environmental management system.¹⁷¹ ISO 14000 is one of several standards established by the International Organization for Standardization, a private standards setting organization for business operations.¹⁷²

The actual environmental standards of ISO 14000 deal with how a company manages the environment inside its facilities and the immediate outside environment. However, the standards also call for analysis of the entire life cycle of a product, from raw material to eventual disposal. These standards do not mandate a particular level of pollution or performance, but focus on awareness of the processes and procedures that can affect the environment.¹⁷³

168. See Laplante & Spears, *supra* note 121, at 82 (discussing various efforts by the World Bank Group and the Equator Principles Banks to apply social and environmental responsibility standards to the energy sector).

169. See generally *EP Association Members & Reporting*, *supra* note 160 (providing information and reports on international institutions' investments).

170. *10 Banks Financing Dakota Access Pipeline Decline Meeting with Tribal Leaders*, FRIENDS EARTH (Jan. 10, 2017), <https://foe.org/2017-01-10-banks-financing-dakota-access-pipeline-decline-meeting-with-tribal-leaders/> [<https://perma.cc/6TU9-N7P6>].

171. See generally INTERNATIONAL ORGANIZATION FOR STANDARDIZATION, <http://www.iso.org> [<https://perma.cc/UFM5-CNWP>] (listing international standards) (last visited Mar. 31, 2018).

172. OFFICE OF RESEARCH & DEV. & OFFICE OF POLLUTION PREVENTION & TOXICS, ENVTL. PROT. AGENCY, EPA/625/F-97/004, EPA STANDARDS NETWORK FACT SHEET: ISO 14000: INTERNATIONAL ENVIRONMENTAL MANAGEMENT STANDARDS 1 (1998).

173. Sino-Swedish Corp. Soc. Responsibility Cooperation, *ISO 14000 Overview*, SINO-SWEDISH CORP. SOC. RESP. WEBSITE (May 14, 2009, 2:57 PM), <http://csr2.mofcom.gov.cn/article/policies/intl/201408/20140800712476.shtml> [<https://perma.cc/FPH4-N4BQ>].

In short, the standards are intended to assist organizations with managing the environmental effects of their business practices. “It should be noted that adherence to the ISO 14000 standards does not in any way release a company from any national or local regulations regarding specific performance issues regarding the environment.”¹⁷⁴

A recent 2007 standard, ISO 26000, which focuses on social responsibility, “assists organizations in contributing to sustainable development.”¹⁷⁵

It is intended to encourage any organization to go beyond legal compliance, recognizing that compliance with law is a fundamental duty of any organization and an essential part of their social responsibility. It is intended to promote common understanding in the field of social responsibility, and to complement other instruments and initiatives for social responsibility, not to replace them.¹⁷⁶

ISO 26000 defines “social responsibility” as the responsibility of organizations for their impact on society and the environment, as evidenced through transparent and ethical behavior that:

- (1) Contribute[s] to sustainable development, including health and welfare of society;
- (2) Takes into account the expectations of stakeholders;
- (3) Is in compliance with applicable law and consistent with international norms of behavior; and
- (4) Is integrated throughout the organization and practices in its relationships.¹⁷⁷

Energy-industry trade associations also have developed guidelines for their members.¹⁷⁸ The International Council on Mining and Metals instituted a Sustainable Development Framework and has issued numerous

174. *Id.*

175. *ISO 26000:2010: Guidance on Social Responsibility*, INTERNATIONAL ORGANIZATION FOR STANDARDIZATION, <https://www.iso.org/standard/42546.html> [<https://perma.cc/RTG5-2NAY>] (last visited Mar. 31, 2018).

176. *Id.*

177. *ISO 26000: Guidance on Social Responsibility*, TÜVRHEINLAND, https://www.tuv.com/media/india/informationcenter_1/systems/Corporate_Social_Responsibility.pdf [<https://perma.cc/4ZAG-S9GF>] (last visited Mar. 31, 2018).

178. *See generally* INT’L COUNCIL ON MINING & METALS, GOOD PRACTICE GUIDE: INDIGENOUS PEOPLES AND MINING 3 (2d ed. 2015) (compiling a collection of sources and toolkits for businesses to use when interacting with indigenous peoples).

toolkits, guidance, and position publications on mining indigenous peoples' issues, human rights, community conflicts, and more.¹⁷⁹ These toolkits are good foundation documents for engagement with tribal governments too.

C. Free, Prior, Informed Consent

The principle that indigenous communities should have the opportunity to grant or withhold their Free, Prior, and Informed Consent (FPIC) to mining or other projects located on their lands, or that impact the resources upon which they depend, is now considered to be an internationally guaranteed human right of indigenous peoples.¹⁸⁰ This principle has increasingly become recognized in national laws, international norms, and voluntary best practice standards and guidelines.¹⁸¹ The legitimacy and practical benefits of the community right to FPIC have been recognized in a number of international conventions and standard-setting exercises, voluntary sectoral guidelines, and national laws.¹⁸² For the most part, these focus on the rights of indigenous communities—due to their unique circumstances and special status in international law. For example, ILO Convention 169 provides that indigenous and tribal peoples “shall have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development.”¹⁸³ Similarly, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) provides:

Indigenous peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and other resources . . . [including the right to require that states] obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other

179. *Id.*

180. FOOD & AGRIC. ORG. OF THE U.N., FREE PRIOR AND INFORMED CONSENT: AN INDIGENOUS PEOPLES' RIGHT AND A GOOD PRACTICE FOR LOCAL COMMUNITIES 32, 49 (2016).

181. WORLD COMM'N ON DAMS, DAMS AND DEVELOPMENT: A NEW FRAMEWORK FOR DECISION-MAKING 216–219 (2000). *See generally* EXTRACTIVE INDUS. REVIEW, STRIKING A BETTER BALANCE—THE WORLD BANK GROUP AND EXTRACTIVE INDUSTRIES 19 (2003) (discussing efforts to require FPIC in extractive-industry practices); MINING, MINERALS AND SUSTAINABLE DEV. (MMSD) PROJECT, BREAKING NEW GROUND 25 (2002) (suggesting that human rights require prior informed consent freely given and arrived at democratically with respect for cultural diversity).

182. Parshuram Tamang, Indigenous Expert, Permanent Forum on Indigenous Issues, An Overview of the Principle of Free, Prior and Informed Consent and Indigenous Peoples in International and Domestic Law and Practices ¶¶ 17–19 (Jan. 17, 2005).

183. INDIGENOUS & TRIBAL PEOPLES CONVENTION, No. 169, art. 7, (ILO 1989).

resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.¹⁸⁴

Other human rights conventions, such as the Convention on the Elimination of Racial Discrimination, the International Covenant on Civil and Political Rights, and the Convention on Biological Diversity, have been interpreted to require that the rights of communities to FPIC be recognized and implemented.¹⁸⁵ In addition, the UN Sub-Commission on the Promotion and Protection of Human Rights' Norms on Transnational Corporations states that:

Transnational corporations and other business enterprises shall respect the rights of local communities affected by their activities and the rights of indigenous peoples and communities consistent with international human rights standards They shall also respect the principle of free, prior, and informed consent of the indigenous peoples and communities to be affected by their development projects.¹⁸⁶

At the core of the recognition of indigenous land rights in the UNDRIP is the acknowledgement that, for many indigenous peoples, territory is more than a physical possession and that "deep connections with particular lands are a constitutive aspect of indigenous cultures."¹⁸⁷ Land rights, thus, intersect with cultural rights and with material well-being of indigenous peoples. Accordingly, the UNDRIP recognizes the rights of indigenous peoples in the natural world—that is, their distinctive spiritual relationship with their traditional territories; lands; waters; historical, cultural, and religious places; plants; medicines; and habitats.¹⁸⁸

In 2013, the International Council on Mining and Metals committed its members to an FPIC process in which "indigenous peoples can give or withhold their consent to a project, through a process that strives to be consistent with their traditional decision-making processes while respecting

184. G.A. Res. 61/295, art. 32, Declaration on the Rights of Indigenous Peoples (Sept. 13, 2007).

185. See, e.g., G.A. Res. 2106 (XX), International Convention on the Elimination of All Forms of Racial Discrimination, art. 2 (Dec. 21, 1965) (guaranteeing racial minorities full and equal enjoyment of human rights).

186. Sub-Comm'n, Commentary on the Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights U.N. Doc. E/CN.4/Sub.2/2003/38/Rev.2, ¶ 10(c) (2003).

187. Kristen A. Carpenter & Angela R. Riley, *Indigenous Peoples and the Jurisgenerative Moment in Human Rights*, 102 CALIF. L. REV. 173, 211 (2014).

188. G.A. Res. 61/295, *supra* note 184 arts. 11, 12, 24, 25.

internationally recognized human rights.”¹⁸⁹ The right of FPIC has been incorporated into the Performance Standard on Indigenous People of the World Bank International Finance Corporation (IFC); consequently, compliance with FPIC is a condition for IFC investment in mining projects.¹⁹⁰ The IFC Performance Standards have been adopted by about eighty of the world’s largest banks in the Principles.¹⁹¹ As such, compliance with FPIC has also become a condition of commercial loans to mining projects. Thus, change is rapidly advancing in both the practical and the legal context for decision-making about mining on the traditional territories of indigenous peoples.

Scholars have advocated for the principles of FPIC requiring that local tribal communities be informed about development projects in a timely manner and given the opportunity to approve or reject a project prior to the commencement of operations.¹⁹² This includes participation in setting the terms and conditions that address the economic, social, and environmental impacts of all phases of mining and post-mining operations.¹⁹³

FPIC differs importantly from consultation in the way decision-making is exercised. Whereas, in the international setting, consultation processes require only that energy-industry companies hear the views of those potentially affected by a project and take them into account when engaging in decision-making processes, consent processes require that host communities actually participate in decision-making processes.¹⁹⁴ Consent processes give affected communities the leverage to negotiate mutually acceptable agreements under which projects may proceed, thereby ensuring that projects stand a better chance of producing results that benefit them.

189. *Indigenous Peoples and Mining Position Statement*, INT’L COUNCIL ON MINING & METALS (May 2013), <https://www.icmm.com/en-gb/about-us/member-commitments/position-statements/indigenous-peoples-and-mining-position-statement> [<https://perma.cc/M4S2-VDCJ>].

190. Laplante & Spears, *supra* note 121, at 79; *see also* INT’L FIN. CORP. WORLD BANK GRP., IFC PERFORMANCE STANDARDS ON ENVIRONMENTAL & SOCIAL SUSTAINABILITY 14 (2012) (describing the eight performance standards that a client must meet for IFC investment, one of which requires clients follow FPIC standards).

191. *Equator Principles Financial Institutions*, INT’L FIN. CORP. http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/company-resources/sustainable-finance/equator+principles+financial+institutions [<https://perma.cc/N2XJ-KJFS>] (last visited Mar. 31, 2018).

192. *See* Seigfried Wiessner, *Rights and Status of Indigenous Peoples: A Global Comparative and International Legal Analysis*, 12 HARV. HUM. RTS. J. 57, 108 (1999) (arguing for informed participation of the indigenous people and identifying local preferences through direct consultation and incorporation of indigenous knowledge into project approaches); Akilah Jenga Kinnison, *Indigenous Consent: Rethinking U.S. Consultation Policies in Light of the U.N. Declaration on the Rights of Indigenous Peoples*, 53 ARIZ. L. REV. 1301, 1301 (2011) (arguing that self-determination translates “to ‘free and informed consent prior to the approval of any project affecting [indigenous] lands or territories or other resources’”).

193. Laplante & Spears, *supra* note 121, at 87.

194. *Id.*

In the United States, tribal nations possess rights that go beyond the principles of FPIC for on-reservation projects because tribes have authority over their territories.¹⁹⁵ However, the United States should use FPIC to address the oil and gas development impacting off-reservation rights and cultural resources. A major distinction between tribes in the United States and other indigenous peoples is that tribes are governments possessing certain inherent powers to make decisions regarding their territories.¹⁹⁶ Indian tribes are “unique aggregations possessing attributes of sovereignty over both their members and their territory.”¹⁹⁷ In this respect, they continue to hold their “natural rights” to sovereign authority on areas where it has not been relinquished.¹⁹⁸ The inherent authority of tribes pre-exists that of the federal government or any state. Most tribes have developed governmental structures that reflect the history, experience, culture, and wishes of the unique people and community it serves.¹⁹⁹ Tribal governments control and regulate the activities within their territories and are in a better position to engage with the energy industry, which many natural-resource rich tribes have dealt with for decades.²⁰⁰ Congress has also enacted many laws supporting the self-determination of tribes in making their own decisions regarding natural resource development on their reservations.²⁰¹

A number of basic principles of engagement have been developed by countries and the mining industry to guide the process of engagement with indigenous peoples and using the principles of FPIC.²⁰² These principles

195. See *Cherokee Nation v. Georgia*, 30 U.S. 1, 1 (1831) (recognizing tribes as distinct sovereign nations with authority over their own territories); see also *Worcester v. Georgia*, 31 U.S. 515, 530 (1832) (acknowledging a tribe’s sovereign right to govern).

196. Judith V. Royster, *Practical Sovereignty, Political Sovereignty, and the Indian Tribal Energy Development and Self-Determination Act*, 12 LEWIS & CLARK L. REV. 1065, 1068–69 (2008); see *Merrion v. Jicarilla Apache Tribe*, 455 U.S. 130, 155 (1982) (noting federal laws regulating the leasing of tribal lands require consent by the tribal governments prior to development of their lands for coal mining, oil and gas extraction, etc.).

197. *United States v. Mazurie*, 419 U.S. 544, 557 (1975).

198. *Id.*

199. Annette Alvarez, *Native American Tribes and Economic Development*, URBANLAND (Apr. 19, 2011), <https://urbanland.uli.org/development-business/native-american-tribes-and-economic-development/> [https://perma.cc/A5J8-4DMH]; MAURA GROGAN ET AL., REVENUE WATCH INST., NATIVE AMERICAN LANDS AND NATURAL RESOURCE DEVELOPMENT 43 (June 15, 2011).
200. *FPIC: The Right to Decide* AMAZON WATCH (Feb. 2011), <http://amazonwatch.org/news/2011/0202-fpic-the-right-to-decide> [https://perma.cc/AW4Z-7NCH].

201. See Judith V. Royster, *Mineral Development in Indian Country: The Evolution of Tribal Control Over Mineral Resources*, 29 TULSA L.J. 541 (1994) (discussing the history of mineral law); *Indian Mineral Development Act of 1982*, 25 U.S.C. §§ 2101–2108 (2012) (“Any Indian tribe . . . may enter into any joint venture, operating, production sharing, service, managerial, lease or other agreement . . .”); 25 U.S.C. § 3502 (requiring the Secretary to assist consenting Indian tribes to create tribal energy-resource agreements).

202. ALISTER THORPE ET AL., *ENGAGING FIRST PEOPLES: A REVIEW OF GOVERNMENT ENGAGEMENT METHODS FOR DEVELOPING HEALTH POLICY* 8 (2016); see MINISTERIAL COUNCIL ON

and other corporate social responsibilities are a good starting point—the international energy industry has adopted many of them.²⁰³ These practices and standards, pushed by NGOs, the United Nations, and countries and indigenous peoples, have made energy companies better.²⁰⁴ United States energy industries and tribes can learn from these many positive corporate social practices and begin implementing them in the United States.

Although not all of the international standards and principles are applicable to the unique interests of tribal nations in the United States, they provide a comprehensive scheme of what could be in the United States. First, the energy industry and its shareholders in the international arena seem to embrace the “big picture” of their responsibilities to societies, cultures, and lands, even though most energy and mining operations are not located in their countries.²⁰⁵ Second, they recognize the consequences of their actions, from the financing of projects to environmental degradation, human rights violations, and indigenous people’s basic rights far beyond their borders. Third, through corporate codes, policies, and internal procedures, international companies seek transparency, accountability, and social responsibility. Finally, the new wave of corporate responsibility is moving toward direct engagement with indigenous peoples, no doubt as a result of the recognition and adoption of FPIC principles.²⁰⁶

IV. TOWARD TRIBAL-INDUSTRY ENGAGEMENT

Do the international standards, and corporate-social-responsibility approaches effectively confront the challenges of the energy industry’s presence in Indian country? As noted above, the international energy industry began with adopting financial and corporate standards, and they are currently seeking direct engagement with indigenous populations whose territories may be impacted.²⁰⁷ This proactive engagement scheme seems to fit best for tribes that have the authority to negotiate and reach agreements without any federal government approvals. Any engagement process, either

MINERAL & PETROLEUM RESOURCES, PRINCIPLES FOR ENGAGEMENT WITH COMMUNITIES AND STAKEHOLDERS 11–12 (2005) (discussing how to engage with communities and stakeholders).

203. INT’L COUNCIL ON MINING & METALS, *supra* note 178, at 2.

204. *See generally id.* (showing positive effects of the basic principles of engagement).

205. Committee on Legal Affairs, *On Corporate Social Responsibility: Accountable, Transparent and Responsible Business Behaviour and Sustainable Growth*, at 10, 2012/2098 (INI) (Jan. 28, 2013).

206. *See* INT’L COUNCIL ON MINING & METALS, *supra* note 178, at 28 (discussing international and legal frameworks that require FPIC).

207. Stephanie Axmann et al. *United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in Canada—Implementation Status Update*, MCCARTHY TETRAULT: CAN. ERA PERSP. (Aug. 8, 2017) <https://www.canadianeraperspectives.com/2017/08/united-nations-declaration-on-the-rights-of-indigenous-peoples-undrip-in-canada-implementation-status-update/> [<https://perma.cc/9H7N-VMWF>].

in parallel or separate from the established federal consultation process, would not relieve the federal government of its trust obligations to tribes; nor would it negate the federal agencies duties to consult under established laws, regulations, and executive orders.²⁰⁸

Given the federal agencies' difficulties in implementing the consultation process with tribal governments, Section A below proposes that the industry must begin engaging with tribes when seeking to build energy transmission projects crossing tribal lands or affecting treaty-reserved rights. Section A begins with a discussion of the limits of the federal consultation process, followed with an example of an energy company, the El Paso Corporation (and other companies), that successfully engaged with tribes on an interstate pipeline crossing the Rocky Mountains to the Pacific coast. The discussion demonstrates that companies can manage risks and avoid project delays and costs by working with tribes. Section B proposes and explores best practices that can be taken from the Ruby Project that should be adopted by the energy companies in engagement. This section specifically discusses principles to guide engagement with tribal communities. Tribal-industry engagement has the potential to address the complex and dynamic root causes of community concerns, if undertaken in an organized, respectful manner, and builds positive long-lasting relationships. Several key areas are discussed and, admittedly, there are other issues that may arise during the engagement process. Of course, any initiatives that a corporation may take would be voluntary in nature outside of the federal legal regime without consequences, unless the project is located on reservation.²⁰⁹ Developing methods or guidelines of engagement with tribal communities about the social, economic, and cultural benefits and costs, in addition to the environmental effects of their projects, are long overdue.²¹⁰

A. The Limits of Federal Consultation

In the United States, "[t]here is a long list of congressional acts, executive orders, and administrative rules that require consultations with tribes, and some require consent before any federal action can be

208. See THORPE, *supra* note 202, at 25–28 (analyzing different national and state requirements to consult with indigenous peoples in Australia).

209. RACHEL DAVIS & DANIEL FRANKS, COSTS OF COMPANY-COMMUNITY CONFLICT IN THE EXTRACTIVE SECTOR 25 (2014).

210. *Id.*; see also James Anaya (Special Rapporteur on the Rights of Indigenous Peoples), *Extractive Industries Operating Within or near Indigenous Territories*, ¶¶ 74–75, U.N. Doc. A/HRC/18/35 (July 11, 2011) (acknowledging the need for guidelines governing the extractive industry's engagement with indigenous peoples).

undertaken.”²¹¹ Numerous laws require Indian nations be notified, consulted, and apprised of the impacts on their treaty rights, lands, and cultural resources.²¹² Despite these laws and policies, tribes have time and time again criticized the federal agencies for not implementing the consultation policies and laws.²¹³ The agency-by-agency and statute-by-statute approach to tribal consultation does not ensure that agencies will adequately consider tribal interests during the course of any particular consultation.²¹⁴ Moreover, there remains no mandated process of how federal agencies are to conduct consultations with Indian tribes,²¹⁵ and while Congress has enacted several statutes requiring consultation, none provide an actual definition of “consultation.”²¹⁶ Thus, while it may be popular to talk about the merits and value of “tribal consultation,” the term itself remains ill-defined and elusive.²¹⁷ “A recent study of the consultation process conducted under the National Historic Properties Act concluded that many consultation sessions were, in fact, merely opportunities for agencies to inform tribes of decisions that had already been made.”²¹⁸ In the absence of clear statutory or executive guidance, it is not surprising that broad differences in the interpretation of the consultation requirement exist among federal agencies.

In October 2016, during the Dakota Access pipeline protests and tribal challenges, and with the overwhelming tribal support across Indian country, the Department of the Interior, the Department of the Army, and the Department of Justice sought comments from tribal governments on

211. Jeanette Wolfley, Address at 63rd Annual Rocky Mtn. Min. Law Inst. 1B, *The Black Snake: The Dakota Access Pipeline Project, Federal Consultation & the Energy Industry's Role* (2017) (forthcoming 2018) (on file with author); see also Exec. Order No. 13,175, 65 Fed. Reg. 67,249 (Nov. 6, 2000) (establishing tribal consultation requirements); Exec. Order No. 12,875, 58 Fed. Reg. 58,903 (Oct. 26, 1993) (discussing the federal government's commitment to working with state, local, and tribal government); Derek C. Haskew, *Federal Consultation with Indian Tribes: The Foundation of Enlightened Policy Decisions, or Another Badge of Shame?*, 24 AM. INDIAN L. REV. 21, 22 n.3 (2000) (providing examples of rules that require consultations with tribes).

212. See, e.g., 25 U.S.C. § 3003 (2012) (requiring tribal notification and consultation for impacts on indigenous gravesites); see also 16 U.S.C. § 470ii(a) (requiring tribal consultation as a part of intergovernmental coordination).

213. Colette Routela & Jeffrey Holth, *Toward Genuine Tribal Consultation in the 21st Century*, 46 U. MICH. J.L. REFORM 417, 444 (2013); see Wolfley, *supra* note 211 (discussing the inadequacies of the federal consultation process and recommendations from tribal leaders for changes in the laws and policies).

214. Michael Eitner, *Meaningful Consultation with Tribal Governments: A Uniform Standard to Guarantee that Federal Agencies Properly Consider Their Concerns*, 85 U. COLO. L. REV. 867, 885 (2014).

215. Robert J. Miller, *Consultation or Consent: The United States' Duty to Confer with American Indian Governments*, 91 N.D. L. REV. 37, 60 (2015).

216. Routela & Holth, *supra* note 213, at 453.

217. *Id.*

218. *Id.* at 461.

consultation regarding energy-infrastructure development.²¹⁹ The response of tribes was comprehensive, with many tribes participating and providing input in the seven listening sessions held throughout Indian country.²²⁰ Additionally, fifty-nine tribes and eight organizations submitted written comments to the questions posed by the three federal departments.²²¹

Significantly, the consultation process does not control or mandate the energy industry to engage with tribal governments. When collaborating with tribal governments, energy companies can choose to be complicit or proactive in the permitting and federal consultation process. Indeed, the consultation process is a government-to-government process designed to compel great involvement in agency decision-making by the tribal nations potentially affected by the agencies' actions or rulemaking.²²²

Voluntary engagement would represent a model of the willingness and the ability of companies and tribes to address, and ultimately forge consensus on, a complex and sensitive set of issues. This exercise will be especially valuable if it encourages others to engage in dialogue on an issue-by-issue, sector-by-sector basis, with or without beginning as a government-convened process or ultimately taking the form of voluntary principles. There are many opportunities to engage, and much is at stake, including basic human rights, preservation of land, sovereignty of tribes, and building a constituency for social responsibility and human rights in the energy-industry community. At stake is avoiding community opposition to energy projects and damage to the energy industry's reputation so that it may expand trade and increase sustainable investment and growth. At stake is a chance to build a consensus for approaches to support cooperation, communication, and resolution to many issues associated with the energy industry and tribal communities. With so much at stake, tribes and the energy industry should seek opportunities to find common ground or at least mechanisms to assist in resolving the myriad of issues.

B. The Ruby Project: A Case in Contrast

219. Letter from Lawrence S. Roberts, Principal Deputy Assistant Sec'y for Indian Aff., to Tribal Leaders (Oct. 11, 2016) (showing the due date for the written comments was Nov. 30, 2016), <https://www.bia.gov/sites/bia.gov/files/assets/as-ia/raca/pdf/idc2-047219.pdf> [<https://perma.cc/6RZS-V84D>].

220. See generally *Tribal Input on Federal Infrastructure Decisions*, U.S. DEP'T INTERIOR, INDIAN AFF., <https://www.bia.gov/as-ia/raca/tribal-input-federal-infrastructure-decisions> [<https://perma.cc/YDR4-HGQG>] (last visited Apr. 10, 2018) (providing transcribed conversations with the tribes about pipeline concerns and impacts).

221. U.S. DEP'T OF THE INTERIOR, ET AL., *IMPROVING TRIBAL INVOLVEMENT IN FEDERAL INFRASTRUCTURE DECISIONS 2* (2017).

222. Routela & Holth, *supra* note 213, at 456.

The Ruby pipeline project, impacting thirty-two tribal nations, stands in direct contrast to the DAPL situation and is presented as a model for tribal-energy industry engagement. The pipeline constructed by the El Paso Corporation (El Paso) between 2007 and 2011, known as the Ruby Project, is a 680-mile, 42-inch interstate pipeline delivering natural gas from Opal, Wyoming, to Malin, Oregon.²²³ The four-year Ruby Project crossed Wyoming, Utah, Nevada, and Oregon, as well as aboriginal lands of thirty-two Indian tribes.²²⁴ Like DAPL, the pipeline project affected the off-reservation rights of the tribes, including sensitive cultural resource areas, and shows that collaboration, communication, and engagement can work between Indian nations and the energy industry.

Prior to construction, El Paso held numerous public meetings and meetings with tribes.²²⁵ El Paso entered into funding agreements that allowed tribes “to retain their own legal and ethnographic experts to document cultural resources for federal consultation purposes.”²²⁶ “The tribes also worked with [El Paso] to create a tribal monitoring program, paid for by the company, which trained more than 100 tribal members to assist archaeological teams prior to, during, and after construction.”²²⁷ At the tribes’ request, “the Ruby pipeline was rerouted—including more than 900 ‘micro-reroutes’ to avoid culturally important sites—at a total cost of approximately \$11 million.”²²⁸ Plants that were utilized by the tribes were “harvested for seeds and preserved in greenhouses prior to ground-disturbing activity and replanted post-construction in the reclaimed right of way.”²²⁹ The company “also worked with tribes to develop a tribal employment program.”²³⁰

Because skilled pipeline construction jobs typically require union membership, El Paso supported tribes’ requests to pay union dues and apprenticeships for tribal members seeking work on the project. A later internal review by the company found that such reroutes and tribal capacity-building measures saved the company at least

223. Press Release, Kinder Morgan, Inc., El Paso Corporation Places Ruby Pipeline in Service (July 28, 2011) (on file with the *Vermont Journal of Environmental Law*).

224. *Id.*

225. Letter from David Lester, Exec. Dir., Council of Energy Res. Tribes, to Kimberly D. Bose, Sec’y, Fed. Energy Regulatory Comm’n (Aug. 4, 2009).

226. Troy Eid, *Working Effectively with Tribes on Energy Projects*, NORTH AM. SHALE (Sept. 6, 2017), <http://northamericanshalemagazine.com/articles/2055/working-effectively-with-tribes-on-energy-projects> [<https://perma.cc/W7U3-EE4L>].

227. *Id.*

228. *Id.*

229. *Id.*

230. *Id.*

\$250 million in avoided project delay costs from potential tribal litigation and protests.²³¹

In addition to the engagement with tribal nations, El Paso entered into agreements with the Western Watersheds Project and Oregon Natural Desert Association to establish a sagebrush-habitat conservation fund, \$15 million over ten years, to buy and retire federal grazing permits from ranchers willing to sell.²³² Reserving the areas would preserve the sage grouse and pronghorn antelope.²³³ It would also promote restoration activities, fence removal, weed control, and land acquisition.²³⁴ El Paso entered into similar agreements establishing endowments with the Public Lands Council and the National Cattleman's Beef Association to preserve the public lands for grazing.²³⁵

Some other energy companies have embraced engagement with tribes for rights of way crossing on- and off-reservation lands, without any federal or state laws requiring them to do so.²³⁶ For example, NextEra Energy Resources, a wind and solar project developer, reaches out to tribes without any federal law requirements to do so and most tribes are very receptive. And, NextEra representatives report that following the DAPL, they have received "immediate responses" from tribes in the Dakotas when contacted about potential rights of way near reservation lands.²³⁷ NextEra seeks to develop a positive, open, and honest relationship with each tribal nation.²³⁸ The Dominion Resources Services company states they have established relationships with federally and state-recognized tribes in the southeast United States for pipelines and have established these engagements outside of the NEPA section 106 process.²³⁹ They regularly have in-person meetings for meaningful communications with tribal communities and send out construction teams to talk with tribal governments about restoration

231. *Id.*

232. Press Release, W. Watersheds Project, et al., W. Watersheds Project, Or. Nat. Desert Ass'n & Ruby Pipeline Agree to Establish Conservation Funds (July 15, 2010) (on file with the *Vermont Journal of Environmental Law*).

233. BUREAU OF LAND MGMT., U.S. DEP'T OF THE INTERIOR, DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT: RUBY PIPELINE PROJECT 14–16 (2013).

234. *Id.*

235. Christy Hemken, *El Paso, PLC Create Public Lands Management Endowment*, WYO. LIVESTOCK ROUNDUP, <http://www.wylr.net/the-roundup/archives/283-energy/oil-and-gas/2781-el-paso-plc-create-public-lands-management-endowment?tmpl=https://perma.cc/ASM2-XAR5> (last visited Apr. 11, 2018).

236. Tim Vollmann, *Exploration and Development Agreements on Indian Lands*, 50 ROCKY MTN. MIN. L. INST. 12–21 (2004).

237. Carolyn Stewart, Dir., Tribal Relations, NextEra Energy Res., Effective Engagement with Tribes (Oct. 2, 2017).

238. *Id.*

239. Molly Plautz, External Affairs Manager, Dominion Res. Servs., Energy Development and Tribal Engagement—A Panel Discussion (Oct. 3, 2017).

projects in the pre-filing of the application phase. When they begin to meet with state officials, they also seek to meet with tribal officials about projects.²⁴⁰ They report tribes are receptive and wish to talk outside the federal consultation process. Enbridge Energy notes that, through outreach; community involvement; and looking for opportunities to work with tribal employment rights offices, tribally run companies, and community relations offices, the company has built meaningful relationships.²⁴¹ They also state that some tribes may hesitate to meet with the company, but that companies must work through such barriers by listening respectfully, answering questions directly, and being transparent.²⁴²

C. Engagement

The term “engagement” refers to the interactions that occur between an energy company and tribal communities. It includes a broad set of activities, ranging from the simple provision of information to active dialogue and partnering. It is a primary activity that needs to take place in a sustained manner across the project life cycle—from initial contact before exploration of the easement through granting of the permit. At a minimum, engagement must aim to ensure tribal people are fully informed and comprehend the full range of social and environmental impacts that can result from a pipeline transmitting oil or gas. Also, companies must understand, recognize, and respect the rights, aspirations and concerns of tribal communities. A basic understanding can inform the design and implementation of restoration or avoidance strategies to protect vital resources and treaty rights.

When engaging with indigenous communities, industries should adopt a long-term approach to planning and funding that focuses on achieving sustainable outcomes. This type of engagement is responsive to human rights and changing needs and aspirations of tribal communities. Understanding the visions, values, histories, and current priorities shared internally, and their role in tribal decision-making is critical to such engagement. Equally important is understanding the timelines required to reach responsible and effective decisions by tribes and companies. Effective engagement among tribes and energy companies requires participants who

240. *Id.*

241. Arshia Javaherian, Senior Legal Counsel, Energy Development and Tribal Engagement—A Panel Discussion (Oct. 3, 2017); ENBRIDGE INC., 2016 ANNUAL REPORT 9 (2016).

242. Arshia Javaherian, Senior Legal Counsel, Energy Development and Tribal Engagement—A Panel Discussion (Oct. 3, 2017) (explaining that hesitation may be due to the fact that companies contact tribes even though there may not be a federal permit application or undertaking requiring federal consultation and a misunderstanding of the differences between consultation and engagement).

can speak for the range of economic, social, environmental, and governance issues requiring discussion and resolution when proposed energy projects are on traditional territories. Engagement also takes a long-term commitment, assigned staff, and financial resources.

The challenge facing companies, however, is turning these principles into best practices and effective actions to engage with tribal communities. The remainder of this part discusses selected general actions, conduct, and practices that energy companies should consider adopting and utilizing when engaging with tribal communities. To start, one must remember that there are 567 tribes in the United States, and each has its own unique histories, values, cultures, and governmental structures.²⁴³ The suggested best practices encourage communication and engagement to address and resolve issues arising out of the controversies involving tribal nations' interests, treaty rights, and land and cultural resource preservation concerns.

D. Due Diligence

Energy companies must implement due diligence beginning with an understanding of the tribal community and its context. Despite numerous tribal commonalities, each tribe is unique. The energy company must ascertain the specific tribal context at the earliest stage of a project or permit renewal. Obtaining baseline information about a tribe(s) is particularly important. Companies should focus on the following key characteristics of the local reservation and off-reservation territory:

- (1) Demographic information to understand tribal identities and internal clan relationships to be used for monitoring change within a community during engagement and project development;
- (2) Land ownership and tenure from a legal and customary perspective, and any conflicts about tenure within clan families. Companies can access information revealing overlapping tribal ownership claims to land through government documents, and independent inquiry from local experts;
- (3) Reviewing treaties, statutes, and agreements relating to the tribe and its territory; most importantly, companies should focus on identifying any off-reservation treaty rights and connections to hunting, fishing, and gathering areas;
- (4) Identify tribal cultural connections and the locations of plants, medicines, sacred sites, and water areas by seeking out, consulting with, and gathering testimony from respected elders or tribal cultural committees whom the community holds confidence in;

243. Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs, 82 Fed. Reg. 4915–20 (Jan. 10, 2017).

- (5) Compile and analyze subsistence data on how the community meets its basic food needs through hunting, fishing, and gathering;
- (6) Obtain information about the ethnic composition and relations in the area, as well as the history of migration and relocation of the tribe;
- (7) Understand current conflicts and general relations between local and regional governments and tribal communities, and historical grievances with energy industries in the region;
- (8) Gain a good, clear understanding of the tribal government structure, its decision-making processes, its community stakeholders, and its general governmental infrastructure.

E. Beginning Engagement

Foremost, companies should seek to engage in parallel conversations with tribal governments while the federal agency is undertaking consultation efforts; or, as discussed earlier, some companies may choose to engage with tribes even if no federal consultation requirement exists. Ideally, such engagement should begin prior to any federal consultation. Importantly, companies must recognize that it is difficult to build any relationship during periods of opposition to a pipeline, which means that there must be a relationship built ahead of time. The decision to engage early in the development process supports respect for tribal sovereignty, promotes overall engagement and cooperation, and encourages community collaboration for other potential projects.

Energy representatives should recognize that engagement must begin early, before considering plans and before the formal federal consultation begins. The quality of initial contact between industry personnel and tribal government officials in a prospective oil and gas project, or right of way, can set the tenor for the whole project. Project staff and contractors must be well prepared, sensitive to the tribal culture, and respectful and open in their approach; this can provide the foundation for a solid and productive relationship. Difficulties are likely to arise if companies: (1) enter into a specific tribal area without first seeking permission to do so; (2) do not engage broadly or fail to adequately explain what they are doing and why; (3) do not allow sufficient time for the community to consider a proposal and make a decision; or (4) disregard, or are ignorant of, local tribal customs. Hiring a tribal member with good local knowledge as a liaison or adviser between the tribe and industry will help resolve miscommunications and bring an understanding of cultural values.

Companies can avoid many of these problems if they consult with the tribal community, its office of public relations, or administrator at the outset on how to engage the tribe's government. Industry must understand and

respect local entry protocols and seek permission to enter the community or access traditional lands. Additionally, industry must ensure that all company representatives (including third-party subcontractors and agents) are familiar with local customs, history and legal status, and understand the need for cultural and spiritual rights. It is wise for senior company managers to be present at initial meetings to meet with the tribal leadership to demonstrate and build respect, long-term trust, and community relationships. Tribal leaders wish to meet with company decision-makers who can provide information, answer questions directly, negotiate and resolve disputes, and take the time to travel to the tribal community. Listen. Listen. Listen. Company representatives must recognize and hear the tribal history of its relationship with energy companies or the federal government. History is important to tribal people; thus, when discussing historic abuses against the tribal community by others, company representatives must listen respectfully. Acknowledging and recognizing the tribal perspective is key.

F. Dialogue

Industry must be willing to commit to open and transparent communication and engagement from the beginning and have a considered approach in place. However, they must recognize that the tribal communication process may be different than the corporate process. Thus, one of the first challenges of an effective dialogue is to clearly define the lines of communication and protocol with tribal officials. For example, a company should seriously consider a tribe's requests to reroute pipelines in order to save time and money in the long term. Early engagement can enable companies to make rerouting decisions.²⁴⁴ Listen to the tribal leadership to fully understand their interests. Industry representatives should not assume that they know what the tribe is going to say, want, or ask of the company.

Industry decisions affect the cultural and spiritual beliefs and social fabric of a tribal community because such decisions impact communal rights to live on, use, harvest, and conserve lands both on- and off reservation or off-reservation treaty-reserved rights. Tribal members have a legitimate stake in the decisions affecting the environment, land, and treaty rights.²⁴⁵ Accordingly, industry should also maximize opportunities to meet

244. See, e.g., Amy Dalrymple, *Attorney Encourages Consultation with Tribes on Pipelines*, BISMARCK TRIB. (July 19, 2017), http://bismarcktribune.com/news/state-and-regional/attorney-encourages-consultation-with-tribes-on-pipelines/article_789e3d5c-8ad5-5988-b6f9-51bca8b72204.html [<https://perma.cc/UM6V-9FLL>] (providing an example of a company that saved money on litigation costs by engaging the tribe early and rerouting the pipeline accordingly).

245. Jeanette Wolfley, *Tribal Environmental Programs: Providing Meaningful Involvement and Fair Treatment*, 29 J. ENVTL. L. & LITIG. 389, 402 (2014).

and communicate with the tribal members and stakeholders to hear their comments and provide information and feedback. Industry should ensure company representatives take part in community meetings and that they are accessible to communities and stakeholders. Hosting a workshop for tribal leadership, and perhaps a separate one with tribal members, providing information, and explaining the proposed project is critically important. At this early stage, tribes can raise questions and express their concerns and interests before making key decisions.

Industry representatives must be willing to actively listen to tribal leadership and community members. Tribal leadership and community members may not automatically trust companies given the conflicts and reputation of the energy industry. It is therefore imperative that representatives respond to the issues of each community and stakeholder group and be sensitive to their concerns. As part of the communication process, industry should determine and use the right channels of communication to ensure the method of communication is appropriate to the relevant tribal communities and stakeholders. For example, most tribal people are very visual learners; they like power points, diagrams, and documents that they may take with them to review.²⁴⁶ Furthermore, words and language are very important to tribal people. Using very direct language (instead of vague, noncommittal language and elaborate words) is best. Industry may wish to identify appropriate tribal individuals and contacts to review documents before a meeting or hire a person to interpret in the tribal language. Industry should provide accurate and timely information to build and maintain honest working relationships.

Energy companies must provide some process of accountability through full disclosure to the tribes of the proposed project. Transparency is critical. Companies must provide information about the project, its risks, and its impacts on the community and environment in easily understandable forms and media. Tribal governments and community interest groups should receive this information directly so that they may review and disseminate to their reservation residents and members.

Continual dialogue and a willingness to hold tribal meetings as they arise are essential. A company may consider forming a team of individuals including tribal representatives to respond to questions, provide updates on the project, and alleviate community concerns.

G. Managing Workforce and Contractor Behavior

246. Melanie Price et al., *The Learning Styles of Native American Students and Implications for Classroom Practice*, in IMAGES, IMAGINATIONS, AND BEYOND, PROCEEDINGS OF THE EIGHTH NATIVE AMERICAN SYMPOSIUM 36, 37 (Mark B. Spencer ed., 2010).

Companies should be responsible for their employees and contractors conducting work on or near tribal communities. It is a common occurrence near oil and gas infrastructure projects to have camps of male employees for long periods of time.²⁴⁷ The National Indigenous Women's Resource Center's amicus brief in the DAPL case set forth the violence, drug and alcohol abuses, and child and women trafficking documented by state, tribal, and federal officials.²⁴⁸ The amicus brief cites a 2013 Department of Justice (DOJ) Office of Violence Against Women (OVW) report explaining the relationship between the oil industry and crimes and violence against women and children:

Because of recent oil development, the [Bakken] region faces a massive influx of itinerant workers[,] and [consequently,] local law enforcement and victim advocates report a sharp increase in sexual assaults, domestic violence, sexual trafficking, drug use, theft, and other crimes, coupled with difficulty in providing law enforcement and emergency services in the many remote and sometimes unmapped "man camps" of workers.²⁴⁹

The developers of oil and gas on or near reservations must recognize the increased levels of violence Native women and children are likely to face. Native women suffer sexual violence at the highest rate of any ethnic group in the United States.²⁵⁰ Non-Indian offenders are overwhelmingly the perpetrators of these offenses.²⁵¹ Such actions violate the public interest, threaten tribal sovereignty, and undermines the integrity of the United States' trust relationship with tribal nations. Tribal communities are particularly vulnerable because they lack authority to prosecute non-Indian workers or employees in their judicial system, and instead must rely on the state or federal governments to take prosecutorial action.²⁵²

247. Brief for National Indigenous Women's Resource Center as Amici Curiae Supporting Plaintiffs at 10, *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 205 F. Supp. 3d 4 (D.D.C. 2016); see also Sarah Deer, *Relocation Revisited: Sex Trafficking of Native Women in the United States*, 36 WM. MITCHELL L. REV. 621, 680–81 (2010) (arguing that this is at least partly a result of jurisdictional limitations).

248. Brief for National Indigenous Women's Resource Center as Amici Curiae Supporting Plaintiffs at 1, *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 205 F. Supp. 3d 4 (D.D.C. 2016).

249. *Id.* at 10.

250. See STEVEN W. PERRY, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, *AMERICAN INDIANS AND CRIME: A BJS STATISTICAL PROFILE, 1992–2002* 7 (2004).

251. *Id.* at 9.

252. See *Oliphant v. Suquamish Indian Tribe*, 435 U.S. 191, 210, 212 (1978) (holding tribes could no longer exercise criminal jurisdiction over non-Indians who commit crimes on tribal lands); see also 25 U.S.C. § 1301(2) (stating Indian tribes can "exercise criminal jurisdiction over all Indians").

Such inappropriate behavior by employees or contractors can cause long-term social harm to a tribal community and company's tribal relations. In some instances, such events may lead to a project not going ahead or being shut down. Often companies do not take responsibility for contractors or employees. Companies often argue that they cannot control such activities or that subcontracts do not cover disciplinary actions and that it is better left for governments to take criminal actions. As part of engaging with tribal governments, industry must make a commitment and take responsibility to ensure that employees and contractors behave appropriately within or near tribal communities. Such measures should include: (1) expanding their use of background checks within the hiring process; (2) establishing policies and standards of conduct for workers on or near reservation communities; (3) holding training sessions and communicating the standards of conduct; (4) taking strict disciplinary action where there are significant breaches of these standards up to, and including, dismissal and termination of contracts; (5) reporting criminal behavior to the appropriate authorities; and (6) providing financial support to victim services, women's shelters, or community organizations that provide aid and assist in developing solutions to human trafficking. Industry must also ensure that contracts with employees, subcontractors, agents, and joint venture partners contain appropriate provisions to govern the parties' conduct.

H. Cultural Resources Management and Preservation

The natural environment is of central importance to many tribal people, not only because they often depend wholly or partly on it for their livelihoods, but also because it has strong cultural, and often spiritual, significance. Additionally, "[m]any tribes identify their origin as distinct people with a particular geographic site, such as a river, mountain, or valley, which becomes a central feature of the tribe's cultural worldview, traditions and customs."²⁵³ For these reasons, when projects adversely impact the environment, they may also be impacting tribal peoples' cultural rights and interests. The history of tribal removal from original ancestral lands has resulted in sacred sites and cultural resources located off-reservation, which has made it difficult for tribes to protect and enhance the tangible and intangible aspects of cultural heritage. Tangible aspects include such things as a spring, butte, sacred mountain, and other sites of significance. Intangible cultural resources include things such as traditional practices around governance, ceremonies, spiritual practices, and traditional knowledge.

253. Wolfley, *supra* note 110, at 55.

There is a wealth of federal statutes and policies encouraging the protection and preservation of tribal lands, including all of its natural and cultural attributes.²⁵⁴ In the DAPL litigation, the tribal parties argued that the federal government failed to protect these valuable tribal resources, thereby adversely impacting religious freedom rights.²⁵⁵ Companies can minimize such disputes with tribes through the engagement process by first recognizing that there may be off-reservation sites and cultural resources used by present-day tribal people. Industry representatives should visit impacted sites or areas identified by tribal elders, cultural committees, or spiritual leaders. Working with and utilizing the knowledge of tribal cultural committees for project sites will go a long way toward building trust and respect for the cultural values of tribes. Companies should consider paying for ethnographic studies for interested tribes and supporting their experts to assist in identifying cultural resources.

The Ruby Project paid for ethnographic studies used in the federal consultation process.²⁵⁶ Other energy companies have established agreements setting out protocols, points of contact, surveys, and resource monitoring.²⁵⁷ The use of tribal elders in such studies will serve companies well. They often do not hold degrees, but they have respect and trust within the tribal community and possess generations of knowledge of the natural landscape and the many sacred sites and resources of the landscape.²⁵⁸ The basis for the wisdom and knowledge that indigenous people possess of the ecosystems and their homelands rests on millennia of observation, habitation, and experience, all utilizing a balance of human interaction and intervention with the environment. “It is the traditional ecological knowledge—an interactive natural-world science—which has preserved many tribal homelands in pristine condition and protected the many medicines and foods for generations.”²⁵⁹

Respect for the oral traditions of the tribe by industry is very important. An outside contracted anthropologist or archeologist may know the book-

254. See, e.g., 42 U.S.C. § 1996 (2012) (stating that it is federal policy to protect Native American sacred sites and traditional forms of worship); Exec. Order No. 13,007, 61 Fed. Reg. 26,771 (May 24, 1996) (directing federal agencies, “to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, (1) accommodate access to and ceremonial use of Indian sacred sites, by Indian religious practitioners and (2) avoid adversely affecting the physical integrity of such sacred sites.”); 25 U.S.C. §§ 3001–13 (protecting tribal remains).

255. *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng’rs*, 239 F. Supp. 3d 77, 88 (D.D.C. 2017).

256. Eid, *supra* note 226.

257. See, e.g., Joe Morey, *LCO Tribe Renews Enbridge Pipeline Easement for \$70 Million over 25 Years* (Oct. 17, 2017), <https://drydenwire.com/news/lco-tribe-renews-enbridge-pipeline-easement-for-70-million-over-25-years/> [<https://perma.cc/JG62-7MY4>] (explaining methods Enbridge Energy used to come to mutually beneficial resolution).

258. See Wolfley, *supra* note 112, at 161 (recognizing the knowledge of tribal elders).

259. *Id.* at 152.

learned history of the tribe, but does not really know the soul of the community, the sacred sites, and their cultural significance. The tribal community must determine the meaning and value of traditional cultural properties because it is their oral traditions and practices that give them import. Again, an established relationship prior to any sacred site identification builds familiarity, trust, and cooperation.

Companies should work with tribes to prepare cultural resource management plans at the outset of projects, or when planning expansions. Industry may do this primarily to meet environmental assessment requirements, but companies should undertake this planning voluntarily too. Such a process assists in identifying sensitive cultural areas and also helps assess the needs or interests of the tribe in protecting and preserving areas. For example, native plants used in tribal ceremonies may be located off-reservation where a pipeline is proposed. As part of engagement, the company may agree to reroute around the area or provide a way to transplant the native plants to an on-reservation location for the tribe. This would be truly beneficial to the tribal community because the loss of plants and resources have a ripple effect on the cultural traditions of tribes, such as loss of words for the plant, ceremonial uses, songs, and caretaker roles.

Other tribal cultural projects may include: (1) funding the recording of languages, stories and songs, which aim to revitalize a tribal language; (2) helping to establish a cultural center or museum that can serve as a place for communities to meet for cultural activities or as a repository for cultural items used by the community; (3) supporting cultural workshops to maintain or stimulate traditional skills and arts to young people; (4) sponsoring tribal powwows or festivals to promote traditional dance and ceremonies; (5) helping to generate a market for traditional arts and crafts; and (6) supporting language preservation projects. Tribes highly value all of these cultural projects.

I. Identifying, Planning, and Monitoring

Including representatives from a tribal community in environmental assessment groups is vital because it demonstrates the willingness of companies to include the community's perspective about the myriad of impacts, and, in doing so, helps incorporate traditional knowledge into environmental impact assessments. Also, including tribal members, tribal environmental departments, and land use committees on environmental monitoring committees and involving them in the collection and analysis of monitoring data supports transparency and disclosure principles. Participatory monitoring can be an important trust-building exercise. For

example, during the pipeline proposal period, the company should hire tribal monitors to survey the right of way and continue to monitor it during the construction process. Such monitoring will ensure compliance with the protection of cultural and other resources. Hiring tribal monitors for rights-of-way construction to monitor for cultural resources or human remains is important. The Ruby Project successfully used this action.²⁶⁰ Companies have a real opportunity to assist tribal communities in ways that the federal government may not assess or propose in its environmental assessments or environmental impact statements.

There are also many opportunities to involve tribes in environmental protection, rehabilitation, and restoration. Examples include gathering seeds of native plants for use in rehabilitation, fire management, and wildlife management. A reclamation project on reservation land may be helpful to a tribe that does not have the funding to establish such a project. Reclaiming a habitat or wetlands area, or repairing a degraded area used by elders or youth, may prove valuable. Many tribes have well-developed wildlife and fishery departments that can assist in developing restoration projects.²⁶¹ Contracting with tribal construction companies and hiring tribal workers for welding, electrical, pipefitting, heavy operating, and laborer positions for off-reservation projects brings badly needed income and employment to tribal communities.

J. Free, Prior, Informed Consent

As discussed earlier in Part III, section C, social engagement and the principle of free, prior and informed consent (FPIC) for mining projects around the world are a necessary part of doing business. Reaching FPIC between industry and tribal governments, including all or some of the issues discussed in this part, ensures that a company will manage the environmental, cultural, and social impacts to the highest business standards. Companies should consider FPIC standards for projects located off-reservation in aboriginal or ceded territory too, and they should document any agreements with the tribal government.

260. A. David Lester, *CERT and the Ruby Pipeline Project: Working Together to Enhance Tribal Sovereignty*, INDIAN COUNTRY TODAY (Nov. 1, 2010), <https://indiancountrymedianetwork.com/news/lester-cert-and-the-ruby-pipeline-project-working-together-to-enhance-tribal-sovereignty/> [https://perma.cc/P2F3-CS2Q].

261. Press Release, U.S. Fish & Wildlife Serv., *The Importance of Native American Tribes and Their Lands to Conservation Recognized with Nearly \$5 Million in Wildlife Grants to 29 Tribes Will Further Tribal-Federal-State Partnerships and Restoration of Key Habitat for Hundreds of Species* (Mar. 25, 2016) (on file with the *Vermont Journal of Environmental Law*).

In the international arena, scholars argue that, where activities directly impact indigenous peoples' right to "use, enjoy, control, and develop their traditional lands," there is a norm developing that recognizes and requires full consent, rather than just meaningful consultation.²⁶² FPIC would be an additional requirement as part of the general federal consultation standard. For example, a project impacting the lands, territories, and resources of the tribes should not occur without adequate tribal consultation and FPIC. As in, the international setting adoption of the standard by federal agencies would greatly assist tribes in protecting and preserving their interests.

The power to withhold consent is necessary to enforce other important tribal rights beyond rights of consultation and participation. This is particularly true in the context of projects that implicate tribal rights due to their ability to threaten indigenous peoples' physical and cultural survival. For instance, the ability to withhold consent allows communities to enforce their community property rights, protect their sacred landscapes, and maintain their culture and relationship with the land. Professor Laplante argues that energy industries can diffuse costly opposition to projects by engaging in community "consent processes."²⁶³ Additionally, acquiring consent from a tribe in an engagement process can give the project stability, avoid costly litigation, and harm its reputation. Former Special Rapporteur Anaya has stated: "[T]he principles of consultation and consent are aimed at avoiding the imposition of the will of one party over the other, and . . . instead striving for mutual understanding and consensual decision-making."²⁶⁴

The challenge is convincing the federal government to change its policy of consultation to include FPIC principles. Presently, the United States struggles with fulfilling its obligations of consultation, and it seems the status quo will likely remain unless tribes can effectively mount a campaign to incorporate FPIC in the federal process.²⁶⁵ Alternatively, Congress may be willing to amend its laws to incorporate the FPIC principles.

Of course, in the engagement process, tribes and the energy industry are free to apply the FPIC principles and reach agreements. In fact, all the different practices discussed in this part implement the principles because each aspect of dialogue, information sharing, reaching agreement on

262. Lillian A. Miranda, *The Hybrid State-Corporate Enterprise and Violations of Indigenous Land Rights: Theorizing Corporate Responsibility and Accountability Under International Law*, 11 LEWIS & CLARK L. REV. 135, 151–53 (2007).

263. Laplante & Spears, *supra* note 121, at 88.

264. James Anaya (Special Rapporteur on the Situation of Human Rights & Fundamental Freedom of Indigenous Peoples), *Promotion & Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development*, ¶ 49, U.N. Doc. A/HRC/12/34 (July 15, 2009).

265. See Kinnison, *supra* note 192, at 1325 (noting the rejection of FPIC rights in the U.N. Declaration over concerns of self-determination).

meeting protocols, and engaging tribal leaders and tribal members in working with the company on restoring and identifying culturally significant areas are all parts of the FPIC principles. Certainly, entering into a memorandum of agreement regarding projects, protocol, and meetings would enhance the initial and ongoing relationship between a company and a tribe.

K. Agreements

Any agreement should be a flexible instrument that provides a framework for governing the ongoing and long-term relationship between an oil and gas project and tribes. The willingness of all parties to change and improve the agreement as circumstances require must characterize the relationship. Accordingly, these kinds of agreements usually contain commitments from parties to work together to ensure mutual benefit and change and to improve the agreement as needed. The success of an agreement also depends on a company's ability to properly implement and monitor the agreement. To assist this process, companies and tribes may develop a committee to oversee the agreement's implementation and undertake regular meetings and reporting.

There are no hard and fast rules about what should be in an agreement. This will depend on the context, the goals and aspirations of the parties to the agreement, and what they see as fair and reasonable. However, it is possible to give some examples on what the options, risks, and potential benefits are with different approaches. The types of issues agreements can address include: (1) company support (not necessarily financial) in the development and implementation of community projects and initiatives; (2) employment and contracting (supplying goods and services) opportunities; (3) monitoring restoration projects; (4) environmental, social, health and cultural impact management; (5) protocols for communication including points of contact, scheduling of meetings, and information sharing; and (6) any provisions relating to the tribal community's use of off-reservation lands.

Additionally, agreements should outline the role and responsibilities of the company and the tribal government, mechanisms for implementing and monitoring agreements, project budgets, and mechanisms for resolving community concerns or grievances.

CONCLUSION

The increased opposition to oil and gas pipelines, and other energy-industry projects located near Indian reservations or lands on which tribes

have treaty-reserved hunting, fishing, and gathering rights, has gained international attention. The recent DAPL controversy at the Standing Rock Sioux Reservation has raised many political, social, environmental, and tribal-sovereignty issues as well as the role of the federal government in adequately protecting rights of tribes and communities. We now stand at a crossroads. This article urges oil and gas companies to seize the opportunity to engage with tribal governments, as the international energy industry is doing with indigenous peoples, to resolve historic conflicts, protect human rights, respect self-determination, and share in the responsibility for its activities impacting communities.

IS WATER SIMPLY A FLOW? EXPLORING AN ALTERNATIVE MINDSET FOR RECOGNIZING WATER AS A LEGAL PERSON

*Alexandre Lillo**

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INTRODUCTION

*Ko au te awa, ko te awa ko au*¹

Our modern societies deal with severe water issues daily. These contemporary problems, although acknowledged by scientists, remain a “headache” for human and social sciences as the instruments and mechanisms of water law often lack effectiveness.² To compensate for this flaw, a recent movement argues it is necessary to rethink the way we handle water-related issues by reformulating the relationship between this resource and humans beings.³ Indeed, it is becoming increasingly common to perceive water as “a flow that transcends the human-nature binary”⁴ and, as a result, to develop innovative instruments that account for this perception. However, it remains a challenging exercise to consider water in this way; thus, legal tools struggle to catch up.

Current environmental and water law is influenced by a rights-based approach, which has evolved over time.⁵ Put differently, this perspective “is the most recent of various analytical constructs that have been utilized in law to protect the natural world and ecological processes on which life depends.”⁶ In this regard, employing the concept of legal personality to protect and preserve nature and its components is one of the latest evolutions in environmental law. The origins of this proposition lie within Christopher Stone’s contributions.⁷

1. In English, this translates to “I am the river, and the river is me.” It is a Whanganui Tribe saying that “refers to the river as a whole, its spiritual and physical dimensions and [the Whanganui Tribe] unity and connection with the river.” *Tutohu Whakatupua Explained Questions and Answers*, WANGANUI CHRONICLE (Sept. 3, 2012, 4:29 PM), http://www.nzherald.co.nz/wanganui-chronicle/news/article.cfm?c_id=1503426&objectid=11073833 [https://perma.cc/4UQ4-SRRS].

2. Charles Duhigg, *Clean Water Laws Are Neglected, at a Cost in Suffering*, N.Y. TIMES (Sept. 12, 2009), <http://www.nytimes.com/2009/09/13/us/13water.html> [https://perma.cc/2D9V-JZ9T].

3. See, e.g., Alice Cohen, *Water as a Governance Opportunity*, in WATER AS A SOCIAL OPPORTUNITY 63, 72 (Seanna L. Davidson et al. eds., 2016) (describing the opportunities to redefine water in governance by “integrating questions of water, human health, and ecosystem health in innovative and holistic ways”).

4. *Id.*

5. See, e.g., Jamie Benidickson, *The Evolution of Canadian Water Law and Policy: Securing Safe and Sustainable Abundance*, 13 MCGILL J. SUSTAINABLE DEV. L. 61, 61–62 (2017) (Can.) (discussing the evolution of water policy and law); Alexandre Lillo, *La gouvernance de l’eau au Canada: Un regard juridique et épistémologique sur l’éminente complexité de sa mise œuvre*, 30 J. ENVTL. L. & PRAC. 123, 126–28 (2017) (Can.) (discussing the origins of water governance).

6. Dinah Shelton, *Nature As a Legal Person*, VERTIGO, Sept. 2015, at para. 2.

7. Christopher D. Stone, *Should Trees Have Standing—Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450, 467, 472, 489 (1972) [hereinafter Stone (1972)].

In 1972, Professor Stone made a groundbreaking proposal by suggesting the natural environment should be given legal personhood.⁸ In his paper, and in its later updates,⁹ he argued that if one could speak for nature—plants, animals, water, or air—judges might be more sensitive to its degradation and disappearance.¹⁰ Despite criticism,¹¹ Stone’s perspective still prevails as a reference when exploring links between nature and legal personality.

Granting legal personality to a non-human entity implies that the law shall treat it as a subject rather than an object. This legal or juridical person “refers generally to an entity . . . which society has decided to confer specific rights and obligations.”¹² When a society recognizes nature as a subject of law, its status shifts from being considered as a private good, common resource or a resource in the public trust to a specific person under the law, with all the consequences that entails.

Therefore, nature could be afforded legal rights and duties or represented by a guardian. In short, nature could have a voice heard by society. From a legal perspective, the real interest of this approach, in addition to creating a form of acknowledgment and a different discourse around nature, arises from the possibility of constructing unique legal mechanisms.

8. See James D. K. Morris & Jacinta Ruru, *Giving Voice to Rivers: Legal Personality As a Vehicle for Recognising Indigenous Peoples’ Relationships to Water?*, 14 AUSTL. INDIGENOUS L. REV. 49, 50 (2010) (restating Stone’s argument for the benefits of applying legal personality to nature as: (1) “the issue of standing for third parties would be less problematic;” (2) “emphasis would be on the actual impact on that resource as opposed to assessing an affected party’s economic loss;” and (3) “remedies would apply to the natural resource directly . . .”).

9. CHRISTOPHER D. STONE, *SHOULD TREES HAVE STANDING? TOWARD LEGAL RIGHTS FOR NATURAL OBJECTS* (1974); CHRISTOPHER D. STONE, *SHOULD TREES HAVE STANDING? TOWARD LEGAL RIGHTS FOR NATURAL OBJECTS* (rev. ed., Avon Books 1975); Christopher D. Stone, *Should Trees Have Standing? Revisited: How Far Will Law and Morals Reach? A Pluralist Perspective*, 59 S. CAL. L. REV. 1, 8 (1985); CHRISTOPHER D. STONE, *SHOULD TREES HAVE STANDING? TOWARD LEGAL RIGHTS FOR NATURAL OBJECTS* (Tioga Publ’g Co. 1988); CHRISTOPHER D. STONE, *SHOULD TREES HAVE STANDING? AND OTHER ESSAYS ON LAW, MORAL, AND THE ENVIRONMENT* (Oceana Publ’ns, Inc. 1996) [hereinafter STONE (1996)].

10. MARIE-ANGÈLE HERMITTE, *LA NATURE, SUJET DE DROIT?*, 2011/1 ANNALES HISTOIRE, SCIENCES SOCIALES 173, 173 (2011) (Fr.).

11. See, e.g., Joel Feinberg, *The Rights of Animals and Unborn Generations*, in 1 PHILOSOPHY & ENVIRONMENTAL CRISIS 43, 50 (William T. Blackstone ed., 1974) (“[M]ere things have no interests. *A fortiori*, they have no interests to be protected by legal or moral rules.”); Andrew Brennan & Yeuk-Sze Lo, *Environmental Ethics*, STAN. ENCYCLOPEDIA PHIL., <https://plato.stanford.edu/archives/win2016/entries/ethics-environmental/> [https://perma.cc/R8KC-V4RB] (last updated Dec. 2, 2016) (noting one criticism of Stone’s theory is that for things to have legal standing they must have interests).

12. Shelton, *supra* note 6, at para. 2.

In practice, granting nature legal personhood continues to be a marginal reality.¹³ However, a few examples inspire hope for a widespread movement.¹⁴ New Zealand exemplifies this approach and is a trailblazer in the field. In 2012, this Southern Hemisphere country recognized legal personhood for the Whanganui River through a series of settlement agreements and, later, a bill enacted in 2017.¹⁵ In 2014, it recognized legal personhood for the Te Urewera National Park.¹⁶ Even more recently, a record of understanding was signed between eight Māori representatives and the Government in order to grant Mount Taranaki legal personality.¹⁷ Additionally, in South America, Ecuador constitutionally acknowledged nature as a legal person in 2008¹⁸ and the Constitutional Court of Colombia granted the Atrato River legal rights in 2016.¹⁹ In India, the Ganga and Yamuna rivers were declared as living entities by a judge of the Uttarakhand High Court.²⁰ Even in the U.S., a lawsuit, filed on September

13. See Shelton, *supra* note 6, at paras. 24–50 (highlighting the relatively few examples of legal personhood for nature).

14. See, e.g., Clare Kendall, *A New Law of Nature*, *GUARDIAN* (Sept. 23, 2008, 7:01 PM), <https://www.theguardian.com/environment/2008/sep/24/ecuador.conservation> [<https://perma.cc/2BKC-D6PG>] (discussing giving legal rights to Ecuador's "rivers, forests, and air"); Sandra Postel, *A River in New Zealand Gets a Legal Voice*, *NAT'L GEOGRAPHIC* (Sept. 4, 2012), <http://voices.nationalgeographic.org/2012/09/04/a-river-in-new-zealand-gets-a-legal-voice/> [<https://perma.cc/U37Y-UFMK>] (describing New Zealand's agreement to recognize a river's legal rights); Bryant Rousseau, *In New Zealand, Lands and Rivers Can Be People (Legally Speaking)*, *N.Y. TIMES* (July 13, 2016), <https://www.nytimes.com/2016/07/14/world/what-in-the-world/in-new-zealand-lands-and-rivers-can-be-people-legally-speaking.html> [<https://perma.cc/C3AB-X2VK>] (discussing a national parks legal personhood in New Zealand); *India Court Gives Sacred Ganges and Yamuna Rivers Human Status*, *BBC NEWS* (Mar. 21, 2017), <http://www.bbc.com/news/world-asia-india-39336284> [<https://perma.cc/4FTN-CS7Y>] (reporting on the court case that granted legal rights to the rivers).

15. *Te Awa Tupua (Whanganui River Claims Settlement) Bill 2016* (129-2) (N.Z.); Tūtohu Whakatupua, Whanganui Iwi and the Crown [2012] (signed 30 Aug. 2012), art 2.1; see also Ruruku Whakatupua Te Mana O Te Awa Tupua, Whanganui Iwi and the Crown [2014] (signed 5 Aug. 2014), arts 2.2, 2.3, 2.7 (focusing on the establishment of a new legal framework for the Whanganui River and finalizing the agreement by adopting two additional documents, which stand as the Crown's acknowledgement and apology); Ruruku Whakatupua Te Mana O Te Iwi O Whanganui, Whanganui Iwi and the Crown [2014] (signed 5 Aug. 2014), art 4 (concentrating the recognition of the Whanganui Iwi, as well as their interactions with the Whanganui River).

16. *Te Urewera Act 2014*, s 11 (N.Z.).

17. See, e.g., Eleanor Ainge Roy, *New Zealand Gives Mount Taranaki Same Legal Rights As a Person*, *GUARDIAN* (Dec. 22, 2017, 6:49 AM), <https://www.theguardian.com/world/2017/dec/22/new-zealand-gives-mount-taranaki-same-legal-rights-as-a-person> [<https://perma.cc/V75K-G64Y>]; Blanton Smith, *Mt Taranaki to Become Legal Personality Under Agreement Between Iwi and Government*, *TARANAKI DAILY NEWS* (Dec. 21, 2017, 3:51 PM), <https://www.stuff.co.nz/taranaki-daily-news/news/100085814/mt-taranaki-to-become-legal-personality-under-agreement-between-iwi-and-government> [<https://perma.cc/7F8U-VJ5P>].

18. Constitución de la República del Ecuador, [Constitution] Oct. 20, 2008, arts. 71–74 (Ecuador).

19. Colombia Constitutional Court Ruling T-622 of 2016, Expediente T-5.016.242. Available online: <https://justiciaambientalcolombia.org/2017/05/07/sentencia-rio-atrato/>.

20. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 16 (India) (granting rights to the rivers in a territorial court in the Indian judicial system).

25, 2017, asked the district court in Denver to recognize the Colorado River as a legal person.²¹

These doctrinal and practical examples show that a legal framework dedicated to nature as a legal person is under construction. Although, it will certainly take time, experimentation, attempts, and failures to make it an acceptable legal tool, one way to contribute to this movement is to explore the applicability of this doctrine to water as a whole.

The consequences of recognizing water as a legal person would be notable: it would be a subject rather than an object of law with individual and subjective rights; it would be bound by liabilities and obligations; and it would be entitled to damages if harmed. However, this approach raises a set of questions: as a component of nature, can water be granted legal personality or an equivalent status in law? If yes, what form would it take? What conditions would be applicable? Can we get past the “common resources” status?

Most of all, envisioning water as a subject of law will inevitably lead to a theoretical and legal reconceptualization of the Human–Nature binary. As a result, the purpose of this article is to investigate the early stages of this idea from both a theoretical and legal perspective. It explores the foundation of water’s legal personality and its promising capacity to respond to contemporary environmental issues by recycling a traditional legal tool.²² First, this article examines the theoretical origins of water as a legal person. Then, it analyzes the concept of legal personality in common and civil law. Finally, it explores the extent of its compatibility with water.

21. See, e.g., Elizabeth Lowman, *Environmental Group Asks Court to Recognize Colorado River As a Person*, JURIST (Sept. 26, 2017, 1:21 PM), <http://www.jurist.org/paperchase/2017/09/environmental-group-asks-court-to-recognize-colorado-river-as-a-person.php> [<https://perma.cc/L7L6-GXQZ>] (summarizing the press release announcing the case); Victoria Prieskop, *Environmentalists Seek Personhood for Colorado River Ecosystem*, COURTHOUSE NEWS SERV. (Sept. 27, 2017), <https://www.courthousenews.com/environmentalists-seek-personhood-colorado-river-ecosystem/> [<https://perma.cc/U9NX-CEPA>] (discussing the environmental group’s quest to seek legal personhood for the Colorado River).

22. Although this article does not address indigenous beliefs (but instead focuses on metaphysical and legal approaches), the roots of this idea lie in indigenous values where water and humans are intertwined. See, e.g., Morris & Ruru, *supra* note 8, at 49 (explaining that indigenous belief is another paradigm through which to address rights of nature and contemporary environmental issues and that indigenous societies, like those of New Zealand, have long believed that humans and nature are intertwined); see also Catherine J. Iorns Magallanes, *Nature As an Ancestor: Two Examples of Legal Personality for Nature in New Zealand*, VERTIGO, Sept. 2015, para. 5 (“Despite not stemming from the environmentalist rights of nature approach, these examples [of indigenous beliefs] were designed to better protect the natural environment and to better recognise an alternative relationship between humans and nature.”).

I. A POST-MODERN MINDSET FOR WATER

In the few instances where water has become a legal person, there has been a discussion regarding the spiritual and sacred dimension of this resource.²³ This section attempts to translate such beliefs into theoretical arguments. In order to consider water as a legal person, it is first essential to describe the philosophical grounds that support this idea and to answer a fundamental question: For what reasons could water be conceived as a person? This exercise based on environmental ethics reconceptualizes interactions between human beings and water, and how these interactions influence our understanding of water. From this theoretical perspective, water cannot only be perceived as an independent natural reality; it is first and foremost a hybrid object concurrently defined by social and natural interactions.²⁴

The theory of environmental ethics was created and developed in North America in the 1960s and 1970s.²⁵ Simultaneously with the movement of common resources,²⁶ a more philosophical school of thought emerged from the environmental crises unveiled in the second half of the 20th century. In this regard:

Although nature was the focus of much nineteenth and twentieth century philosophy, contemporary environmental ethics only emerged as an academic discipline in the 1970s. The questioning and rethinking of the relationship of human beings with the natural environment over the last thirty years reflected an already widespread perception in the 1960s that the late twentieth century faced a human population explosion as well as a serious environmental crisis.²⁷

23. See, e.g., Magallanes, *supra* note 22, at para. 14 (outlining New Zealand indigenous concepts of water in comparison with granting nature legal personhood).

24. From Bruno Latour's perspective, a hybrid (or quasi-object) is a thing that cannot belong solely to the social or the natural realm. BRUNO LATOUR, *NOUS N'AVONS JAMAIS ETE MODERNE* [WE WERE NEVER MODERN] (1991). In other words, a hybrid object is made from both nature and society and shall be considered as such. To this end, Latour aims to "cure" the modern process of continually distinguishing nature and society as two separate dimensions.

25. See generally Catherine Larrère, *Éthiques de L'environnement*, 24 *MULTITUDES* 75, 75 (2006) (discussing the history of the environmental ethics and thought in America) (Fr.); Brennan & Lo, *supra* note 11 (outlining the development of environmental ethics).

26. See generally ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* 2–6 (1990) (compiling common resource doctrinal and theoretical models); Garrett Hardin, *The Tragedy of the Commons*, 162 *SCIENCE* 1243, 1244 (showing that open access to a common resource, for which there is a significant demand, indubitably leads to its overexploitation, and, potentially, to its extinction).

27. Brennan & Lo, *supra* note 11.

Environmental ethics responds to the harmful effects of human activities on natural ecosystems by advocating for a paradigm shift away from the traditional and predominant anthropocentrism.²⁸ Therefore, this theory examines the way in which we grasp contemporary environmental issues and questions, an approach that is frequently centered on humankind.²⁹ Environmental ethics challenges this interpretation of the Human–Nature binary³⁰ by confronting the assumed superiority and domination of humanity over nature. Thus:

When environmental ethics emerged as a new sub-discipline of philosophy in the early 1970s, it did so by posing a challenge to traditional anthropocentrism. In the first place, it questioned the assumed moral superiority of human beings to members of other species on earth. In the second place, it investigated the possibility of rational arguments for assigning intrinsic value to the natural environment and its non-human contents.³¹

In this regard, the purpose of environmental ethics is: to explore the influence of human values on the perception of the environment and its non-human components; to dissolve the polarity between nature and society;³² and to question the nature and the origins of environmental crises.³³ Therefore, this theory endeavors to conceive and justify a new relationship between humans and nature.³⁴ Based on this perspective, it becomes possible to propose alternative tools to comprehend current environmental problems. The benefit of this approach lies in its transversal ambition to consider not only the social *and* natural dimensions of contemporary environmental challenges, but also the interactions *between* the two.

28. *Id.*

29. *Id.*

30. Vinh-De Nguyen, *Qu'est-ce que L'éthique de L'environnement?* HORIZONS PHILOSOPHIQUES [PHIL. HORIZONS], Spring 2000, at 133, 140 (Can.).

31. Brennan & Lo, *supra* note 11.

32. See Cohen, *supra* note 3, at 66–67 (explaining that the application of environmental ethics aims to reframe the “nature-society binary” that is often described as a couple “wherein a barrier exists between the realms of the human and the non-human”).

33. Hicham-Stéphane Afeissa, *De L'éthique Environnementale au Principe Responsabilité et Retour* [From Environmental Ethics to the Principle of Responsibility and Return], 8 EDUCATION RELATIVE A L'ENVIRONNEMENT 22 (2009) (Fr.).

34. Nguyen, *supra* note 30, at 138.

By its nature, environmental ethics can be imposed on water.³⁵ Canadian scholar Jamie Linton has pursued this exercise by adapting relational dialectics to water.³⁶ Relational dialectics is an analysis that “considers how things that are often understood to be separate, independent, or self-sufficient, actually produce each other in mutually constitutive processes.”³⁷ In other words, relational dialectics considers the dependency that characterizes two things, moments, or concepts,³⁸ and it focuses on their internal relations.³⁹ Thus, a crucial question arises: What analyses of water does environmental ethics allow? To answer this question, the interactions between water and human beings must be explored.

The challenge associated with water law and management lies in the fact this resource is characterized by universal and transversal dimensions that are seemingly external to the human experience. This portrait of water as a strict natural reality creates a filter through which it becomes difficult to consider this substance from a legal perspective.⁴⁰ Also described as a meta-narration, this confined perception may be reconceptualized using environmental ethics.⁴¹ Water is not only defined by natural dimensions but also by socio-cultural aspects.⁴²

In fact, the social nature of water may be expressed through two observations. First, the concepts surrounding water are developed and popularized in a specific sociocultural context which intrinsically influences

35. See ROBERT W. SANDFORD & MERRELL-ANN S. PHARE, *ETHICAL WATER – LEARNING TO VALUE WHAT MATTERS MOST* 34 (2011) (illustrating that environmental ethics can be transposed in various models); Graham Mayeda, *L'espace Naturel et la Responsabilité Envers L'Environnement Eans la Philosophie de Nishida Kitarō et Watsuji Tetsurō*, in *MILIEUX MODERNES ET REFLETS JAPONAIS: CHEMINS PHILOSOPHIQUES* 129, 132–33 (2015) (providing a specific case of Japanese environmental ethics); see also CLARE PALMER, ET AL., *ENVIRONMENTAL ETHICS* 420 (2014) (giving a general description of the models and a detailed philosophical analysis).

36. JAMIE LINTON, *WHAT IS WATER? THE HISTORY OF A MODERN ABSTRACTION* 25 (2010).

37. *Id.* at 27.

38. *Id.* at 28.

39. See Jeremy J. Schmidt, *Water: An Ethical Opportunity for Canada*, in *WATER AS A SOCIAL OPPORTUNITY* 33–34 (Seanna L. Davidson et al. eds., 2015) (providing a deeper theoretical analysis of water ethics).

40. DANIEL PUECH, *L'EAU EN REPRÉSENTATIONS: GESTION DES MILIEUX AQUATIQUES ET REPRÉSENTATIONS SOCIALES* 73, 80 (Chantel Apse & Patrick Point eds., 1999) (providing an example of the universal and transversal characteristics of water and of the difficulties it creates for law).

41. See generally LINTON, *supra* note 36, at 8–11 (presenting an alternative description of water as a meta-narration, under the concept of modern water, in which considering water as a mere natural entity is abstracting its socio-natural constitution); Julie Trottier, *L'avènement de la Gestion Intégrée des Ressources en Eau*, in *GESTION DE L'EAU, APPROCHE TERRITORIALE ET INSTITUTIONNELLE* 179, 182 (Alexandre Brun & Frédéric Lasserre, eds., 2012) (defining modern water as an unterritorialized, objective, homogenous, ahistorical and outside of social interactions entity).

42. Lillo, *supra* note 5, at 134.

its construction and the way in which it is described.⁴³ Second, water-related challenges and issues result directly or indirectly from interactions with the human environment.⁴⁴ Therefore, the theoretical and conceptual description of water should consider these two realities. Essentially, water is concurrently bound by nature as well as society; thus, it should not be regarded merely as a social or natural entity. Instead, water can be conceived as a concomitant and consubstantial combination of the two;⁴⁵ it is a hybrid object⁴⁶ and a socio-natural entity.

Based on this epistemological mindset, water consists of both natural and social dimensions. On the one hand, the natural aspect of water pertains to nature as an independent being. A mind-independent reality existing without any human presence, conception, or description.⁴⁷ On the other hand, the social dimension of water appears within the social context and the surrounding cultural environment. The social context and environment define how water is perceived in a particular situation. As a result, water can be understood as a natural, external, and independent reality whose relations and reciprocal interactions with mankind, human culture, and social environment define its meaning and implications.⁴⁸ In fact, water freezes, evaporates, condenses, flows, and emerges regardless of any human influence.⁴⁹ However, every challenge and problem related to it only exists because of its relationship with human beings.⁵⁰ In other words, the identity of water arises from social interactions; its “process occurs *through* us,” and therefore, “water problems are never just water problems.”⁵¹ Instead, water problems are consequences of a “particular kind of engagement” that is both cultural and social.⁵²

As part of this article, the value of this theoretical approach is associated with the post-modern conception of water that it proposes.⁵³

43. See Trotter, *supra* note 41, at 180 (presenting an example through the case of integrated water resources management).

44. *Facts on Water Resources*, GREENFACTS, <http://www.greenfacts.org/en/water-resources/water-resources-foldout.pdf> [<https://perma.cc/XL43-B8LC>] (last visited Feb. 19, 2018).

45. See Erik Swyngedouw, *Modernity and Hybridity: Nature, Regeneracionismo, and the Production of the Spanish Waterscape*, 89 ANNALS ASS'N AM. GEOGRAPHERS 443, 443–45 (1999) (showing the dual condition between the social and natural status of water); see also LINTON, *supra* note 36, at 224 (explaining that water is “a process whose identity is formed in social relations”).

46. LATOUR, *supra* note 24.

47. Magallanes, *supra* note 22, at para. 14 (describing water’s naturalness as having “its own spirit and life force”).

48. Lillo, *supra* note 5, at 134.

49. LINTON, *supra* note 36, at 109.

50. *Id.*

51. *Id.* at 224.

52. *Id.*; see also LATOUR, *supra* note 24 at 47–48 (providing a more general approach).

53. Although not essential to this present paper, it would have been possible to extend this reasoning by introducing the relational ontology of water. Lillo, *supra* note 5, at 134–35 (explaining that

Water is an entity endowed with its own personality, its own health, and, arguably, its own spirit independent of human beings or their influence. Accordingly, water can be conceived as a specific being—a person. A quality allocated to “persons” is the capacity to interact with the components of their environment; therefore, it is defined by a set of connections arising from the agency of each actor involved.⁵⁴ Thus, granting water legal personhood begins to make sense as this entity would be recognized *per se*, and these social interactions could be considered mutually to its existence rather than separately.

II. THE CONCEPT OF LEGAL PERSONALITY AND ITS POTENTIAL COMPATIBILITY WITH WATER

Every theoretical approach requires empirical data to supplement it. As mentioned earlier, examples exist of nature being recognized as a legal person.⁵⁵ From the precedents set in New Zealand and India, this article examines the cases in which bodies of water have been granted legal personhood and attempts to identify criteria for treating water in this way. To complete these case studies, a positivist analysis of the current state of law with respect to legal personality is conducted. By targeting the dominant conceptions regarding legal personhood in common and civil law, this article answers the following question: Are there general standards upon which water could be considered a legal person?

A. The Precedents Set by New Zealand and India

There are only a few cases in which a body of water was granted legal personhood.⁵⁶ Amongst them are the noteworthy illustrations from New Zealand and India.⁵⁷ In both situations, a strong spiritual approach is at the root.⁵⁸ In New Zealand, the Māori beliefs influence the cultural grounds that

the ontological approach considers water as a hybrid reality, characterized by the reciprocity of its social and natural dimensions).

54. See BRUNO LATOUR, *FACE À GAÏA: HUIT CONFÉRENCES SUR LE NOUVEAU RÉGIME CLIMATIQUE* 67 (2015) (explaining how the concept of agency is employed in its philosophical aspect—it is the capacity (and the effectiveness associated with that capacity) to act in a given environment that has the power to influence a given situation).

55. See, e.g., *Te Awa Tupua, Whanganui Iwi and the Crown* [2014] (signed 5 Aug. 2014), art 9.13.48; *Mohd. Salim v. State of Uttarakhand*, 2017 PIL No. 126 of 2014, ¶ 16 (India).

56. Erin O'Donnell & Julia Talbot-Jones, *Three Rivers Are Now Legally People – But That's Just the Start of Looking After Them*, CONVERSATION (Mar. 23, 2017, 3:13 PM), <http://theconversation.com/three-rivers-are-now-legally-people-but-thats-just-the-start-of-looking-after-them-74983> [<https://perma.cc/6U2F-CEXX>].

57. *Id.*

58. *Id.*

led to legislatively granting the Whanganui River legal personality.⁵⁹ A similar recognition occurred in India, where the Ganga and Yamuna rivers were judicially declared living legal entities.⁶⁰

1. The Whanganui River and Te Awa Tupua

From the environmental ethics perspective, New Zealand stands out as a precursor. Indeed, this country recognized the Whanganui River as a legal person in a deed of settlement called *Tūtohu Whakatupua* and signed in 2012.⁶¹ This instrument was a full and final settlement between the Whanganui Iwi and the Crown.⁶² Additional measures later strengthened this initiative.⁶³ First, the *Tūtohu Whakatupua* was completed in 2014 by two documents: (1) the *Ruruku Whakatupua Te Mana o Te Awa Tupua*,⁶⁴ which established a new legal framework for the Whanganui River, and (2) the *Ruruku Whakatupua Te Mana o Te Iwi o Whanganui*,⁶⁵ which recognizes the Whanganui Iwi and their interactions with the Whanganui River. Second, a supplementary deed adopted in 2016 amended certain provisions of the previous *Ruruku Whakatupua Te Mana o Te Awa Tupua* and *Ruruku Whakatupua Te Mana o Te Iwi o Whanganui*.⁶⁶ Third, the entirety of this process was enacted in 2017 when the *Te Awa Tupua (Whanganui River Claims Settlement) Act* (Te Awa Tupua Act) was adopted.⁶⁷ Because this law derives from decades of negotiations and settlements between the Whanganui Iwi and the Crown, it compiles the essential contributions of the official documents mentioned above.⁶⁸ Thus, the following paragraphs will explore the noteworthy provisions included in this Act.

The main purpose and significance of this Act is the personification of the Whanganui River.⁶⁹ It recognizes that the River is “held by the

59. Rousseau, *supra* note 14.

60. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 16 (India).

61. *Tūtohu Whakatupua, Whanganui Iwi and the Crown* [2014] (signed 30 Aug. 2012), arts 2.1.2, 2.6-2.9.

62. Iwi is the Māori word for “tribe.” See *Ruruku Whakatupua Te Mana O Te Iwi O Whanganui*, *supra* note 15, at art 2.11 (translating iwi to tribe).

63. See *Te Urewera Act*, *supra* note 16 at s 11 (broadening the movement by the recognition of a national park as a legal person in 2014).

64. *Ruruku Whakatupua Te Mana O Te Awa Tupua*, *supra* note 15, at art 1.

65. *Ruruku Whakatupua Te Mana O Te Iwi O Whanganui*, *supra* note 15, at art 1.

66. *Ruruku Whakatupua – Te Tānekaha, Whanganui Iwi and the Crown* [2016] (signed 27 Apr. 2016), art 1.

67. See *Te Awa Tupua (Whanganui River Claims Settlement) Bill 2016* (129-2), pt 2, cl 14 (N.Z.) (legalizing the status of the Whanganui River as a legal person).

68. *Id.* at commentary.

69. *Id.*

indigenous tribes and upholds their spiritual relationship with it. . . . [I]t create[s] a new legal entity of the river itself, Te Awa Tupua.”⁷⁰ These words imply that the Māori expression “Te Awa Tupua” is not simply a designation that was given to the Whanganui River but that it has its own meaning and essence.⁷¹ “Te Awa Tupua” refers not only to the river from a hydrological perspective, but it provides “a description of the river system from the mountains to the sea including its tributaries and all its elements.”⁷² In other words, this conception “is not a geographical location, but rather a recognition of the river system as a whole with specific interests and intrinsic values of its own.”⁷³

The Te Awa Tupua Act also included and defined this expression. Clause 12 provides that “Te Awa Tupua is an indivisible and living whole, comprising the Whanganui River from the mountains to the sea, incorporating all its physical and metaphysical elements.”⁷⁴ Indirectly, this provision implies that the River is not limited to its traditional understanding as a stream of water following a definite course or channel.⁷⁵ Rather, the Act describes the River as “the body of water known as the Whanganui River that flows continuously or intermittently from its headwaters to the mouth of the Whanganui River on the Tasman Sea and is located within the Whanganui River catchment.”⁷⁶ This entity is composed of: (1) “all tributaries, streams, and other natural watercourses that flow continuously or intermittently into the body of water [previously] described”;⁷⁷ (2) “all lakes and wetlands connected continuously or intermittently with the bodies of water [previously] referred to”;⁷⁸ and (3) “the beds of the bodies of water” related to the Whanganui River.⁷⁹

Additionally, clause 13 of the Act describes Te Awa Tupua in depth.⁸⁰ It is understood as both a physical and spiritual entity, an indivisible and

70. Magallanes, *supra* note 22, at para. 17.

71. See Te Awa Tupua (Whanganui River Claims Settlement) Bill 2016 (129-2), pt 2, cl 12 (N.Z.) (explaining that this concept does not have an English translation).

72. *Tutohu Whakatupua Explained Questions and Answers*, *supra* note 1.

73. *Te Awa Tupua*, WHANGANUI RIVER RIGHTS IN NEW ZEALAND, <https://sites.google.com/site/whanganuiriverrights/the-river-as-a-legal-entity> [https://perma.cc/7DMR-XHC5] (last visited Feb. 19, 2018).

74. Te Awa Tupua (Whanganui River Claims Settlement) Bill 2016 (129-2), pt 2, cl 12 (N.Z.).

75. *River*, ENGLISH OXFORD LIVING DICTIONARIES, <https://en.oxforddictionaries.com/definition/river> [https://perma.cc/UNZ3-6YTA] (last visited Feb. 19, 2018).

76. Te Awa Tupua (Whanganui River Claims Settlement) Bill 2016 (129-2), pt 1, cl 7(a) (N.Z.).

77. *Id.* at pt 1, cl 7(b).

78. *Id.* at pt 1, cl 7(c).

79. *Id.* at pt 1, cl 7(d).

80. *Id.* at pt 2, cl 13.

living whole, as well as a singular entity comprised of many elements and communities.⁸¹ Therefore, Te Awa Tupua and the various communities linked to it, including the Iwi and Hapū of the Whanganui River, have inalienable connections and responsibilities regarding their respective health and well-being.⁸² The nature of this relationship was translated into law by declaring Te Awa Tupua as a legal person.⁸³ More precisely, clause 14(1) of the Act states that this entity has “all the rights, powers, duties, and liabilities of a legal person.”⁸⁴ Clause 14(2) supplemented this provision by indicating that “[t]he rights, powers, and duties of Te Awa Tupua must be exercised or performed, and responsibility for its liabilities must be taken, by Te Pou Tupua,”⁸⁵ which is a dedicated body established to be the “human face of Te Awa Tupua.”⁸⁶ Furthermore, it is established that Crown-owned parts of the riverbeds are transferred and vested in the name of Te Awa Tupua.⁸⁷ These provisions have a significant meaning; they have the effect of abolishing the traditional approach based on riparian rights, property rights, or public ownership.

In sum, by legally recognizing a metaphysical conception of water through multiple initiatives, New Zealand stimulated a positive momentum to the movement of environmental ethics. As the first developed country to implement and enact such a standard, this Nation contributed to an emergent doctrine. New Zealand acknowledged that a river is not only a physical unit having hydrological effects on fauna, flora, and mankind, but also a living entity having its own relationships, health, functions, and values.⁸⁸ In addition, this fundamental assertion was further recognized using legal personality, illustrating that a “Western” legal tool can be applied to a spiritual understanding of water. The Whanganui River case represents a promising paradigm shift in the protection and preservation of water. In the following section, we will see that this initiative recently had support from a judgment in India.

81. *Id.*

82. *Id.* at commentary.

83. *Id.* at pt 2, cl 14(1).

84. *Id.*

85. *Id.* at pt 2, cl 14(2).

86. *Id.* at pt 2, cl 18(2) (providing for an institutionalized representation of Te Awa Tupua; this body constitutes a tool similar to trusteeship or guardianship, as Te Awa Tupua would be, for instance, incapable of representing itself—law designed a specific mechanism so it can be done); see also Stone (1972), *supra* note 7, at 464–67 (showing how Christopher Stone envisioned and anticipated this type of instrument).

87. Te Awa Tupua (Whanganui River Claims Settlement) Bill 2016 (129-2), pt 2, cl 48 (N.Z.).

88. See generally *id.* (showing the Te Awa Tupua River has its own legal personality).

2. The Ganga and Yamuna Rivers Judgment

Following the example set by New Zealand, India was the scene of a recent judgment recognizing the Ganga and Yamuna rivers as legal living entities.⁸⁹ Contemporary to the Te Awa Tupua Act,⁹⁰ the verdict rendered by Justice Rajiv Sharma and Justice Alok Singh is the first of its kind in India.⁹¹ Although the India Supreme Court ultimately suspended the judgment, the decision still constitutes a landmark in the field of environmental law.⁹²

Similar to the Māori beliefs in New Zealand, communities in India, especially the Hindu community, have a strong spiritual attachment to their environment.⁹³ Even though regarded as a common-law country,⁹⁴ the Indian legal system can be defined as a hybrid model. It is influenced by civil and common law as well as customary practice and religious convictions. In this singular legal context, litigation arose from the “revelation that despite long correspondence, neither the State of U.P. [Uttar Pradesh] nor the State of Uttarakhand [was] cooperating with the Central Government “for the constitution of the Ganga Management Board.”⁹⁵ The purpose of this Board is to supervise disputes over

89. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 16 (India).

90. The *Te Awa Tupua Bill* was read on March 14, 2017, though it resulted from a much longer initiative of negotiations; the India High Court’s decision was released on March 20, 2017—only a few days after the bill was read. Compare *Te Awa Tupua (Whanganui River Claims Settlement) Bill*, N.Z. PARLIAMENT, https://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/00DBHOH_BILL68939_1/te-awa-tupua-whanganui-river-claims-settlement-bill [https://perma.cc/BHN9-8Q2G] (last visited Feb. 19, 2018) (noting the Bill’s progress), with Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 19 (India) (issuing the decision on March 20, 2017).

91. *A First in India: Uttarakhand HC Declares Ganga, Yamuna Rivers As Living Legal Entities [Read Judgment]*, LIVELAW.IN (Mar. 20, 2017, 9:27 PM), <http://www.livelaw.in/first-india-uttarakhand-hc-declares-ganga-yamuna-rivers-living-legal-entities/> [https://perma.cc/9765-87NP].

92. See Bhadra Sinha, *SC Puts on Hold Uttarakhand HC Order Declaring River Ganga a Living Entity*, HINDUSTANTIMES, <http://www.hindustantimes.com/india-news/sc-puts-on-hold-uttarakhand-high-court-order-declaring-ganga-a-living-entity/story-IYqkaehoLhAyWfjAP8GYOO.html> [https://perma.cc/Y3Q8-ZL9L] (last updated Feb. 19, 2018) (discussing how the Supreme Court overturned the High Court judgment on July 7th, 2017. The Court ruled that territorial tribunal “erred in not considering Ganga an inter-state river. The high court went beyond its jurisdiction in passing the verdict, as no plea was made for declaring the rivers as a living entity.”); see also Agence France-Presse, *Rivers Do Not Have Same Rights As Humans: India’s Top Court*, YAHOO NEWS (July 7, 2017), <https://www.yahoo.com/news/rivers-not-same-rights-humans-indias-top-court-143813859.html> [https://perma.cc/V8AP-9GDJ] (explaining that despite the Supreme Court’s ruling that the High Court went beyond its jurisdiction, “[p]etitioner Mohammad Saleem [has] the opportunity to appeal the ruling by a bench headed” by Chief Justice J. S. Khehar).

93. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 11 (India).

94. N.Y. UNIV. OF LAW JOURNAL OF INT’L LAW & POLITICS, GUIDE TO FOREIGN AND INTERNATIONAL LEGAL CITATIONS 81 (1st ed. 2006).

95. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 3 (India).

“irrigation, rural and urban water supply, hydro power generation, navigation, [and] industries” in the Ganga River area.⁹⁶

Following this complaint, Mohammad Salim filed a Public Interest Litigation (PIL) petition in 2014.⁹⁷ To answer this matter, the High Court⁹⁸ analyzed the context and affirmed that an “extraordinary situation has arisen since Rivers Ganga and Yamuna are loosing [sic] their very existence.”⁹⁹ The judges added that “this situation requires extraordinary measures to be taken to preserve and conserve Rivers Ganga and Yamuna.”¹⁰⁰ Such a firm statement is justified through the relations that exist between these rivers and the Hindu community. Indeed, the judges mention both the “very sacred and revered” status of these rivers and the “deep spiritual connection” Hindus have with them.¹⁰¹

Justice Rajiv Sharma and Justice Alok Singh reached the “extraordinary measure” they suggested by exploring the various precedents where a non-human entity was recognized as a legal person.¹⁰² From the different cases they examined, they drew an extensive analysis of the concept of legal personality.¹⁰³ The judges mainly invoked one Supreme Court decision in order to define the limits and the nature of the legal personhood.¹⁰⁴ In that judgment, it was held that “legal personality refers to the particular device by which the law creates or recognizes units to which it ascribes certain powers and capacities.”¹⁰⁵ On this basis, the Supreme Court established a distinction between a natural person and a juristic person; this second concept “connote[s] recognition of an entity to be in law a person which otherwise it is not.”¹⁰⁶

Moreover, this Supreme Court judgment emphasized the utility associated with legal personhood.¹⁰⁷ The judges stated the following: “it is well settled and confirmed by the authorities on jurisprudence and Courts of various countries that for a bigger thrust of socio-political-scientific development evolution of a fictional personality to be a juristic person

96. *Id.* at ¶ 18.

97. *Id.* at ¶ 1.

98. See N.Y. UNIV. OF LAW JOURNAL OF INT’L LAW & POLITICS, *supra* note 94, at 81 (explaining that in India, the High Courts are institutions that head each state’s judicial administration).

99. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, at ¶ 4 (India).

100. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 10 (India).

101. *Id.* at ¶ 11.

102. *Id.* at ¶ 10.

103. *Id.* at ¶ 14.

104. Shiromani Gurudwara Prabandhak Committee, Amritsar v. Shri Som Nath Dass, AIR 2000 SC 1421 (India).

105. *Id.*

106. *Id.*

107. See Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 14–16 (India) (discussing the Supreme Court judgment).

became inevitable.”¹⁰⁸ In this regard, the Supreme Court defined a “legal person” as “any entity (not necessarily a human being) to which rights or duties may be attributed.”¹⁰⁹ Through this broad definition, a legal person is apprehended as a nomenclature rather than a concept.

By adopting this position, the High Court embraced a reasoning that elucidates who or what could be a juristic person and ultimately concluded that the Ganga and Yamuna rivers, as well as “all their tributaries, streams, every natural water flowing with flow continuously or intermittently of these rivers,” are juristic living entities “having the status of a legal person with all corresponding rights, duties and liabilities of a living person.”¹¹⁰ This conclusion is supported by the large and inclusive conception adopted for legal personhood as well as the spiritual relationship nurtured between the Hindu community and their environment. To that extent, the Court stated that:

[a]ll the Hindus have deep Astha [faith] in rivers Ganga and Yamuna and they collectively connect with these rivers. Rivers Ganga and Yamuna are central to the existence of half of [the] Indian population and their health and well-being. The rivers have provided both physical and spiritual sustenance to all of us from time immemorial. Rivers Ganga and Yamuna have spiritual and physical sustenance. They support and assist both the life and natural resources and health and well-being of the entire community. Rivers Ganga and Yamuna are breathing, living and sustaining the communities from mountains to sea.¹¹¹

The judgment’s last contribution lies in the mechanism used to support the new status of juristic person. In order to preserve and conserve the Ganga and Yamuna rivers as legal, living entities, Justice Rajiv Sharma and Justice Alok Singh adopted the *parens patrie* doctrine, which provides a human representative for the newly recognized legal person. This agent acts in the name of the juristic person as a “parent” or a “guardian,” where his actions “are imputed to the legal persona . . . and are not the juristic acts of

108. *Id.* ¶ 14.

109. *Id.*

110. *See id.* ¶ 19 (basing the decision on sections 48A and 51A(g) of the Constitution of India); *see also* INDIA CONST. arts 48A, 51A(g) (Section 48A provides that “[t]he State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.” Section 51A(g) establishes that “[i]t shall be the duty of every citizen of India . . . to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.”).

111. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 17 (India).

the human agents themselves.”¹¹² To satisfy this stewardship mechanism, the Court named “the Director NAMAMI Gange, the Chief Secretary of the State of Uttarakhand and the Advocate General of the State of Uttarakhand . . . persons in loco parentis as the human face to protect, conserve and preserve Rivers Ganga and Yamuna and their tributaries.”¹¹³ In addition, the Court ordered the Central Government to create the Ganga Management Board within three months,¹¹⁴ despite government opposition to the judgment.¹¹⁵

From the theoretical perspective discussed above, this judgment can be interpreted as a legitimate way of recognizing the hybrid dimension of water. More precisely, paragraph 17 of the decision exemplifies the relational interactions that exist between human beings and nature.¹¹⁶ The judges highlighted the connection between the rivers and the communities without insinuating any kind of prevalence of one on the other.¹¹⁷ They described the symbiosis among the two, how water and communities create only one whole, and, most importantly, how necessary and fundamental it is to consider such a statement from a legal perspective.¹¹⁸ In this regard, law becomes an instrument with a duty to recognize and facilitate this connection rather than an object that unilaterally dictates how this relation should be.

Incidentally, one could attribute the two case studies of New Zealand and India to an act of cultural preservation. *A priori*, such a perspective seems legitimate. However, it nurtures the modern dissolution between nature and society. Indeed, it is essential to bear in mind the contribution of environmental ethics: it provides a hybrid conception of water, a balanced mixture of nature and society. In other words, the meaning(s) of water as an independent natural entity is defined by the socio-cultural context around it. Hence, there is nothing wrong with granting legal personhood to water in order to safeguard a cultural dimension associated with it. In fact, it actually contributes to the socio-natural constitution of water.

112. Shiromani Gurudwara Prabandhak Committee, *Amritsar v. Shri Som Nath Dass*, AIR 2000 SC 1421 (India).

113. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 19 (India).

114. *Id.* ¶ 5

115. Kavita Upadhyay, *Uttarakhand Doesn't Want Living Person Status for Ganga, Yamuna*, INDIAN EXPRESS (June 27, 2017, 3:41 AM), <http://indianexpress.com/article/india/uttarakhand-doesnt-want-living-person-status-for-ganga-yamuna-4723578/> [https://perma.cc/6SLW-9BAN] (explaining how the Uttarakhand government is opposed to the judgment and filed a special petition with the Supreme Court to contest the decision from the High Court, arguing “the High Court has erred in not considering that the Ganga and Yamuna are inter-state rivers.”).

116. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 17 (India).

117. *See id.* (discussing how the rivers are important to the community).

118. *Id.*

These notable cases are genuine milestones. They mark the beginning of a transition to a new generation with a rights-based approach dedicated to nature, environment, and water in their interactions with mankind. Throughout these initiatives, legal tools traditionally restrained to humans are now being converted for use by non-human entities. However, one could ask if this process of translation can be generalized and eventually systematized. The following section suggests a basis to complete this enterprise by determining general criteria for legal personality.

B. General Criteria for Legal Personality: Lessons from Civil and Common Law

Modern legal systems widely implement the concept of legal personality. In addition to being recognized by various acts and judgments across the world, legal personality is also a topic of debate within the specialized doctrine. The construct of legal personality was used, adapted, and extended concomitantly to the various moral and cultural evolutions of our societies.¹¹⁹ Moreover, this notion varies in each country, where it is used and shaped by the legal regime, because of the history and the culture surrounding the notion.¹²⁰

Examining the ways in which water can be a legal person requires to explore if this notion has general standards, if it has commonalities across borders. By using the notion of legal person as an inclusive concept referring to any legal entities—human or non-human, this article examines the status of legal personality within common law and civil law systems to uncover the existence of such criteria.

At common law, legal persons are “capable of exercising rights or owing duties.”¹²¹ When it comes to the concept of legal person, common law distinguishes between natural person and juristic person.¹²² On the one hand, a natural person is a human being having “certain legal rights adhering automatically upon birth, rights which expand as the child becomes an adult [and vanish upon death].”¹²³ From this quasi-automatic status arises legal personality, which stands as the characteristics and the

119. See Stone (1972), *supra* note 7, at 450–57 (analyzing the transformations of legal rights for non-human entities).

120. See Alexis Dyschkan, *Legal Personhood: How We Are Getting It Wrong*, 2015 U. ILL. L. REV. 2075, 2079–80 (2015) (discussing that conceptualizing a legal person can be ambiguous and the doctrine refers to it in opposition to a natural person, as a synonym of a juristic person).

121. *Id.* at 2080.

122. See generally Shelton, *supra* note 6, at para. 22 (discussing the difference between “natural” and “juridical” persons).

123. *Id.*

qualities of human beings as well as their capacity of holding rights and obligations.¹²⁴ “[B]iological life, genetic humanness, brain development, ability to feel pain, consciousness/sentience, ability to communicate, ability to form relationships, higher reasoning ability, and rationality”¹²⁵ and, most importantly, interests, are bases of characteristics for legal personalities.¹²⁶ The notion of legal personality infers the concept of legal capacity, which is the lawful ability for a given entity to enter legal action in its own name.¹²⁷

On the other hand, the second aspect of legal personhood in common law is established through the concept of juristic person.¹²⁸ This notion (also called an artificial, juridical, or fictitious person) is an artificial creation that designates non-human entities as subjects of law—otherwise not recognized as such—by which they gain legal personality.¹²⁹ In other words, a juristic person can be “any subject-matter other than a human being to which the law attributes personality.”¹³⁰ Based on this broad definition, many entities could potentially be juristic persons, but the definition is mainly used to provide corporations with a distinct or separate legal status than the one attributed to the natural persons who belong to these structures.¹³¹ Hence, any given juristic person has a distinct identity, legal personality, duties, and rights. However, the legal advantage and disadvantage of a juristic person are variable. In fact, its rights and obligations differ from natural person as they are conferred for defined (and sometimes limited) legal purposes.¹³² This situation is justified because “juristic persons arose out of necessities in the human development,”¹³³ which creates the need of a divergent legal status.

124. *Legal Personality*, BLACK’S LAW DICTIONARY (2d ed. 1910) (“Sum total of an individual’s legal advantages and disadvantages. Defined as the lawful characteristics and qualities of an entity. An example of these are a person’s age or asset ownership. From this, an entity’s legal capacity and status in the jurisdiction or society’s legal order. An example is how a law is applicable if one is a home owner versus a renter.”); PATRICK J. FITZGERALD, *SALMOND ON JURISPRUDENCE* 349 (1966); see also STONE (1996), *supra* note 9, at 52 (conceptualizing this situation into two broad categories: holding rights as a legal advantage and holding duties as a legal disadvantage).

125. Shelton, *supra* note 6, at para. 23.

126. See *id.* (explaining that “if an entity does not have interests in the sense identified above, then legal personhood cannot be based on the protection of those interests for its own sake”); see also JOEL FEINBERG, *HARM TO OTHERS* 34 (1984) (discussing legal interests).

127. See *Legal Capacity*, BLACK’S LAW DICTIONARY (2d ed. 1910) (“Lawful capacity for an entity in its own name to enter into binding contracts, to sue and to be sued.”).

128. *Legal Personality*, BLACK’S LAW DICTIONARY (9th ed. 2009).

129. *Artificial Personality*, BLACK’S LAW DICTIONARY (9th ed. 2009).

130. FITZGERALD, *supra* note 124, at 305.

131. See, e.g., HERMITTE, *supra* note 10, at 202 (discussing how it is, under the current definition, complex to figure out which non-human could have a legal personality).

132. See *Mohd. Salim v. State of Uttarakhnad*, 2017 PIL No. 126 of 2014, ¶ 14 (India) (discussing various types of legal personhood).

133. *Id.* ¶ 14 (citing *Shiromani Gurudwara Prabandhak Committee, Amritsar v. Shri Som Nath Dass*, AIR 2000 SC 1421).

Civil law systems also adopt a dichotomy regarding subjects of law; they distinguish between physical and moral persons. Similar to common law, the concept of physical person describes every human being that acquires the enjoyment of civil rights upon its birth.¹³⁴ Even if physical persons essentially benefit from the same legal norms, the nature of the relationships between them requires identification and individualization. Therefore, civil-law systems usually establish four complementary elements to identify physical persons: name, gender, residence, and record of civil status.¹³⁵

The concept of moral person is comparable to that of juristic persons in common law. Moral persons are a group of persons considered as a collective subject of private or public law. Thus, by the use of this fictitious mechanism, such an entity can hold rights and obligations.¹³⁶ A moral person would, consequently, acquire legal capacity; although, the nature of its legal advantages and disadvantages would likely vary from that of a physical person.¹³⁷ It relates, for instance, to the ability to own material and immaterial goods or to the capacity to engage in legal proceedings. Moreover, the acquisition of the legal personality is not automatic for moral persons. It is the result of an administrative process that also includes identification through having a name, assets, and an established place of residence.¹³⁸ In this sense, both physical and moral persons possess legal personality and capacity, which means that they can become subjects of rights and obligations. Nevertheless, the attribution of the legal personality to either a physical or a moral person is traditionally based on different grounds.¹³⁹ The concept of physical personality relies on questions of ethics and morality as it aims at making an individual legally exist; whereas, the notion of moral personality provides a means of collective action.¹⁴⁰

134. Civil Code of Québec, S.Q. 1996, c 1, art 1 (Can.); *see also* CODE CIVIL [C. CIV.][CIVIL CODE] art. 16-1 (Fr.) (explaining a right to respect of the human body). *But see* Xavier Bioy, *The Right to Legal Personality*, REV. FUNDAMENTAL RTS. & FREEDOMS (2012), <http://www.revuedlf.com/droit-fondamentaux/le-droit-a-la-personnalite-juridique/> [<https://perma.cc/4DVF-WUAZ>] (explaining that section 16 of the French Civil Code does not refer nor define the concept of legal person, but scholars largely consider its implicit recognition under this section).

135. *See* ÉDITH DELEURY & DOMINIQUE GOUBAU, LE DROIT DES PERSONNES PHYSIQUES 231 (4th ed. 2008) (describing the elements in Quebec, Canada); *see also* BERNARD TEYSSIÉ, DROIT CIVIL – LES PERSONNES 183 (16th ed. 2014) (describing the elements in France).

136. FITZGERALD, *supra* note 124, at 305.

137. DELEURY & GOUBAU, *supra* note 135, at 2 (explaining that moral persons acquire different rights and obligations depending on their “consistence” as a legal being”).

138. *Id.* at 231.

139. HERMITTE, *supra* note 10, at 197.

140. Bioy, *supra* note 134.

Lastly, there is a paradox in the context of civil law. The concept of legal personality is either profoundly accepted, as stated by Marie-Angèle Hermitte,¹⁴¹ or deeply debated, as explained by Marie-Ève Arbour and Mariève Lacroix.¹⁴² One could hypothesize that a paradigm shift is ongoing over the use of legal personality. In fact, new purposes are being developed for this concept, particularly for animals or nature. Indeed, because of modern challenges that human beings are facing, an evolution of our understanding of what can be a subject of law is at stake.

After this brief overview of principles surrounding legal personality in common and civil law systems, this article may now attempt to provide general criteria for this concept. More precisely, the intent is to explore what could be common standards for considering water as a juristic person. Civil law provides that for an entity to be considered as a legal person it must essentially be identifiable, distinguishable, and, to some extent, singular. In order for a non-human entity to be identifiable, it requires definition by its own characteristics. Its identity is controlled by the aspects, attributes, components, conditions, or features “determining who or what a person or thing is.”¹⁴³ Hence, the capacity of identifying an entity is a consequence of its existence. In addition, an entity’s uniqueness and singularity distinguishes or individualizes it.¹⁴⁴ Therefore, individualization arises from an entity’s identity, as the characteristics it presents define its distinction from another entity.

The main contribution provided by common law, with respect to legal personality, is the conception of interest.¹⁴⁵ The fact that an entity has its own interests, concerns, advantages, and welfare is often a sufficient condition to confer legal personality.¹⁴⁶ In other words, an entity must have interests to have moral status,¹⁴⁷ which eventually leads to a recognition by law in order to protect those interests. However, one could argue that such a statement is typically centered on human beings as “things have (or ‘take’)

141. HERMITTE, *supra* note 10, at 174.

142. Marie-Ève Arbour & Mariève Lacroix, *Le Statut Juridique du Corps Humain ou L'Oscillation Entre L'Objet et le Sujet de Droit*, 40 REVUE DE DROIT DE L'UNIVERSITÉ DE SHERBROOKE [U. SHERBROOKE L. REV.] 231, 233–34 (2009–2010) (Can.).

143. *Identity*, ENGLISH OXFORD LIVING DICTIONARIES, <https://en.oxforddictionaries.com/definition/identity> [https://perma.cc/473B-8E2J] (last visited Feb. 23, 2018).

144. See, e.g., STONE (1996), *supra* note 9, at 59 (citing examples in which the law has imputed preferences into non-human legal personality).

145. See *id.* at 60 (preferring the criterion of “preference” over the one of “interest”, arguing that “[t]he more *interested* we have become in other living things, the more we have been able to discover about their preferences” and describing the construction of non-human preferences as the adoption of their standpoints).

146. See Shelton, *supra* note 6, at paras. 21 and 23.

147. See FEINBERG, *supra* note 126, at 34.

no interests by definition.”¹⁴⁸ Moreover, it could be asserted that non-human entities, such as rivers or watersheds, have “no self-conscious interests,” or have interests that are distinct from the ones cultivated by human beings.¹⁴⁹ Yet, Shelton has provided an alternative approach:

[i]f an entity does not have interests . . . then legal personhood cannot be based on the protection of those interests for its own sake. Instead, a determination of legal personhood must be based on the protection of the interests of others. Legal personhood based on the interests of others may be more limited than legal personhood based on the interests of the entity itself. Legal personhood based on an entity’s interests is not possible until the entity has actually developed interests. Prior to that development, legal personhood must be based on concerns about protecting the interests of others.¹⁵⁰

Based on this reasoning, the preferences of a non-human entity could be equally defined by internal and external interests, concerns, or benefits. In other words, granting legal personality to a non-human entity could result either from its internal preferences that humans have been able to identify (for instance, through scientific observations) or from external interests defined by various concerns humans have about it. It is essential to note that the idea of external interest is not related to private or individual benefits, but rather to a collective desire to protect a non-human entity that is beneficial to our well-being and sustainability. The underlying idea is to associate external interests with, for instance, ecological services provided by non-human entity.¹⁵¹ As a consequence, for a non-human entity to be recognized as a legal person, it should be identified as a unique or singular individuality in order to obtain the ability to protect its internal preferences or, alternatively, collective external interests surrounding it.

After exploring both the theoretical grounds and the legal foundations, it is time to reap the benefits of their respective contributions. Therefore, the purpose of the following section is to investigate the basis of an alternative legal perception of water, that is, to explore the premises on which water could be generally perceived as a legal person.

148. STONE (1996), *supra* note 9, at 59.

149. *Id.* at 52.

150. Shelton, *supra* note 6, at para. 23.

151. Ecological services can be defined as the functions performed by a natural entity such as soil, water or animals. See, e.g., STEPHEN J. HALL ET AL., BLUE FRONTIERS: MANAGING THE ENVIRONMENTAL COSTS OF AQUACULTURE 81 (2011) (describing the role of ecological services).

III. APPLYING THE STATUS OF LEGAL PERSON TO WATER: OPPORTUNITIES, LIMITATIONS, AND PROSPECTS

What is the purpose of granting legal personality to water? What advantage is there to recognizing this entity as a legal person? And to what extent can water be a subject of law? As mentioned earlier in this article, two precedents demonstrated that this is a feasible legal orientation. However, various scholarly propositions are following distinct paths. Subsequently, we are facing an opposition regarding the way in which water should be granted legal personhood. Should water as a whole be recognized as a legal person? Or should it be specific bodies of water? This section will examine these different avenues and determine some opportunities and limits. It is to be noted that the suggestions arising from the following discussion are theoretical in nature. The advent of a mature and practical framework will only be achievable through additional research, analysis and development.

As explained in the first section of this article, water can be understood as a hybrid entity, as a mind-independent reality defined by the social connections that surround it. Thus, water has its own preferences, advantages, or—in a more tangible manner—its own attributes that interact with the socio-cultural context. Furthermore, water generates collective interests. In that regard, the concept of legal personality appears to meet the requirements of the proposed theoretical conception of water. This approach would allow the preservation of this natural whole by providing the necessary instruments to strengthen its protection while also considering the various interests that gravitate around it.

However, such a generalization might not seem entirely suitable when it comes to its compatibility with legal personhood. In our opinion, this approach provides an innovative mindset toward water, but it would need to be slightly altered to foster its conceptualization as a legal person. To understand water as a subject of law, it seems more pertinent to identify a specific body of water, rather than water as a whole, as it would correspond to the criteria determined for legal personhood. In fact, a river, a watershed, an aquatic ecosystem, a lake, a wetland, or even an aquifer forms a defined body of water that contributes to its identification and eventually to its uniqueness. Even if Stone “advocated that legal personality should be afforded to all natural resources”, granting legal personality to water as a whole seems unattainable for two main reasons.¹⁵² First, by considering water as a fully separated natural entity, it would go against its conception

152. Morris & Ruru, *supra* note 8, at 50.

as a hybrid. Second, the recognition of an overarching entity would presumably create an unstable and risky legal context. One could also hypothesize that the limits to be imposed on water could be drawn by social interactions. Indeed, even if some dimensions of water are global, such as the hydrological cycle, the interactions defining this entity are primarily social and, therefore, essentially local.

From another perspective, conferring legal personality to water, as a whole, could potentially create absurd situations. For instance, what measures should we take when encountering a devastating flood if water as a whole was a subject of law? Should we sue any of its representatives for failing to uphold its obligations? Should we just accept that, as a flood occurs, water is simply following its own attributes and rules by submerging a residential area? Combining the proposed theoretical approach and the legal characteristics that define a subject of law could avoid these tricky situations. Although a “framed” conception of water could be adopted, it leaves questions concerning the scope of legal personhood. As what kind of juristic person can water be understood? Can a body of water be considered as a conventional juristic person?¹⁵³ Conventional juristic persons do not automatically (and rarely) hold natural or constitutional rights.¹⁵⁴ Nevertheless, to ensure the protection and preservation of nature and water, these entities should, to some extent, be granted such rights.

Subsequently, one could raise the fundamental question of prospective duties and liabilities. To what kinds of duties and liabilities could water be subject? Should the idea of respective responsibilities prevail? Further research of reconceptualization, especially from a semantic perspective, would define an appropriate ontology. Yet, this exercise could be achieved based on the concept of ecological services, as it supports the beneficial relational interactions between humans and nature. Furthermore, would society need to develop a distinct and specific kind of legal personality? Would that imply a third kind of legal person? This is a concern that requires further analysis, specifically with respect to the questions of passive and active subjects of law and legal advantages and disadvantages. Nonetheless, an observation emerges from this article. There is a growing need for a legal personality that creates, through the personification of

153. This article focuses on the concept of juristic person not only because there is a clear distinction between this notion and the one of natural person in both common-law and civil-law systems, but also because the idea of conferring legal personality to water does not lie within a desire to “humanize” this entity. Rather, this article understands them as tools to redefine our position toward modern issues. See, e.g., HERMITTE, *supra* note 10, at 198 (discussing the consequences of confusing the juristic person and natural person).

154. Shelton, *supra* note 6, at paras. 21–23.

nature, a status satisfying the interests surrounding water and granting it specific legal rights to protect its unique conditions.

Even though it appears more suitable to consider a body of water as a legal person rather than water as a whole, the question of boundaries still remains central. One could raise the concern of physical limits, as “problems . . . may arise if a part of an ecosystem is declared a legal person and detached from related and necessary components. A river, for example, cannot be fully protected without including the entire catchment area, including tributaries.”¹⁵⁵ In other words, there are large challenges “involved in defining the boundaries of the ‘natural object.’ For example, from time to time one will wish to speak of that portion of a river that runs through a recognized jurisdiction; at other times, one may be concerned with the entire river, or the hydrologic cycle.”¹⁵⁶ As a consequence, specialists describe this situation as being incongruous and therefore suggest that “the methods of legal implementation illustrate the perceived limits within this legal system.”¹⁵⁷ In that regard, an extensive conception of boundaries would be required; not only should a river be recognized as subject of law but also its attachments. The river should be considered as a whole, that is, as a functioning system¹⁵⁸ composed of beds, related streams, tributaries, banks, catchment area, connected lakes, and wetlands.¹⁵⁹ On another note, one can raise the following question: is this conception different from the system we presently have for natural persons? The law currently unifies the various aspects of human beings (whether it is physical, mental, or spiritual) under the single category of natural person.¹⁶⁰ Therefore, why should we consider only part of what makes a river as a whole entity?

To achieve and accept the compatibility of water and legal personality, it is also necessary to overcome the abstraction of modern water outlined by Linton.¹⁶¹ As mentioned previously, a specific body of water seems more appropriate to conceive as a legal person. Yet, the conception proposed by

155. *Id.* at para. 46.

156. Stone (1972), *supra* note 7, at 456.

157. Magallanes, *supra* note 22, at 7.

158. STONE (1996), *supra* note 9, at 52.

159. See Shelton, *supra* note 6, at para. 46 (explaining the Whanganui Act “rightly combines the river, bed and banks into one entity, but it still allows nature to be divided into separate units”); Ruruku Whakatupua Te Mana O Te Awa Tupua, Whanganui Iwi and the Crown [2014] (signed 5 Aug. 2014), art 9.13.48 (defining the Whanganui River as the river continuously flowing and all related tributaries, streams, lakes, wetlands, and beds).

160. See Elvia Arcelia Quintana Adriano, *The Natural Person, Legal Entity or Juridical Person and Juridical Personality*, PENN. ST. J.L. & INT’L AFF. 363, 369–70 (2015) (discussing the nature of human beings as legal persons).

161. See LINTON, *supra* note 36, at 213 (discussing the limitations of a modern view of water).

modern water has the effect of globalizing this entity as well as alienating its social dimension. In other words, modern water eliminates all potential limitations and makes this entity difficult to identify or define. We must not fall into a trap—recognizing water as a subject of law do imply the recognition of an independent body. Nevertheless, it is essential to bear in mind the inputs of hybridity to avoid entanglement in the conception endorsed by modern water. In fact, if the recognition of water as a legal person is only based on its recognition as a mere natural entity, it ultimately comes—again—to bury its social dimensions. The understanding of water as a legal person ought to outline its consubstantial concomitance of nature and society.

CONCLUSION

The purpose of this article is to explore the compatibility of two seemingly antagonistic objects. In that regard, water, from a theoretical and philosophical perspective, could be perceived and recognized as a legal person under certain conditions. It proposes new grounds and an alternative pathway in order to rethink the way in which we manage water. This approach is a reaction to the struggle most Western countries still have to create efficient laws and policies to protect water. However, many substantial challenges and lingering questions remain unsolved: who would be the guardian, or the human representative, of water?¹⁶² How would this guardian be chosen? What would be its role? What would be the rights, obligations or responsibilities of a given body of water? How could we define them objectively? Are these rights absolute? What prevention and compensation mechanisms could be implemented? Would the traditional economic theory be the most relevant to that regard? Although it requires further research, debates, innovations, and developments, the conceptualization of water as a subject of law would be a massive change in the field of law.¹⁶³ Our societies may not be prepared for such an advancement. Nevertheless, to think of water solely as a natural entity separated from us would perpetuate the parasitic relationship between

162. This question is already being discussed within the doctrine. For instance, Bruno Latour discusses this topic by saying that even with a new mindset toward nature and water, a natural entity needs the “fiction of a representative.” LATOUR, *supra* note 24, at 351. In addition, the Te Awa Tupua Act establishes the Te Pou Tupua office, which is “the human face of Te Awa Tupua and act[s] in the name of Te Awa Tupua.” Te Awa Tupua (Whanganui River Claims Settlement) Bill 2016 (129-2), pt 2 cl 18 (N.Z.). The India High Court has also appointed three legal representatives to the Ganga and Yamuna rivers—the director NAMAMI Gange, the Chief Secretary of the State of Uttarakhand, and the Advocate General of the State of Uttarakhand. Mohd. Salim v. State of Uttarakhand, 2017 PIL No. 126 of 2014, ¶ 19 (India).

163. HERMITTE, *supra* note 10, at 202.

mankind and its environment. Alternatively, some existing legal instruments, even though socially constructed by human beings, may lean toward a reconsideration and a reconceptualization of nature in order to move from a parasitic connection to a symbiotic relation.

**GREENING EGGS AND HAM:
USING THE NATIONAL ENVIRONMENTAL POLICY ACT
TO ASSESS ANIMAL-AGRICULTURAL POLLUTION FROM
THE NATIONAL SCHOOL LUNCH PROGRAM**

*Julia McCarthy**

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ABBREVIATIONS

AFO	Animal Feeding Operation
APA	Administrative Procedure Act
AMS	United States Department of Agriculture Agricultural Marketing Service
CAA	Clean Air Act
CAFO	Concentrated Animal Feeding Operation
CERCLA	Comprehensive Environmental Response, Compensation, & Liability Act
CEQ	Council on Environmental Quality
CWA	Clean Water Act
DOI	Department of Interior
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to- Know Act
FNS	United States Department of Agriculture Food & Nutrition Service
FONSI	Finding of No Significant Impact
FSA	United States Department of Agriculture Farm Service
FY	Federal Fiscal Year
GHG	Greenhouse Gas
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NSLP	National School Lunch Program
USDA	United States Department of Agriculture
USDA Foods	Entitlement or Commodity Foods

INTRODUCTION

Walk through the halls of an elementary school and you will find pictures of cows and pigs dancing across alphabet walls, red barns decorating proudly displayed student art, and kindergartners squealing “e-i-e-i-o.” Educators use *Charlotte’s Web* to introduce children to the world around them—to learn about life cycles, season changes, sounds, and emotions. But, for most American students, their only real contact with a farm will occur in the cafeteria, where the food served comes from a place that little resembles the clover fields of children’s books.

Large agricultural operations, commonly referred to as “factory farms,” dominate domestic food production.¹ To produce meat, dairy, and eggs, industrial livestock operations, or concentrated animal feeding operations (CAFOs), pack hundreds, if not thousands, of animals into crowded areas to maximize yield.² In the factory-farming model, there are no smiling cows, no pigs foraging across the barn-dotted fields. There is an astounding amount of waste accompanied by an alarming amount of pollution.³

Animals confined to smaller feeding areas produce too much waste for too small a space.⁴ To mitigate the effects of constant excrement exposure and to force faster development, CAFO operators pump animals with antibiotics and hormones.⁵ Extensive drainage systems, often exposed, ensure that CAFO debris—a “mixture of feces, urine, bedding, hair, and occasionally animal carcasses”—flows from animal confinements into

1. FARM ANIMAL INV. RISK & RETURN, FACTORY FARMING: ASSESSING INVESTMENT RISKS 4 (2016), http://www.fairr.org/wp-content/uploads/FAIRR_Report_Factory_Farming_Assessing_Investment_Risks.pdf [<https://perma.cc/RWP6-HGQ8>].

2. See 40 C.F.R. § 122.23(b)(1)–(2) (2017) (defining CAFO and also defining an animal feeding operation (AFO) as any facility where animals are “stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and . . . [c]rops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility”); see also 40 C.F.R. § 122.23(b)(4) (2017) (qualifying an AFO as a CAFO when the facility houses more than a specified number of certain animals).

3. ARE LARGE EQUINE COMMUNITIES CAFOs?, EQUINE ECO GREEN, <http://www.equineecogreenus.com/environmental-library.html> [<https://perma.cc/FU4L-YHUV>] (last visited Feb. 15, 2018).

4. See *id.* (“[CAFOs] are facilities where large numbers of poultry, swine, cattle or other animal types are confined within a much smaller area than traditional pasture operations. The concentration of the wastes from these animals increases the potential to impact air, water, and land quality.”).

5. See GEOFFREY BECKER, CONG. RESEARCH SERV., R40739, ANTIBIOTIC USE IN AGRICULTURE: BACKGROUND AND LEGISLATION 3–5 (2010) (observing “that approximately 83% of feedlots administered at least one antibiotic for disease prevention or growth promotion . . . [and] that 24.6 million pounds of antibiotics were used for nontherapeutic purposes in food animals annually.”); RENEE JOHNSON, CONG. RESEARCH SERV., R40449, THE U.S.–EU BEEF HORMONE DISPUTE 1–2 (2015) (“In large U.S. commercial feedlots, [hormone] use approaches 100%.”)

adjacent manure “lagoons.”⁶ As these manure lagoons fill, CAFO operators spray or apply the untreated waste onto nearby fields, spreading fecal matter, chemical residue, and antibiotic particles into the surrounding air and waterways.⁷

Environmental justice and public health advocates have tried to address the harms industrial animal agriculture creates through a variety of legal means, including the Clean Water Act (CWA), Clean Air Act (CAA), and nuisance claims.⁸ So far, success has been limited. Federal environmental laws inadequately address agricultural pollution.⁹ State laws provide only patchwork protections.¹⁰ And, many legislatures have responded to successful nuisance claims by passing measures that limit tort claims against agricultural operators.¹¹

Mounting scientific evidence linking factory farms to a host of human health harms demonstrates the need for immediate, comprehensive action.¹² To address the harms inherent in industrial animal agriculture, advocates need to consider creative courses of action. This paper proposes using the National Environmental Policy Act (NEPA) as a tool for change.

NEPA requires federal agencies to examine the environmental effects of any major agency action.¹³ To mitigate the damage industrial animal agriculture causes, advocates should petition the United States Department of Agriculture (USDA) Food and Nutrition Service (FNS) to complete an environmental impact statement (EIS) for the National School Lunch

6. Warren A. Braunig, *Reflexive Law Solutions for Factory Farm Pollution*, 80 N.Y.U. L. REV. 1505, 1509 (2005).

7. CARRIE HRIBAR, NAT’L ASS’N OF LOCAL BDS. OF HEALTH, UNDERSTANDING CONCENTRATED ANIMAL FEEDING OPERATIONS AND THEIR IMPACT ON COMMUNITIES 2–3 (2010), http://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf [https://perma.cc/UT27-VA3X].

8. See discussion *infra* Part II.

9. See J.B. Ruhl, *Farms, Their Environmental Harms, and Environmental Law*, 27 ECOLOGY L.Q. 263, 265 (2000) (“[F]arms are virtually unregulated by the expansive body of environmental law that has developed in the United States in the past 30 years.”).

10. See, e.g., 30 TEX. ADMIN. CODE § 321.43(b) (2017) (requiring all animal feeding operations regardless of size to obtain an air quality permit). *But cf.* TEX. AGRIC. CODE § 251.001 (2018) (declaring it Texas policy to limit “the circumstances under which agricultural operations may be regulated or considered to be a nuisance.”).

11. See, e.g., OKLA. STAT. tit. 2, § 20-56 (2017) (stating that an AFO licensed under and complying with the state’s Concentrated Animal Feeding Operations Act shall not be deemed a nuisance); see also TEX. AGRIC. CODE § 251.004(b) (explaining that a person bringing a nuisance action against an agricultural operation that has existed for more than a year will be liable for the defendant’s attorney’s fees).

12. See, e.g., U.S. GOV’T ACCOUNTABILITY OFF., GAO-08-944, CONCENTRATED ANIMAL FEEDING OPERATIONS: EPA NEEDS MORE INFORMATION AND A CLEARLY DEFINED STRATEGY TO PROTECT AIR AND WATER QUALITY FROM POLLUTANTS OF CONTROL 23 (2008) [hereinafter GAO-08-944] (explaining that between 2002 and 2008, more than 15 government-sponsored or peer-reviewed studies directly linked animal wastes to health or environmental impacts and 12 studies established indirect links).

13. 42 U.S.C. § 4332(2)(c) (2012).

Program (NSLP). The NSLP costs more than \$13 billion annually and is the most expensive federal nutrition program for direct government food purchases.¹⁴ Alternatively, advocates could challenge USDA's decision to forgo NEPA review for the NSLP under the Administrative Procedure Act (APA).¹⁵

The USDA spends a significant portion of the federal budget to purchase commodities from industrial-agricultural sources for several federal food programs, thereby underwriting the cost of environmental and human health harms.¹⁶ By petitioning the USDA to complete an EIS for the NSLP, advocates could compel the Agency to assess the environmental impact of its purchases. Such an assessment would not only fill the existing information gap on the breadth and depth of CAFO pollution,¹⁷ but could also have an important shaming effect on the industry. As the largest purchaser of industrially produced domestic food, the federal government has an unmatched ability to demand industry change—to produce animal products in a more sustainable, humane manner.¹⁸

By challenging the USDA's decision to forgo NEPA review under the APA, courts could find the Agency's decision “arbitrary, capricious, an

14. See, e.g., RANDY ALISON AUSSENBERG, CONG. RESEARCH SERV., R43783, SCHOOL MEALS PROGRAMS AND OTHER USDA CHILD NUTRITION PROGRAMS: A PRIMER 5–6 tbl.1 (2016) [hereinafter SCHOOL MEALS] (compiling expenditure information for federal child nutrition programs); see also CONG. BUDGET OFFICE, CHILD NUTRITION PROGRAMS: SPENDING AND POLICY OPTIONS 3 (2015) (indicating that the Supplemental Nutrition Assistance Program (SNAP) is the largest food program, but participants, rather than the federal government, select and purchase food items).

15. Jennifer Hoffpauir, Note, *The Environmental Impact of Commodity Subsidies: NEPA and the Farm Bill*, 20 FORDHAM ENVTL. L. REV. 233, 233 (2009) (arguing that the USDA should prepare an EIS for the farm bill's commodity payment programs); see, e.g., Carry Lowry La Seur & Adam D.K. Abelkop, *Forty Years After NEPA's Enactment, It Is Time for a Comprehensive Farm Bill Environmental Impact Statement*, 4 HARV. L. & POL'Y REV. 201–02 (2010) (arguing that the USDA should prepare an EIS for the farm bill's policies focused on corn overproduction and ethanol subsidies); see also MARY JANE ANGELO, JASON J. CZARNEZKI, & WILLIAM S. EUBANKS II, FOOD, AGRICULTURE, AND ENVIRONMENTAL LAW 207, 211–12 (2013) (discussing NEPA review of farm bill legislation and individual farm bill programs as well as the potential to use NEPA for other statutory processes).

16. See, e.g., FOOD AND NUTRITION SERV., 2017 EXPLANATORY NOTES 32–63–32–65 (2017) [hereinafter EXPLANATORY NOTES], <https://www.obpa.usda.gov/32fns2017notes.pdf> [<https://perma.cc/5S8R-WHGZ>] (explaining that in FY 2015, the USDA spent roughly \$1.5 billion on commodities for the school lunch program); see also Wayne Pacelle, *Taxpayers Are Funding a Factory Farm Horror Show*, DODO (Jan. 21, 2015), <https://www.thedodo.com/us-meat-animal-research-center-945442976.html> [<https://perma.cc/3KUC-ATE9>] (commenting on the billions of dollars per year the government spends on subsidizing factory farms).

17. See GAO-08-944, *supra* note 12, at 4 (“To assess the progress that EPA and the states have made in regulating and controlling the air emissions of, and in developing protocols to measure, air pollutants from CAFOs, we reviewed relevant documents and interviewed EPA officials, as well as officials responsible for an ongoing national air emissions monitoring study. . . . No federal agency collects accurate and consistent data on the number, size, and location of CAFOs.”).

18. Exec. Order No. 13,693, 3 C.F.R. § 281 (2015).

abuse of discretion, or otherwise not in accordance with law.”¹⁹ Advocates could potentially use the APA to set an important legal precedent for federal food programs.

Using the NSLP as an example, this paper explains how an advocate could challenge CAFO pollution under NEPA. Part I provides necessary background information. It outlines the NSLP structure and details the environmental and human health harms of factory farming. Part II describes applicable environmental regulations and explains why traditional environmental tools fail to regulate factory-farm pollution effectively. Part III introduces NEPA procedures within the context of the NSLP and explains why the USDA should complete an EIS for the NSLP procurement. Part IV argues that advocates should challenge the USDA’s inaction and outlines a litigation strategy.

I. THE NATIONAL SCHOOL LUNCH PROGRAM AND ANIMAL FACTORY POLLUTION

The USDA’s mission is to “provide leadership on food, agriculture, natural resources, rural development, nutrition, and related issues based on public policy, the best available science, and effective management.”²⁰ But, animal-agricultural practices that create uncontrollable quantities of manure do not protect natural resources or efficiently manage waste. By purchasing factory-farm products for the NSLP, the USDA supports practices that jeopardize future agricultural interests, natural resources, and rural communities. Subsection A describes the extent to which the federal government subsidizes industrial agriculture and outlines how the NSLP works. Subsection B catalogs the environmental and human health harms that factory farming causes.

A. The National School Lunch Program Spends Billions of Dollars on Food from Factory Farms

The federal government acquires billions of dollars’ worth of food each year.²¹ Various agencies supply countless public facilities including

19. Administrative Procedure Act, 5 U.S.C. § 706 (2012).

20. *About the U.S. Department of Agriculture*, U.S. DEP’T AGRIC., <https://www.usda.gov/our-agency/about-usda> [<https://perma.cc/8MFF-QT4D>] (last visited Feb. 15, 2018).

21. See MAGGIE GOSSELIN, BEYOND THE USDA: HOW OTHER GOVERNMENT AGENCIES CAN SUPPORT A HEALTHIER, MORE SUSTAINABLE FOOD SYSTEM 9 (Ben Lilliston ed., 2010), https://www.iatp.org/sites/default/files/258_2_107172.pdf [<https://perma.cc/W75C-7FFS>] (explaining how the Department of Defense purchases more than \$4.5 billion of food annually).

hospitals, schools, childcare and senior centers, federal prisons, and employee cafeterias with what is purportedly healthy, nutritious food.²² With a budget that exceeds \$13 billion, the NSLP is the most expensive nutrition program used by government agencies to directly purchase food.²³ The NSLP aims to supply healthy, but low-cost food to school-age children and to support the agricultural industry by increasing demand for agricultural commodities.²⁴ “Since its inception in 1946, the NSLP has served over 224 billion lunches in the U.S.”²⁵ In fiscal year (FY) 2016, the NSLP served a whopping 30.3 million eligible children much-needed school lunches.²⁶

The NSLP provides school districts and independent schools with cash subsidies and USDA Foods—often called “commodity” or “entitlement” foods—for each meal they serve.²⁷ Cash subsidies allow school districts and independent schools to purchase products that comply with federal regulations requiring schools to offer milk and meat (or a suitable meat alternative) daily.²⁸ Entitlement foods are offered to lunch providers to encourage domestic consumption of farm products and remove market surplus.²⁹ Entitlement foods typically make up about 15% to 20% of school-lunch products.³⁰

22. See, e.g., U.S. GOV'T ACCOUNTABILITY OFF., GAO/RCED-00-173R, FOOD AND COMMODITIES: FEDERAL PURCHASES AND MAJOR REGULATIONS THAT POTENTIALLY AFFECT PRICES PAID 6–14 (2000) (providing information about federal agencies' food purchases for a variety of different programs).

23. SCHOOL MEALS, *supra* note 14, at 5 tbl.1.

24. Richard B. Russell National School Lunch Act, 42 U.S.C. § 1751 (2012).

25. TRAVIS A. SMITH, “BILLIONS AND BILLIONS SERVED” HETEROGENEOUS EFFECTS OF FOOD SOURCE ON CHILD DIETARY QUALITY 2 n.1 (2013), https://ageconsearch.umn.edu/bitstream/151212/2/Smith_ChildFoodSource_AAEA2013.pdf [<https://perma.cc/8TS8-FFVX>]; see generally *The National School Lunch Program*, U.S. DEP'T AGRIC. (Nov. 2017), <https://fns-prod.azureedge.net/sites/default/files/cn/NSLPFactSheet.pdf> [<https://perma.cc/G6HR-WN29>].

26. RANDY ALISON AUSSENBERG & KIRSTEN J. COLELLO, CONG. RESEARCH SERV., R42353, DOMESTIC FOOD ASSISTANCE: SUMMARY OF PROGRAMS 13 (2017); *National School Lunch Program*, *supra* note 25.

27. See 42 U.S.C. § 1753(a)–(b)(1) (requiring the USDA to make food-assistance payments to each state and enabling the USDA to use its appropriations to provide agricultural commodities); see also JIM MONKE, CONG. RESEARCH SERV., RL34081, FARM AND FOOD SUPPORT UNDER USDA'S SECTION 32 PROGRAM 4 (2016) (defining the terms “commodity” and “entitlement” foods).

28. 42 U.S.C. § 1753(a); see 7 C.F.R. § 210.10(b) (2017) (describing the meal requirements for school lunches).

29. 7 U.S.C. § 612c-1.

30. U.S. DEP'T OF AGRIC., USDA FOODS IN THE NATIONAL SCHOOL LUNCH PROGRAM 4 (2016), https://dpi.wi.gov/sites/default/files/imce/school-nutrition/pdf/nslp_white_paper.pdf.

The FNS “[h]as overall responsibility for school-meals programs.”³¹ Federal regulations direct the FNS to reimburse providers for meals served, offer technical assistance, and evaluate state NSLP administration.³² To supply states with commodities, the FNS determines which foods are available for purchase, publishes an annual list of these foods, tracks entitlements, takes orders, monitors distribution, and provides policy guidance.³³ The FNS works with the Agricultural Marketing Service (AMS) and Farm Service Agency (FSA) to devise its annual purchase plan.³⁴ On behalf of the FNS, the AMS issues solicitations and purchases commodities, including animal products.³⁵ The FSA then “administers the purchase contracts and pays the vendors.”³⁶

In FY 2015, the FNS distributed nearly \$12 billion to states and purchased \$1.5 billion in agricultural commodities for the NSLP.³⁷ Animal products constituted nearly \$940 million of the \$1.5 billion the FNS spent on commodities; animal product purchases for the NSLP exceeded \$859 million—equivalent to 55% of NSLP commodity costs.³⁸

31. SCHOOL MEALS, *supra* note 14, at 9 fig.1; *see also* 7 C.F.R. § 210.3(a) (2017) (establishing the FNS as the administrator of the NSLP).

32. 7 C.F.R. § 210.4(b)(1) (2017); 7 C.F.R. § 210.18(b)(4) (2017); 7 C.F.R. § 210.19(a) (2017).

33. FOOD AND NUTRITION SERV., U.S. DEP’T OF AGRIC., USDA FOODS IN THE NATIONAL SCHOOL LUNCH PROGRAM WHITE PAPER 4 (2016).

34. MONKE, *supra* note 27, at 4.

35. *Purchase Programs: Solicitations and Awards*, U.S. DEP’T AGRIC., <https://www.ams.usda.gov/selling-food/solicitations> [<https://perma.cc/FP7S-7YEV>] (last visited Feb. 15, 2018).

36. MONKE, *supra* note 27, at 4.

37. EXPLANATORY NOTES, *supra* note 16, at 32-12, 32-23; *see, e.g.*, MONKE, *supra* note 27, at 1-2 (explaining that Section 32 funds, authorized by 7 U.S.C. § 612c, transferred \$8.4 billion directly to the FNS for child nutrition programs, \$40 million for the Fresh Fruit and Vegetable Program, and another \$465 million for school food commodities to support the NSLP).

38. *See* EXPLANATORY NOTES, *supra* note 16, at 32-63–32-65 (estimating values based on calculations from the tables, the total commodity cost of animal food products—beef, chicken, eggs, ham, pork, turkey, cheese, milk, and yogurt—for FY 2015 was \$940 million, of which the NSLP purchases constituted 91%, equaling \$859 million).

FY 2015 Entitlement Commodities:
Quantity and Value of Animal Food Products³⁹

Commodities	Pounds	Dollars
Beef	105,637,200	\$331,745,757
Chicken	216,675,700	\$237,474,679
Egg	5,865,420	\$9,057,263
Ham	7,839,600	\$13,723,594
Pork	16,343,860	\$19,821,247
Turkey	41,003,000	\$66,862,998
Cheese	141,468,510	\$259,857,378
Milk	266,999	\$159,242
Yogurt	805,158	\$1,055,753
Total for CNR	536 million lbs.	\$940 million
Total for NSLP (91%)	490 million lbs.	\$859 million

Most of these foods are from industrial-agricultural operations—factory farms produce over 99% of the animals Americans eat.⁴⁰

B. Industrial Animal Agriculture Threatens Environmental and Human Health

The United States agricultural industry raises more than 9 billion animals each year: more than 8.5 billion broiler chickens, 340 million laying hens, 270 million turkeys, 116 million pigs, 35 million beef cattle, and 9 million dairy cows.⁴¹ To accommodate the massive number of food-producing animals and to minimize costs, factory-farm operators crowd animals into feeding facilities.⁴² Over 9 billion animals eating, breeding, birthing, and defecating in limited quarters create a huge waste problem.⁴³

39. *Id.*

40. *Farm Animals Need Our Help*, ASPCA, <https://www.asPCA.org/fight-cruelty/farm-animal-cruelty/what-factory-farm> [<https://perma.cc/5223-V4VC>] (last visited Feb. 15, 2018).

41. HUMANE SOC'Y OF THE U.S., AN HSUS REPORT: THE WELFARE OF ANIMALS IN THE CHICKEN INDUSTRY 1 (2013); HUMANE SOC'Y OF THE U.S., AN HSUS REPORT: THE WELFARE OF ANIMALS IN THE MEAT, EGG, AND DAIRY INDUSTRIES 1–3 (2009).

42. Gaverick Matheny & Cheryl Leahy, *Farm-Animal Welfare, Legislation, and Trade*, 70 LAW & CONTEMP. PROBS. 325, 325–26 (2007).

43. *Factory Farming and the Environment*, FARM SANCTUARY, <https://www.farmsanctuary.org/learn/factory-farming/factory-farming-and-the-environment/> [<https://perma.cc/56UL-9B58>] (last visited Feb. 15, 2018).

The manure contains “nitrogen and phosphorus, pathogens such as *E. coli*, growth hormones, antibiotics, chemicals used as additives to the manure or to clean equipment, animal blood, silage leachate from corn feed, or copper sulfate used in footbaths for cows.”⁴⁴ Large farms can produce more waste than some cities: “For example, a very large hog farm, with as many as 800,000 hogs, generates more than 1.6 million tons of manure annually—more than one and a half times the sanitary waste produced by the about 1.5 million residents of Philadelphia, Pennsylvania in 1 year.”⁴⁵

The Environmental Protection Agency (EPA) does not require sewage treatment plants to treat animal waste.⁴⁶ Instead, the over 500 million tons of manure produced annually pour into manure lagoons that contaminate air and waterways and contribute to the spread of antibiotic-resistant bacteria and foodborne illness.⁴⁷ Current manure-management methods contribute to water pollution.⁴⁸ According to EPA, agriculture is a “top source[] of impairment” in rivers and streams.⁴⁹ Improper land application and faulty manure-lagoon containment systems spoil ground and surface waters, threatening the health of drinking water and aquatic ecosystems.⁵⁰

Groundwater pollution occurs when CAFO operators improperly apply manure to land causing leaching or runoff, or when faulty containment systems leak.⁵¹ Groundwater pollution is a very serious problem—about

44. HRIBAR, *supra* note 7, at 2.

45. GAO-08-944, *supra* note 12, at 5.

46. See National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations, 68 Fed. Reg. 7176, 7176, 7180–85, 7196–97 (Feb. 12, 2003) (codified at 40 C.F.R. pt. 9, 122, 123, & 412) (requiring CAFO operators to develop nutrient management plans using the best available technology that is economically achievable but not to the same levels as human waste treatment facilities).

47. See *Waterkeeper All., Inc. v. Env'tl. Prot. Agency*, 399 F.3d 486, 493, 519 (2d Cir. 2005) (finding that CAFOs generate about 500 million tons of animal manure each year and that the EPA acknowledges that the manure contains pathogens and microorganisms that pose a potential risk to human health and the environment); 68 Fed. Reg. at 7180 (“USDA estimates that operations that confine livestock and poultry animals generate about 500 million tons of manure annually (as excreted.”)); see also HRIBAR, *supra* note 7, at 2 (stating that large animal farms can produce more than 1.6 million tons of manure waste annually and that in total livestock animals produce “as much as 1.2–1.37 billion tons of waste” each year).

48. HRIBAR, *supra* note 7, at 3–4.

49. ENVTL. PROT. AGENCY, EPA 841-R-08-001, NATIONAL WATER QUALITY INVENTORY: REPORT TO CONGRESS 1 (2009), https://www.epa.gov/sites/production/files/2015-09/documents/2009_01_22_305b_2004report_2004_305breport.pdf [<https://perma.cc/7EAQ-D6H4>].

50. See GAO-08-944, *supra* note 12, at 9 (“[I]f improperly managed, manure and wastewater from animal feeding operations can adversely impact water quality through surface runoff and erosion, direct discharges to surface water, spills and other dry-weather discharges, and leaching into the soil and groundwater. Excess nutrients in water can result in or contribute to low levels of oxygen in the water and toxic algae blooms, which can be harmful to aquatic life.”).

51. HRIBAR, *supra* note 7, at 3.

50% of the U.S. population relies on groundwater for drinking water.⁵² Surface water pollution occurs when heavy storms cause manure lagoons to overflow, drainage systems to spill into bodies of water, surface water to pass through farming areas, or soil to erode.⁵³ Phosphorus and nitrogen flush into waterways, leading to degraded water that is unable to sustain aquatic life.⁵⁴ Hormones found in CAFO waste may diminish fish fertility.⁵⁵ Fecal bacteria and pathogens can restrict recreational swimming and reduce seafood consumption.⁵⁶

Manure-treatment methods also pollute airways.⁵⁷ CAFOs are responsible for “[n]early three-quarters of the nation’s ammonia” emissions.⁵⁸ Facility ventilation systems discharge pollutants and other respiratory irritants.⁵⁹ Manure applied to land generates atmospheric ammonia and nitrous oxide—potent greenhouse gases—as well as particulate matter.⁶⁰ Manure that remains in lagoons breaks down anaerobically, discharging methane—another significant greenhouse gas.⁶¹ Additionally, the increased use of emission-intensive liquid manure systems is partly responsible for the 64% increase in methane and nitrous emissions from 1990 to 2015.⁶² In total, agricultural emissions account for 10% of U.S. greenhouse gas production.⁶³

52. *Pesticides in Groundwater*, U.S. GEOLOGICAL SURV., <https://water.usgs.gov/edu/pesticidesgw.html> [<https://perma.cc/H2KK-BGM8>] (last modified Dec. 2, 2016).

53. HRIAR, *supra* note 7, at 4.

54. GAO-08-944, *supra* note 12, at 24 (“[T]hree . . . studies found water bodies impaired by higher nitrogen and phosphorus levels from manure runoff from animal feeding operations.”).

55. *See id.* (“Two . . . studies found that hormones from these discharges caused a significant decline in the fertility of female fish in nearby water bodies.”).

56. *See* RONALD L. OHREL, JR. & KATHLEEN M. REGISTER, ENVTL. PROT. AGENCY & THE OCEAN CONSERVANCY, VOLUNTARY ESTUARY MONITORING MANUAL 17-1 (2006), https://www.epa.gov/sites/production/files/2015-09/documents/2009_03_13_estuaries_monitor_chap17.pdf [<https://perma.cc/5EZP-GEXA>] (explaining that fecal contamination can make water unsafe by spreading pathogens).

57. *See* GAO-08-944, *supra* note 12, at 66–70, 73 (noting different studies that illuminate how manure-treatment methods can pollute the air).

58. *CAFOs Ordered to Report Hazardous Pollution*, WATERKEEPER ALLIANCE (Apr. 11, 2017), <http://waterkeeper.org/cafos-ordered-to-report-hazardous-pollution/> [<https://perma.cc/49BF-PE99>].

59. *Id.*; HRIAR, *supra* note 7, at 5.

60. DOUG GURIAN-SHERMAN, UNION OF CONCERNED SCIENTISTS, CAFOs UNCOVERED: THE UNTOLD COSTS OF CONFINED ANIMAL FEEDING OPERATIONS 4, 25, 54 (2008).

61. HRIAR, *supra* note 7, at 7.

62. ENVTL. PROT. AGENCY, EPA 430-P-17-001, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990–2015 5–9–5-10 (2017), https://www.epa.gov/sites/production/files/2017-02/documents/2017_complete_report.pdf [<https://perma.cc/RL29-V6Q2>].

63. *Agriculture and Climate Change*, U.S. DEP’T AGRIC. ECONOMIC RESEARCH SERV., <https://www.ers.usda.gov/topics/natural-resources-environment/climate-change/agriculture-and-climate-change/> [<https://perma.cc/N3DK-3C3V>] (last updated Oct. 14, 2016).

Human health and community well-being suffer as a result of water and air pollution from factory farms. Polluted waterways spread nitrates, which scientists have linked to blue baby syndrome, birth defects, miscarriages, and stomach and esophageal cancers.⁶⁴ Poor air quality contributes to increased rates of asthma and chronic lung disease.⁶⁵ Individuals exposed to ammonia emissions suffer acute and chronic health conditions, including: chemical burns to the eyes, nose, throat, and chest; headaches; and chronic lung disease.⁶⁶

The human health harms do not end there. An estimated 80% of antibiotics in the United States are used on animals, typically for preventative, rather than therapeutic, purposes.⁶⁷ CAFO operators rely heavily on hormones and antibiotics to accelerate animal growth and to stave off disease in the overcrowded facilities.⁶⁸ Bacteria in animals fed antibiotics may become resistant to those antibiotics, thus, making those antibiotics less effective in treating human diseases.⁶⁹

CAFOs also increase the risks from consuming meat, poultry, fish, and dairy products. Humans are now more likely to consume meat, poultry, fish, and dairy products in which environmental contaminants, such as arsenic and nitrate, accumulate.⁷⁰ For this and other reasons, foodborne illnesses have become more dangerous and difficult to treat.⁷¹

CAFO pollutants not only pose greater risks associated with individual health, but also threaten public welfare as a whole. Neighbors of CAFOs report that their communities may be “overrun with the raunchy, rotten-egg smell of hog manure for days at a time” or overpopulated by insects.⁷²

64. HRIBAR, *supra* note 7, at 4.

65. *Id.* at 6.

66. *Id.*

67. See U.S. DEP’T HEALTH AND HUMAN SERV., FOOD AND DRUG ADMIN., 2009 SUMMARY REPORT ON ANTIMICROBIALS SOLD OR DISTRIBUTED FOR USE IN FOOD-PRODUCING ANIMALS 10 (2014) (distinguishing differences in the circumstances in which antimicrobial drugs are used in human and veterinary medicine); Ralph Loglisci, *New FDA Numbers Reveal Food Animals Consume Lion’s Share of Antibiotics*, CTR. FOR A LIVABLE FUTURE (Dec. 23, 2010), <http://www.livablefutureblog.com/2010/12/new-fda-numbers-reveal-food-animals-consume-lion%E2%80%99s-share-of-antibiotics> [<https://perma.cc/GJX9-LJKG>] (“[I]n 2009] . . . almost 80% [of antibiotics] were reserved for livestock and poultry.”).

68. BECKER, *supra* note 5, at 3–5; JOHNSON, *supra* note 5, at 1.

69. See BECKER, *supra* note 5, at 7–8 (stating that increased antimicrobial use has led to resistant microorganisms that could compromise public health).

70. See ENVTL. PROT. AGENCY, 240-R-13-001, AMERICA’S CHILDREN AND THE ENVIRONMENT 85 (3d ed. 2013) (stating that contaminants accumulate in animals and are often found in meat and dairy products).

71. GURIAN-SHERMAN, *supra* note 60, at 62 (“[A]ntibiotic-resistant strains [of food-borne bacteria] that develop due to CAFO practices may increase hospital costs and suffering compared with non-resistant strains.”).

72. Bridget Huber, *Law and Odor: How to Take Down a Terrible-Smelling Hog Farm*, MOTHER JONES (May–June 2014), <http://www.motherjones.com/environment/2014/04/terrible-smell->

People living adjacent to factory farms cannot host cook-outs, sit on their porches at sunset, or even open their windows to enjoy a cool breeze on a spring day. Consequently, homeowners report a decrease in real estate value, and local governments report a subsequent decline in tax revenue.⁷³

II. FEDERAL AND STATE LAWS HAVE MADE CHALLENGING ANIMAL-AGRICULTURAL POLLUTION DIFFICULT

Despite the environmental harms factory farms produce, legal means to address industrial-agricultural pollution are limited. Compared to other industries, agriculture enjoys significant freedom from environmental regulation.⁷⁴ Farm groups lobbied Congress to omit farms and ranches from many federal regulations, arguing that policing individual crop and livestock operations poses too great an administrative burden.⁷⁵ Environmental laws and regulations either expressly exempt farming from regulatory control or impose limited permitting requirements on only the largest agricultural polluters.⁷⁶

Though agriculture ranks among the top sources of pollution in this country, the USDA has played a limited role addressing agricultural pollution. The Agency's mitigation efforts largely involve educational outreach, as well as voluntary technical and financial assistance.⁷⁷ Instead, the Agency should use all tools available to it to address animal-factory

hog-farms-lawsuits [<https://perma.cc/8HW3-4ZMV>]; SUSAN STEEVES & RALPH WILLIAMS, CONTAINED ANIMAL FEEDING OPERATIONS—INSECT CONSIDERATIONS 1 (2007), <https://www.extension.purdue.edu/extmedia/ID/cafo/ID-353.pdf> [<https://perma.cc/56GM-CFA5>].

73. HAMED MUBARAK ET AL., THE IMPACTS OF ANIMAL FEEDING OPERATIONS ON RURAL LAND VALUES 2 (1999); HRIBAR, *supra* note 7, at 11.

74. See CLAUDIA COPELAND, CONG. RESEARCH SERV., RL31851, ANIMAL WASTE AND WATER QUALITY: EPA REGULATION OF CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOs) 1 (2010) ("Some laws specifically exempt agriculture from regulatory provisions, and some are structured in such a way that farms escape most, if not all, of the regulatory impact.").

75. MEGAN STUBBS, CONG. RESEARCH SERV., R41622, ENVIRONMENTAL REGULATION AND AGRICULTURE 1 (2014).

76. See Robin Bravender, *EPA Issues Final 'Tailoring' Rule for Greenhouse Gas Emissions*, N.Y. TIMES (May 13, 2010), <http://www.nytimes.com/gwire/2010/05/13/13greenwire-epa-issues-final-tailoring-rule-for-greenhouse-32021.html> [<https://perma.cc/39WN-5FZ9?type=image>] (noting that the 2010 Greenhouse Gas Emissions Tailoring Rule excluded over six million sources—including agricultural facilities—which would otherwise have had to obtain greenhouse gas permits); see also RUHL, *supra* note 9, at 293 ("Some laws, while not expressly exempting or even mentioning farms, are structured in such a way that farms escape most if not all of the regulatory impact. Other laws expressly exempt farms from regulatory programs that would otherwise clearly apply to them."). But see *Util. Air Reg. Grp. v. Env'tl. Prot. Agency*, 134 S. Ct. 2427, 2449 (2014) (determining that EPA did not have the authority to require permitting for stationary sources subject to the already limited Prevention of Significant Deterioration permitting requirements).

77. See *e.g.*, 7 U.S.C. §§ 5401–5405 (2012) (providing for an Agricultural Council on Environmental Quality that is responsible for recommending and coordinating policies, as well as developing plans, but does not have enforcement authority.)

pollution. The following subsections make a case for the USDA to assess the NSLP procurement under NEPA because traditional environmental measures such as the CWA, CAA, and state nuisance law fail to effectively curb animal-agricultural pollution.

A. Environmental Laws Fail to Protect Water Quality from Industrial-Agricultural Pollution

The goal of the CWA is to prevent pollutant discharge into waterways.⁷⁸ To control the flow of pollutants into waterways, the CWA establishes a National Pollution Discharge Elimination System (NPDES).⁷⁹ The CWA also authorizes citizens to sue individuals who violate CWA effluent standards or limitations, as well as EPA and state administrative orders.⁸⁰ But, this framework does little to curb animal-factory pollution. Current laws and regulations exclude a majority of animal-factory activities from meeting NPDES permitting requirements, and citizens can sue animal factories only in a limited number of circumstances.⁸¹

When Congress wrote the CWA and its first set of regulations in the 1970s, the agricultural sector looked very different than it does now.⁸² In the past 40 years, animal producers embraced larger production facilities.⁸³ Since the 1950s, the number of animal operations decreased by 80%, but livestock production has more than doubled.⁸⁴

78. Federal Water Pollution Control Amendments of 1972, 33 U.S.C. § 1251(a) (2012).

79. *Clean Water Act (CWA) and Federal Facilities*, ENVTL. PROTECTION AGENCY, <https://www.epa.gov/enforcement/clean-water-act-cwa-and-federal-facilities> [<https://perma.cc/7CGQ-D5AC>] (last updated Jan. 29, 2018).

80. 33 U.S.C. § 1365.

81. See, e.g., *Concerned Area Residents for the Env't v. Southview Farm*, 34 F.3d 114, 115, 121–23 (2d Cir. 1994) (determining that an animal feeding lot operation was a point source not subject to any agricultural exemption). Compare *Animal Feeding Operations*, U.S. DEP'T AGRIC., NAT. RESOURCES CONSERVATION SERV., <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/livestock/afo/> [<https://perma.cc/A5D6-36B6>] (last visited Feb. 16, 2018) (indicating that there are approximately 450,000 AFOs in the United States), with ENVTL. PROT. AGENCY, NPDES CAFO PERMITTING STATUS REPORT -- NATIONAL SUMMARY (2016), https://www.epa.gov/sites/production/files/2017-04/documents/tracksum_endyear2016_v2.pdf [<https://perma.cc/L3AG-NT8V>] (indicating that only about 19,500 AFOs meet the size threshold to be regulated under the CWA). Compare 40 C.F.R. § 122.2 (2017) (including “concentrated animal feeding operations” in the definition of “point source” subject to regulation under the CWA), with 40 C.F.R. § 122.23(b)(2) (excluding AFOs below certain size thresholds from the definition of “concentrated animal feeding operation” under the CWA).

82. See ENVTL. PROT. AGENCY, EPA 820-R-13-002, LITERATURE REVIEW OF CONTAMINANTS IN LIVESTOCK AND POULTRY MANURE AND IMPLICATIONS FOR WATER QUALITY 5 (2013) (indicating that livestock and poultry production has changed significantly since the 1960s).

83. PEW COMM'N ON INDUS. FARM ANIMAL PROD., PEW CHARITABLE TRUSTS & JOHNS HOPKINS BLOOMBERG SCHOOL OF PUB. HEALTH, PUTTING MEAT ON THE TABLE: INDUSTRIAL FARM ANIMAL PRODUCTION IN AMERICA vii, 3, 5–6 (2008).

84. ENVTL. PROT. AGENCY, *supra* note 82, at v.

The CWA and its regulations have not kept pace with the significant changes in the agricultural sector—namely, the intensification of animal production.⁸⁵ As is, the CWA focuses on controlling wastewater discharge from manufacturing facilities, sewage treatment plants, and similar industrial “point sources.”⁸⁶ Section 1362 states that a point source is:

any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural storm water discharges and return flows from irrigated agriculture.⁸⁷

NPDES requires permits for these point sources.⁸⁸ But, under the point source definition, only a small number of animal factories need permits.⁸⁹ CAFOs, as CWA regulations define them, are only the largest animal feeding operations (AFOs).⁹⁰ The regulations consider the number and kind of animals confined, and occasionally, other circumstances.⁹¹ For example, the EPA considers an AFO a CAFO when there are more than 700 mature cows, 10,000 sheep, or 125,000 chickens.⁹²

The EPA may consider facilities with fewer animals as CAFOs when the operations are discharging pollutants directly into waters or through man-made systems.⁹³ But, under section 1362, the EPA may not require a

85. See COPELAND, *supra* note 74, at 1 (“[These regulations] have not been amended to reflect significant structural and technological changes in some components of the animal agriculture industry that have occurred, particularly during the last three decades. In addition, manure and waste-handling and disposal problems from intensive animal production have begun to receive attention as these facilities increase in size and the effects of these problems reach beyond the industry to affect others in nearby communities.”).

86. See 33 U.S.C. § 1362(6) (2012) (defining pollutants covered by the CWA).

87. *Id.* § 1362(14).

88. See *Clean Water Act Section 404 and Agriculture*, ENVTL. PROTECTION AGENCY, <https://www.epa.gov/cwa-404/clean-water-act-section-404-and-agriculture> [<https://perma.cc/G3LZ-4PJL>] (last updated Nov. 20, 2017) (stating that it is illegal to release fill material into waters of the U.S. without a permit unless an exemption applies). Compare 33 U.S.C. § 1311(a) (making pollutant discharges illegal except in compliance with the law), with 33 U.S.C. § 1342(a) (enabling the EPA to issue NPDES permits).

89. See 33 U.S.C. § 1362(14) (defining point source); see also COPELAND, *supra* note 74, at 5 (“Most agricultural activities are considered to be nonpoint sources, since they do not discharge wastes from clearly identifiable pipes, outfalls, or similar ‘point’ conveyances. Nonpoint sources are not subject to the permit, compliance, and enforcement regime that applies to point sources.”).

90. 40 C.F.R. § 122.23(b)(1) (2017).

91. *Id.* § 122.23(b)(4).

92. *Id.*

93. *Id.* § 122.23(b)(6).

permit from smaller operators that discharge agricultural storm water and return flow.⁹⁴

Runoff from nonpoint sources now represents a larger share of water pollution problems.⁹⁵ And, NPDES does not necessarily prohibit permitted point sources from discharging pollutants.⁹⁶ With a permit, a CAFO operator can discharge byproducts into waterways and apply manure, litter, and process wastewater to surrounding land.⁹⁷ Limiting CWA regulations to only certain large facilities and certain activities means that most water pollution from animal agriculture will go unchecked.

B. Environmental Laws Fail to Protect Air Quality from Industrial-Agricultural Pollution

The EPA has the authority to regulate CAFO air emissions under the CAA; Emergency Planning and Community Right-to-Know Act (EPCRA); and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).⁹⁸

The CAA aims “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.”⁹⁹ To achieve these goals, the CAA directs the EPA to set health-based standards for ambient air quality, deadlines for state and local compliance, emission controls for hazardous air pollutants, and national emission standards for common or large sources of air pollution.¹⁰⁰

94. 33 U.S.C. § 1362(14); ENVTL. PROT. AGENCY, EPA 833-R-10-006, IMPLEMENTATION GUIDANCE ON CAFO REGULATIONS CAFOs THAT DISCHARGE OR ARE PROPOSING TO DISCHARGE 2 (2010), https://www3.epa.gov/npdes/pubs/cafo_implementation_guidance.pdf [<https://perma.cc/CX54-FJAZ>].

95. See, e.g., COPELAND, *supra* note 74, at 5 (“As point source pollution has been brought under regulation, uncontrolled discharges in the form of runoff from ‘nonpoint sources’ have become not only greater in absolute terms, but also proportionally a larger share of remaining water pollution problems.”).

96. See 33 U.S.C. § 1342(a) (detailing the NPDES permitting framework); see also *Clean Water Act Section 404 and Agriculture*, *supra* note 88 (stating that there is an exemption for discharges of fill materials from normal farming and ranching activities).

97. 40 C.F.R. § 122.23(e).

98. *Agriculture: Laws and Regulations That Apply to Your Agricultural Operation by Farm Activity*, ENVTL. PROTECTION AGENCY, <https://www.epa.gov/agriculture/agriculture-laws-and-regulations-apply-your-agricultural-operation-farm-activity> [<https://perma.cc/8UMX-PRTA>] (last updated Nov. 28, 2017).

99. 42 U.S.C. § 7401(b)(1).

100. See generally JAMES E. MCCARTHY ET AL., CONG. RESEARCH SERV., RL30853, CLEAN AIR ACT: A SUMMARY OF THE ACT AND ITS MAJOR REQUIREMENTS (2013), (describing the regulatory requirements set out for the EPA to achieve the regulatory goals); 42 U.S.C. § 7401 (providing the findings that demonstrate the purpose and goal of the Clean Air Act).

Section 7409 directs the EPA to establish National Ambient Air Quality Standards (NAAQS) for air pollutants that endanger public health or welfare.¹⁰¹ States are responsible for adopting a plan to implement, maintain, and enforce these standards, while polluters are responsible for obtaining a permit for emissions that exceed a threshold amount specified for each NAAQS pollutant.¹⁰²

The EPA has established NAAQS for six air pollutants, only one of which CAFOs produce.¹⁰³ NAAQS exist for particulate matter, but these standards can exclude agricultural pollutants.¹⁰⁴ Recent changes to NAAQS set stricter limits for “fine” particulate matter but did not strengthen air quality standards for “coarse” particulate matter¹⁰⁵—the more common byproduct of agricultural activities.¹⁰⁶ Additionally, the EPA has not established an air quality standard for ammonia, the most common CAFO pollutant.¹⁰⁷

Though the CAA does not regulate ammonia pollution from CAFOs, EPCRA and CERCLA may soon require livestock producers to report pollutant discharge, including ammonia.¹⁰⁸ Recently, the court in *Waterkeeper Alliance v. Environmental Protection Agency* vacated a

101. 42 U.S.C. § 7409(b).

102. *Id.* § 7410(a)(1)–(2)(L).

103. ENVTL. PROT. AGENCY, CRITERIA AIR POLLUTANTS 1 (3d ed. 2017) https://www.epa.gov/sites/production/files/2017-07/documents/ace3_criteria_air_pollutants_updated_live_file.pdf [https://perma.cc/8PV7-G4ZT]; HRIBAR, *supra* note 7, at 6.

104. See NAAQS Table, ENVTL. PROTECTION AGENCY, <https://www.epa.gov/criteria-air-pollutants/naaqs-table> [https://perma.cc/ZB6Y-8MWD] (last updated Dec. 20, 2016) (listing the six criteria pollutants regulated under NAAQS: sulfur dioxide, carbon monoxide, lead, nitrogen dioxide, ozone, and particulate matter); NAT’L RESEARCH COUNCIL, AIR EMISSIONS FROM ANIMAL FEEDING OPERATIONS 4–5 (2003) (indicating that CAFOs also emit ammonia, nitrous oxide, methane, volatile organic compounds, hydrogen sulfide, and odors).

105. National Primary & Secondary Ambient Air Quality Standards, 40 C.F.R. pt. 50, apps. L, O (2016) (explaining “fine” particulate matter has a diameter under 2.5 micrometers, while “coarse” particulate matter measures between 2.5 and 10 micrometers in diameter and explaining the relationship of these determinations to NAAQS); see also ROBERT ESWORTHY, CONG. RESEARCH SERV., R42934, AIR QUALITY: EPA’S 2013 CHANGES TO THE PARTICULATE MATTER (PM) STANDARD 2 (2015) (“[T]he final rule did not modify the standards for inhalable ‘coarse’ particles larger than 2.5 but smaller than 10 microns.”).

106. Roger D. Peng et al., *Coarse Particulate Matter Air Pollution and Hospital Admissions for Cardiovascular and Respiratory Diseases Among Medicare Patients*, 299 JAMA 2172, 2172–73 (2008).

107. See NAAQS Table, *supra* note 104 (indicating that NAAQS does not include ammonia); see also HRIBAR, *supra* note 7, at 5 (“The most typical pollutants found in air surrounding CAFOs are ammonia, hydrogen sulfide, methane, and particulate matter, all of which have varying human health risks.”).

108. CERCLA and EPCRA Reporting Requirements for Air Releases of Hazardous Substances from Animal Waste at Farms, ENVTL. PROTECTION AGENCY, <https://www.epa.gov/epcra/cercla-and-epcra-reporting-requirements-air-releases-hazardous-substances-animal-waste-farms> [https://perma.cc/GJ3D-KJXE] (last updated Feb. 13, 2018).

federal rule that had exempted CAFOs from reporting certain hazardous wastes under EPCRA and CERCLA.¹⁰⁹ The existing rule required other industries to report releases of ammonia and hydrogen sulfide, both found in livestock manure, but determined these reporting requirements “unnecessary” for CAFO operators.¹¹⁰

C. State Nuisance Laws Also Thwart Environmentalists’ Attempts to Address Factory-Farming Pollution

As an alternative to environmental law challenges, some property owners and citizens’ groups have brought nuisance claims against CAFO operators.¹¹¹ Private nuisance laws allow individuals to sue when CAFO odors deprive these landowners of the use and enjoyment of their property.¹¹² Public nuisance laws allow the government to sue on behalf of a community to quell pollution or odor issues.¹¹³

But, seldom do nuisance cases stop CAFO pollution.¹¹⁴ State laws rarely afford private citizens standing to bring a public nuisance claim, meaning that only public officials may sue for injunctive relief.¹¹⁵ Local officials rarely bring public nuisance claims, fearing adverse economic consequences.¹¹⁶

An individual may instead bring a private nuisance claim for monetary relief. Large settlements and jury awards can deter CAFO pollution to some degree, but many legislatures passed laws to deter private nuisance

109. *Waterkeeper All. v. Env’tl. Prot. Agency*, 853 F.3d 527, 530 (D.C. Cir. 2017).

110. *Id.*

111. *See, e.g., Ryan Teel, Not in My Neighborhood: The Fight Against Large-Scale Animal Feeding Operations in Rural Iowa, Preemptive Tactics, and the Doctrine of Anticipatory Nuisance*, 55 DRAKE L. REV. 497, 501 (2007) (touting traditional nuisance law as a weapon to prevent the development of animal feeding operations).

112. *See, e.g., Hanes v. Cont’l Grain Co.*, 58 S.W.3d 1, 5 (Mo. Ct. App. 2001) (holding private citizens may sue a hog farm operator claiming odor, flies, and contaminated water impaired their use and enjoyment of their properties).

113. *See Vanessa Zborek, “Yes, in Your Backyard!” Model Legislative Efforts to Prevent Communities from Excluding CAFOs*, 51 WAKE FOREST J.L. & POL’Y 147, 166 (2015) (“The public nuisance doctrine prevents land use that would impair a right generally held by the public.”).

114. *See, e.g., Serena M. Williams, CAFOs as Neighbors: An Analysis of Kentucky Nuisance Law and Agricultural Operations*, SUSTAIN, Fall–Winter 2002, at 14, 14 (discussing a case in which the court did not cease operations causing the nuisance).

115. Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L.J. 471, 485 n.45 (1970); *see also* Denise E. Antolini, *Modernizing Public Nuisance: Solving the Paradox of the Special Injury Rule*, 28 ECOL. L.Q. 755, 760–61 (2001) (explaining that individuals typically do not have standing to sue for public nuisance unless the individual has suffered a “special injury”).

116. *See, e.g., Huber, supra* note 72 (explaining that after Missouri neighbors won an \$11.5 million judgment against a Smithfield hog operation, the company threatened to leave the state).

claims.¹¹⁷ Some capped available damages in farm nuisance suits, limiting the deterrent effect of such claims.¹¹⁸ Others passed more comprehensive “Right to Farm” acts, limiting nuisance cases outright.¹¹⁹ For example, Wyoming’s Right to Farm Act states:

a farm or ranch operation shall not be found to be a public or private nuisance by reason of that operation if that farm or ranch operation: (i) Conforms to generally accepted agricultural management practices; and (ii) Existed before a change in the land use adjacent to the farm or ranch land and the farm or ranch operation would not have been a nuisance before the change in land use or occupancy occurred.¹²⁰

In other cases, state law awards costs and fees to agricultural operations defending in a nuisance suit.¹²¹ By limiting an individual’s right to bring nuisance suits, state legislatures stripped the public of an important legal tool to address CAFO pollution. Where substantive environmental laws fail to adequately address factory-farm pollution, and nuisance laws do not allow individuals to prevent the proliferation of CAFO pollution, advocates need to consider an alternative course of action—a NEPA challenge.

III. THE USDA SHOULD COMPLETE AN ENVIRONMENTAL IMPACT STATEMENT TO DETERMINE THE EXTENT OF ANIMAL-FARM POLLUTION THAT THE NATIONAL SCHOOL LUNCH PROGRAM CAUSES

NEPA formalizes national environmental policy, recognizing the federal government’s obligation to protect natural resources.¹²² The statute

117. See Alexander A. Reinert, *The Right to Farm: Hog-Tied and Nuisance-Bound*, 73 N.Y.U. L. REV. 1694, 1706–07 (1998) (explaining that Right to Farm acts, which are designed to protect agricultural operators from common-law nuisance liability, exist in some form in all 50 states).

118. See, e.g., MO. REV. STAT. § 537.295 (2016) (excluding nuisance claims for agricultural operations except when negligence or improper operation causes the nuisance); see also Brent Martin, *Gov. Nixon Signs Farm Nuisance Lawsuit Bill, After Vetoing Initial Bill*, MISSOURINET (May 11, 2011), <http://www.missourinet.com/2011/05/11/gov-nixon-signs-farm-nuisance-lawsuit-bill-after-vetoing-initial-bill-audio/> [https://perma.cc/3YWQ-4AK8] (explaining that the state legislature limited farm nuisance suits in rural communities to protect agricultural operations).

119. See Amy Lavine, *Right to Farm Laws*, in 4 AM. LAW ZONING § 33:5 (5th ed.) (explaining that statutes in Iowa, Tennessee, and Wyoming give agricultural operations that comply with applicable laws and regulations an irrebuttable presumption that a nuisance does not exist).

120. WYO. STAT. ANN. § 11-44-103 (2017).

121. See TEX. AGRIC. CODE ANN. § 251.004(b) (2018) (explaining that a person bringing a nuisance action against an agricultural operation that existed for more than a year will be liable for the attorney’s fees of the defendant).

122. National Environmental Policy Act of 1969, 42 U.S.C. § 4331 (2012).

asserts that “each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.”¹²³ To preserve the natural environment “without degradation, risk to health or safety, or other undesirable and unintended consequences,” NEPA commits federal and state beneficiaries “to use all practicable means and measures.”¹²⁴

Applying NEPA to the NSLP’s purchases from CAFOs is one way that the USDA could commit to preserving our natural environment. Advocates could petition the USDA to complete an EIS for the NSLP or, alternatively, challenge the USDA’s decision not to complete one under the APA. Quantifying the environmental effects of school food procurement would create a record of animal-factory pollution for future actions and could pressure industry and the USDA to change their respective production and procurement practices.

First, according to NEPA, agencies must determine whether an agency action qualifies for a categorical exclusion from NEPA review; next, whether the action merits an environmental assessment (EA) or a finding of no significant impact (FONSI); and finally, whether the action warrants an EIS.¹²⁵

A. The USDA Regulations Do Not Categorically Exempt the National School Lunch Program from NEPA Review

Neither the activities supporting nor the agency overseeing the NSLP qualify for a categorical exclusion under the USDA regulations.¹²⁶ As a food provision program, the NSLP activities are broader than those activities that the USDA regulations list.¹²⁷ The USDA regulations exclude only administrative, funding, research, education, legal, and market-development activities from NEPA.¹²⁸ To administer the NSLP, the FNS establishes nutritional standards for meals, offers technical assistance and

123. *Id.* § 4331(c).

124. *Id.* § 4331(a), (b)(3).

125. See *National Environmental Policy Act Review Process*, ENVTL. PROTECTION AGENCY, <https://www.epa.gov/nepa/national-environmental-policy-act-review-process> [https://perma.cc/94JR-AL2H] (last updated Jan. 24, 2017) (describing the different steps an agency may need to take under NEPA).

126. See 7 C.F.R. § 1b.3–1b.4 (2017) (listing the activities and agencies that are excluded from preparing an EA and EIS under the USDA regulations).

127. See 40 C.F.R. § 1500.5 (allowing “categorical exclusions” for actions that do not have a “significant effect” on the environment); 40 C.F.R. § 1507.3(a) (requiring agencies to adopt procedures consistent with the regulations); 7 C.F.R. § 1b.3 (listing activities that are categorically excluded from preparing an EA or EIS).

128. 7 C.F.R. § 1b.3.

training to meet these standards, reimburses states for each meal served, and provides USDA Foods.¹²⁹ To supply USDA Foods, the FNS determines which foods are available for purchase, selects and publishes an annual list, tracks state entitlements, takes orders, monitors distribution, and provides policy guidance.¹³⁰

Not only do the NSLP activities not qualify for a categorical exemption, neither do the agencies that oversee the program.¹³¹ The USDA regulations omit the FNS from the list of USDA agencies whose actions “have no individual or cumulative effect on the human environment.”¹³² The USDA regulations do list the FSA and AMS—the USDA agencies that contract for and purchase commodities on behalf of the FNS—as qualifying for categorical exclusions.¹³³ But, the FSA and AMS are acting as agents of the FNS, which “has overall responsibility for school-meals programs” and is not exempt from NEPA review.¹³⁴ The Council on Environmental Quality (CEQ) regulations specify that for actions involving more than one agency, the government may determine lead and cooperating agencies.¹³⁵ For the purposes of the NSLP, the FNS would likely be the lead agency, and regulations would require the FSA and AMS, as cooperating agencies, to assist the FNS in complying with NEPA.¹³⁶

One USDA regulation also requires agencies to “scrutinize their activities to determine continued eligibility for categorical exclusion.”¹³⁷ *Humane Society of the United States v. Johanns* interpreted this regulation, determining that the USDA has a responsibility to consider whether categorical exclusions issued decades before are valid in light of emerging evidence.¹³⁸ The court held that “failing even to consider whether a normally excluded action may have a significant environmental impact flies

129. 42 U.S.C. §§ 1751, 1753, 1769b-1.

130. FOOD AND NUTRITION SERV., *supra* note 33, at 4.

131. See 7 C.F.R. § 1b.4 (listing agencies that are excluded from preparing an EA or EIS).

132. *Id.*

133. *Id.*

134. SCHOOL MEALS, *supra* note 14, at 9 fig.1 (indicating that FNS “[h]as overall responsibility for school-meals programs”); see also FOOD AND NUTRITION SERV., *supra* note 33, at 4 (“AMS serves as the primary purchasing agent for USDA Foods.”); 42 U.S.C. § 4332 (indicating that NEPA applies to all federal agencies); FARM SERV. AGENCY, U.S. DEP’T OF AGRIC., DAIRY PRODUCT PRICE SUPPORT PROGRAM (DPPSP) FACT SHEET 1 (2011) (“FSA purchases and delivers processed commodities under various domestic food distribution programs, such as the National School Lunch Program.”).

135. 40 C.F.R. § 1501.5–6.

136. See *id.* (stating that if multiple agencies are involved in the same action or directly related actions subject to NEPA, they must work together to prepare an EIS and they have discretion to decide which agencies are the lead agencies and which agencies are the cooperating agencies in preparing the EIS).

137. 7 C.F.R. § 1.b3(c).

138. *Humane Soc’y of the U.S. v. Johanns*, 520 F. Supp. 2d 8, 34 (D.D.C. 2007).

in the face of the CEQ regulations . . . as well as USDA's own NEPA regulations."¹³⁹

First authorized in 1946, the NSLP predates the widespread adoption of the factory farm—since the 1950s, livestock production has more than doubled, while the number of operations has fallen by 80%.¹⁴⁰ Evidence of animal-factory pollution in air and waterways continues to emerge, thus bolstering the need for NEPA review.¹⁴¹

B. The USDA Should Complete an Environmental Assessment and an Environmental Impact Statement for the National School Lunch Program

Because the NSLP activities and agencies do not qualify for a categorical exclusion, the FNS should prepare an EA. The EA should list the reason for purchasing animal-agricultural products from factory farms, possible procurement alternatives, the wide-sweeping environmental harms, and the authorities consulted.¹⁴² Given the well-documented environmental impacts of factory farming, the EA findings should prompt the USDA to prepare an EIS, rather than a FONSI.

Agencies must complete an EIS for all “major Federal actions significantly affecting the quality of the human environment.”¹⁴³ The CEQ regulations specify that major federal actions include “[a]doption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive,” as is the case with the NSLP.¹⁴⁴ In terms of cost, the NSLP is significant—the program has an annual budget of over \$13 billion.¹⁴⁵ A huge portion of the NSLP cash subsidies and approximately \$859 million in commodities support animal agriculture.¹⁴⁶

In *Hanly v. Kleindienst*, the court held that the CEQ guidelines weigh in favor of a formal EIS when actions are “highly controversial” or cause

139. *Id.*

140. ENVTL. PROT. AGENCY, *supra* note 82, at v.

141. See Teel, *supra* note 111, at 504–06 (stating that recent studies detail the impacts of AFOs on air and waterways).

142. See 40 C.F.R. § 1501.3–4 (describing when agencies must prepare an EA and an EIS); see also *National Environmental Policy Act Review Process*, *supra* note 125 (listing the requirements for an EA).

143. 42 U.S.C. § 4332(2)(c) (2012); see also 40 C.F.R. § 1502.4(a)–(b) (describing when major federal actions require an EIS).

144. 40 C.F.R. § 1508.18(b)(3).

145. SCHOOL MEALS, *supra* note 14, at 5 tbl.1.

146. U.S. DEP'T OF AGRIC., 2017 USDA BUDGET EXPLANATORY NOTES FOR COMMITTEE ON APPROPRIATIONS: FOOD AND NUTRITION SERVICE 32-63–32-65 (2017).

“cumulative harm.”¹⁴⁷ The effects of factory farming are both controversial and cumulative. Numerous studies have linked factory farms—like those the USDA relies on—to diminished air and water conditions, heightened greenhouse gas emissions, and poorer community health.¹⁴⁸

To document these harms, the USDA will need to evaluate environmental impacts and possible programmatic alternatives. The USDA can choose to complete a programmatic EIS rather than a generic EIS.¹⁴⁹ A programmatic EIS considers cumulative impacts, focuses on policy-level alternatives, and emphasizes comprehensive mitigation measures.¹⁵⁰ Such an EIS would allow the USDA to analyze animal-agricultural pollution across the broad range of facilities, regions, and multi-project programs that the NSLP spans.

Conducting a NEPA review for the NSLP would yield multiple benefits. Because the EIS process involves a public comment period, concerned citizens and other agencies could provide meaningful feedback on NSLP procurement.¹⁵¹ Citizens living near CAFOs have indispensable information concerning the social, economic, and environmental effects of factory farming on their communities. Schools that source sustainable animal-agricultural products could offer viable procurement alternatives. Moreover, agencies, such as the EPA, could provide further scientific support linking CAFOs to widespread environmental harms. While NEPA would not require the USDA to adopt the suggestions of public commenters, it would ensure the USDA better understood the social, economic, and environmental consequences of animal-agricultural procurement.¹⁵² Additionally, the USDA would have to respond to the comments.¹⁵³ The record created would not only provide the public with more information on factory-farm pollution, but would also provide lawyers with material to inform future litigation.¹⁵⁴

147. See *Hanly v. Kleindienst*, 471 F.2d 823, 830–31 (2d Cir. 1972) (determining that the General Services Administration should have completed an EIS considering the cumulative effects of constructing a jail).

148. See, e.g., GAO-08-944, *supra* note 12, at 5–6 (providing a brief overview of CAFOs’ environmental and health impacts).

149. Final Guidance for Effective Use of Programmatic NEPA Reviews, 79 Fed. Reg. 76,986 (Dec. 23, 2014).

150. *Id.* at 76,986, 76,988–90.

151. *National Environmental Policy Act Review Process*, *supra* note 125.

152. See 40 C.F.R. § 1503.4 (2017) (requiring agencies preparing an EIS to assess, consider, and respond to comments).

153. *Id.* § 1503.4(a).

154. See *National Environmental Policy Act Review Process*, *supra* note 125 (“The EIS process ends with the issuance of [a] Record of Decision.”).

IV. ADVOCATES CAN CHALLENGE THE USDA'S FAILURE TO PRODUCE AN ENVIRONMENTAL IMPACT STATEMENT FOR THE NATIONAL SCHOOL LUNCH PROGRAM

As an alternative to petitioning the USDA to complete an EIS for the NSLP, advocates could challenge agency inaction under the APA. NEPA does not contain a citizen suit provision; so, advocates would need to argue that failure to conduct an EIS for the NSLP is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law."¹⁵⁵ To bring such a claim, advocates will need to establish that a plaintiff has standing and that the USDA's particular action—or, in this case, inaction—is subject to judicial review.¹⁵⁶ The sections below outline NEPA standing requirements and consider how best to tackle USDA inaction.

A. Choosing a Potential Plaintiff

To establish standing, a plaintiff will have to demonstrate that she meets both Article III and APA standing requirements.¹⁵⁷ The most likely candidate to meet both constitutional and prudential standing requirements would live near a CAFO that produces USDA Foods and would experience air or water quality issues.

Two similarly named cases outline these standing requirements. *Lujan v. Defenders of Wildlife* involved a challenge to regulations that limited the applicability of the Endangered Species Act abroad.¹⁵⁸ The Court in *Defenders of Wildlife* determined that environmentalists did not suffer a concrete, discernible injury because of these regulations and outlined a test for constitutional standing.¹⁵⁹ For Article III standing, a plaintiff must establish: (1) injury in fact; (2) a causal connection between the injury and agency conduct; and (3) that the court can provide the plaintiff with relief.¹⁶⁰

In *Lujan v. National Wildlife Federation*, the Court outlined APA standing requirements.¹⁶¹ In this case, plaintiffs alleged that the Bureau of Land Management's review of orders that could affect their recreational use

155. Administrative Procedure Act, 5 U.S.C. § 706 (2012).

156. See *id.* § 702 ("A person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof.").

157. U.S. CONST. art. III, § 2, cl. 1; 5 U.S.C. § 702.

158. *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 555 (1992).

159. *Id.* at 560–61, 564.

160. *Id.* at 560–61.

161. *Lujan v. Nat'l Wildlife Fed'n*, 497 U.S. 871, 882 (1990) (quoting 5 U.S.C. § 702).

and aesthetic enjoyment of adjacent public lands had violated NEPA.¹⁶² In its ruling, the Court determined that the plaintiffs had to demonstrate that their complaint fell within the “zone of interests” that the statute protects or that they were “adversely affected or aggrieved . . . within the meaning of a relevant statute” by a final agency action.¹⁶³ Using this test, the Court found that the plaintiffs’ interests in recreational use and aesthetic enjoyment were within the zone of interests that NEPA protects.¹⁶⁴ But, the Court concluded that the plaintiffs did not show they would be adversely affected.¹⁶⁵

A plaintiff living near a CAFO that sells exclusively USDA Foods will have the best shot of establishing both constitutional and prudential standing. The harms she deals with—air and water pollution from factory farms—are precisely the kinds of injuries against which Congress intended NEPA to protect.¹⁶⁶

B. Choosing an Action to Challenge

Advocates would next need to establish that the USDA’s failure to prepare an EIS was an action subject to judicial review. The CEQ regulations authorize legal challenges when the “responsible officials fail to act and that failure to act is reviewable by courts or administrative tribunals under the [APA] or other applicable law as agency action.”¹⁶⁷ Often federal agency inaction will not trigger NEPA review, but courts have held in certain cases that an agency’s failure to act under NEPA for major federal actions is subject to judicial review.¹⁶⁸ For example, the court in *Center for Food Safety v. Johanns* held that the USDA violated NEPA when it issued permits for testing genetically engineered plant varieties without explaining why the agency did not prepare an EA or EIS.¹⁶⁹

Two cases to which a court may turn to determine if the NSLP actions are reviewable are *Kleppe v. Sierra Club* and *Defenders of Wildlife v. Andrus*.¹⁷⁰ In *Kleppe*, Sierra Club argued that the Department of Interior

162. *Id.* at 875.

163. *Id.* at 883 (internal quotations omitted).

164. *Id.* at 872.

165. *Id.* at 871–72.

166. See 42 U.S.C. § 4321 (2012) (“The purposes of this chapter are . . . to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man . . .”).

167. 40 C.F.R. § 1508.18 (2017).

168. See *Ctr. for Food Safety v. Johanns*, 451 F. Supp. 2d 1165, 1174, 1187 (D. Haw. 2006) (describing that a “final agency action” can include a “failure to act”).

169. *Id.* at 1171.

170. *Kleppe v. Sierra Club*, 427 U.S. 390, 412 (1976); *Defs. of Wildlife v. Andrus*, 627 F.2d 1238, 1239–40 (D.C. Cir. 1980).

(DOI) should have completed a comprehensive EIS when issuing permits to a number of smaller, private coal mining companies.¹⁷¹ The Court determined that the DOI plan involved many minor actions, and suggested that an EIS would be necessary only if a number of proposals with a cumulative effect—defined as “synergistic environmental impacts”—were pending before the agency.¹⁷² In *Andrus*, the DOI refused requests to prepare an EIS for a state plan to control wolf populations.¹⁷³ In that case, the court held that the “agency has done nothing more than fail to prevent the other party’s action from occurring.”¹⁷⁴

Both cases suggest that there must be a proposal for a major federal action, not merely a contemplated action.¹⁷⁵ With the NSLP, there is both clear federal control and concrete action. Distinguishable from the initiative in *Andrus*, the NSLP involves a federal, not state, program.¹⁷⁶ Unlike the DOI, the USDA does much more than merely allow the NSLP to occur. The Agency is ultimately responsible for all program activities, including the purchase of animal food products through cash subsidies to states and the FNS’s commodity purchases.¹⁷⁷

In fact, the NSLP involves “systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive” and includes “continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies.”¹⁷⁸ For the NSLP, the USDA devises a national plan, distributes funds to states, purchases commodities, administers contracts, and pays vendors.¹⁷⁹

Pursuant to *Kleppe*, advocates should contest a specific USDA action with a cumulative-effect argument. The USDA’s commodity purchase plan for the NSLP or subsequent commodity bid specifications are examples of actions that would have such a cumulative effect.¹⁸⁰ The annual purchase plan details available NSLP funds and outlines what foods the FNS will

171. *Kleppe*, 427 U.S. at 412.

172. *Id.* at 410.

173. *Andrus*, 627 F.2d at 1240.

174. *Id.* at 1244.

175. See *Kleppe*, 427 U.S. at 394 (“[NEPA] requires that all federal agencies include a detailed statement of environmental consequences known as an environmental impact statement ‘in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment.’”); see also *Andrus*, 627 F.2d at 1243 (noting Congress created NEPA to combat growing environmental problems by holding federal agencies accountable, forcing them to complete proposals for major federal actions).

176. See *Andrus*, 627 F.2d at 1240 (discussing an Alaskan state hunting program).

177. *The National School Lunch Program*, *supra* note 25.

178. 40 C.F.R. § 1508.18(a) (2017).

179. *MONKE*, *supra* note 27, at 4.

180. *Id.*

supply to states based on prior year purchases.¹⁸¹ The USDA then issues bid specifications for products, which include numerous types of beef, chicken, cheese, etc.¹⁸² In FY 2015, the FNS provided more than \$859 million in animal-agricultural products through the NSLP's commodity program.¹⁸³ These millions of dollars likely supported factory farms, bankrolling pollution from animal agriculture. By arguing that these annual actions trigger NEPA review, advocates may be able to force the USDA to assess the environmental consequences of its actions.

CONCLUSION

Industrial animal production externalizes the environmental and public health costs of resource-intensive agriculture. As the Agency responsible for both preserving our natural resources and feeding future generations, the USDA should be assessing to what degree its reliance on factory farms affects the environment. Large-scale agricultural production consumes considerable energy and water resources, poisons waterways, and emits toxic air particles. Processing animal food products and distributing them to far-flung locales contributes to carbon emissions and, consequently, climate change. By purchasing food from industrial polluters, the federal government underwrites the costs of this environmental degradation.

To address both the environmental havoc industrial agriculture wreaks and the misguided use of federal funds, food justice organizations should challenge existing federal food-procurement practices. Forcing the USDA to comply with NEPA's EIS requirement would be an important first step to help transform the broken agricultural system and protect the health of our most valuable national resource—future generations.

181. *Id.*

182. *Id.*; see also EXPLANATORY NOTES, *supra* note 16, at 32-63–32-65 (listing the agricultural products that USDA purchased in 2015).

183. See EXPLANATORY NOTES, *supra* note 16, at 32-63–32-65 (listing the USDA's expenditures on individual animal agriculture products in 2015).

DON'T DRINK THE WATER: WHY THE SAFE DRINKING WATER ACT FAILED FLINT

Moriah Schmidt*

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INTRODUCTION

You wash your hands in it. You bathe your children in it. You make them mac ‘n’ cheese and chicken soup with it. You pour yourself a tall, cold glass of it. Water.

Quite possibly, you, like many other Americans, wake up every day and turn on your faucet or showerhead without considering whether the

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water pouring into your life, which you have worked and paid for, is safe. Imagine if the water you relied on to nourish yourself and your children suddenly became toxic, poisoning your children, without your knowledge.¹ The International Covenant of Economic, Social, and Cultural Rights recognizes water as necessary for our existence.² However, the recent lead-contaminated drinking water crisis in Flint, Michigan, demonstrated how even a necessity such as safe drinking water may become a commodity.³

This Note addresses in three parts how the Flint Water Crisis revealed inadequacies in current regulations under the Safe Drinking Water Act. Part I discusses the evolution of safe drinking water regulations and explains how standards are set and regulated under the Safe Drinking Water Act (SDWA) and the Lead and Copper Rule (LCR). Part II explains the roles of the Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ) in overseeing these rules in Flint. Part III will suggest actions to rebuild Flint and prevent similar crises from occurring elsewhere.

I. THE PURPOSE OF THE SAFE DRINKING WATER ACT

In the idyllic-sounding township of Toms River, New Jersey, the last twenty years have been filled with pain, heartache, and anger.⁴ The citizens of Toms River experienced a cancer cluster with many local children developing neuroblastoma.⁵ They soon discovered that a chemical company

1. See generally Molly Rauch, *When Your Water Poisons Your Children*, GOOD HOUSEKEEPING (Feb. 15, 2016), <http://www.goodhousekeeping.com/life/parenting/a36741/mothers-of-flint-michigan-contaminated-water/> [https://perma.cc/4YZE-FP2J] (depicting the story of a mother who was unaware her home's water was poisoning her and her family).

2. International Covenant on Economic, Social, and Cultural Rights, art. 11, Jan. 3, 1976, (showing that the United States has signed but not ratified the ICESCR); U.N. Economic and Social Council (ECOSOC), U.N. Committee on Economic, Social, and Cultural Rights (CESCR), General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant), (Jan. 20, 2003); see also *Status of Ratifications of ICESCR Interactive Dashboard*, OFFICE OF THE HIGH COMMISSIONER, UNITED NATIONS HUMAN RIGHTS, <http://indicators.ohchr.org/> [https://perma.cc/V7BC-P2FN] (last visited Mar. 16, 2018) (illustrating that the United States is active in applying those rights within its sovereign powers).

3. See generally Monica Davey & Mitch Smith, *What Went Wrong in Flint*, N.Y. TIMES (Mar. 3, 2016), <http://www.nytimes.com/interactive/2016/03/04/us/04flint-mistakes.html> [https://perma.cc/5ET7-J2EH] (discussing that the State gave Flint an emergency loan with conditions, one of which was continuing to use Flint River water).

4. MaryAnn Spoto, *Toms River Cancer Cluster Still a Mystery Despite 20 Years of Studies*, NJ.COM (Feb. 6, 2015, 12:59 PM), http://www.nj.com/ocean/index.ssf/2015/02/after_decades_of_studies_toms_river_residents_no_c.html [https://perma.cc/ZPC3-UTEU] (discussing the status of the Toms River community 20 years after the discovery of dangerous chemicals in the community's water and environment).

5. *Id.*

had secretly been dumping hazardous wastes into the river.⁶ The township still does not have answers as to how this could occur.⁷

Equally ravaging was the crisis in another seemingly idyllic town, Love Canal, situated near Niagara Falls.⁸ Citizens learned that the town built a local school where Hooker Medical Company had previously dumped chemical waste in the 1950s.⁹ Outbreaks of leukemia and other cancers, rises in miscarriages, and other health defects led to evacuations in 1978 and finally a declared health emergency in 1980.¹⁰ The public was rightfully upset at the slow reaction of the government in the face of a dire health emergency.¹¹ Love Canal sparked nationwide concern for ensuring safety from the wastes of this rapidly changing world.¹²

Welcome to the 21st century, where technological advances would lead one to think safe drinking water in the United States was a given.¹³ Flint, Michigan—a once-promising city near Detroit—would find that the mistakes of yesterday were too soon forgotten.¹⁴ The citizens of Flint brought the water crisis to the attention of the nation after they realized their water was poisoning them.¹⁵ After the City switched to a less expensive source for supplying public water needs, citizens noticed that the water was a rusty color and that it smelled.¹⁶ They were often told that the

6. *Id.* See generally DAN FAGIN, TOMS RIVER: A STORY OF SCIENCE AND SALVATION (2013) (telling the story, facts, circumstances, and response to the industrial pollution in Toms River that caused a neuroblastoma outbreak and other health epidemics).

7. Spoto, *supra* note 4 (recounting affected persons' confusion and anger at the lack of definitive answers as to the cause of their children's cancer).

8. See generally LOIS MARIE GIBBS, LOVE CANAL AND THE BIRTH OF THE ENVIRONMENTAL HEALTH MOVEMENT (Island Press 2011) (1998) (describing the impacts of the pollution in Love Canal).

9. *Id.* at 22 (discussing Hooker's admission to dumping chemicals).

10. *Id.* (demonstrating the dangerous effect of manmade pollutions and the need for quick response).

11. *Id.* (noting the government's slow response to the warning signs and public outcry).

12. *Id.* at 19–20.

13. See generally *Examples of Innovation in the Water Sector*, U.S. ENVTL. PROTECTION AGENCY, <https://www.epa.gov/water-innovation-tech/examples-innovation-water-sector> [<https://perma.cc/CBD7-B7GF>] (last updated Dec. 18, 2017) (referencing the progress that has been made in ensuring water resources are protected throughout the United States through recent innovations).

14. See generally Julie Bosman & Monica Davey, *Anger in Michigan over Appointing Emergency Managers*, N.Y. TIMES (Jan. 22, 2016), <http://www.nytimes.com/2016/01/23/us/anger-in-michigan-over-appointing-emergency-managers.html> [<https://perma.cc/W6RU-XUBL>] (explaining the community of Flint's opinion that emergency managers were more concerned with finances than public health).

15. Davey & Smith, *supra* note 3.

16. Brie D. Sherwin, *Pride and Prejudice and Administrative Zombies: How Economic Woes, Outdated Environmental Regulations, and State Exceptionalism Failed Flint, Michigan*, 88 COLO. L. REV. 653, 666 (2017).

water was safe, or were merely advised to boil the water before use.¹⁷ After almost two years of this, a doctor and researchers finally convinced officials that there was something bigger going on than normal effects of switching to a new water source.¹⁸ They made a disastrous diagnosis: lead poisoning.¹⁹ The slow discovery and remediation prompted some to believe that Flint is an example of environmental injustice because of the racial and economic status of the community.²⁰

Until Congress passed the SDWA, “the only enforceable federal standards for drinking water were directed at communicable waterborne diseases” under the Public Health Service Act of 1962.²¹ “Congress passed the [SDWA] in response to increasing indications of a serious threat to health from contaminants in . . . drinking water not related to communicable disease.”²² Thus, the focus of drinking water safety has shifted from a focus on waterborne diseases to controlling toxins in a world that is constantly finding new chemicals, new combinations, and new risks.²³

A. Overview of the Safe Drinking Water Act

The SDWA, codified at 42 U.S.C. §§ 300f–300j, is the primary federal law that protects drinking water from pollutants and contaminants.²⁴ Enacted in 1974, with key amendments in 1996, the SDWA includes mechanisms of regulations, funding for projects and improvements, and protection of underground sources.²⁵ Section 300g–1 gives the EPA the power to set national standards for drinking water to protect the public health and reduce or eliminate contaminants found in public water

17. Merrit Kennedy, *Lead-Laced Water in Flint: A Step-by-Step Look at the Makings of a Crisis*, NPR (Apr. 20, 2016, 6:39 PM), <http://www.npr.org/sections/thetwo-way/2016/04/20/465545378/lead-laced-water-in-flint-a-step-by-step-look-at-the-makings-of-a-crisis> [<https://perma.cc/N5QD-QC6H>].

18. *See generally id.* (discussing the important dates of the Flint Water Crisis and when the government got involved).

19. Sara Ganim & Linh Tran, *How Tap Water Became Toxic in Flint, Michigan*, CNN (Jan. 13, 2016, 10:53 AM), <http://www.cnn.com/2016/01/11/health/toxic-tap-water-flint-michigan> [<https://perma.cc/M2ED-2C67>].

20. Catherine Millas Kaiman, *Environmental Justice and Community-Based Reparations*, 39 SEATTLE U. L. REV. 1327, 1328, 1367–68 (2016).

21. JEROME G. ROSE, LEGAL FOUNDATIONS OF ENVIRONMENTAL PLANNING 411 (2013).

22. *Id.*

23. WILLIAM H. RODGERS, JR. & ELIZABETH BURLESON, RODGERS' ENVIRONMENTAL LAW, § 4:20 (2017).

24. MARY TIEMANN, CONG. RESEARCH SERV., RL34201, SAFE DRINKING WATER ACT (SDWA): SELECTED REGULATORY AND LEGISLATIVE ISSUES 1 (2008).

25. *Id.*

systems.²⁶ Section 300g-2 gives states the power to regulate and enforce regulations of the SDWA.²⁷ The EPA oversees compliance monitoring through Public Water System Supervision (PWSS) and Underground Injection Control.²⁸ Through PWSS programs, states have the authority to direct primary implementation and enforcement of the SDWA.²⁹ State drinking water standards need to be at least as stringent as the federal standards.³⁰ Michigan's Safe Drinking Water Act authorizes the MDEQ to enforce drinking water quality standards and to make capacity assessments and evaluations.³¹

B. Setting Standards

The Michigan SDWA adopted the federal standards for maximum contaminant levels in drinking water.³² The EPA sets these standards through a three-step process.³³ First, the EPA identifies contaminants that exist in public water at levels that threaten or already harm the public's health.³⁴ Second, the EPA determines the maximum contaminant level goal (MCLG) at a level below what is expected to harm public health, which allows a margin of safety.³⁵ Finally, the EPA specifies enforceable maximum contaminant standards for each contaminant in a public drinking water system in the form of maximum contaminant levels (MCL).³⁶ The MCL "must be set as close to the [goal] as is 'feasible' [assuming] the best technology or other means available, [but] taking costs into consideration."³⁷ Feasible means "the level that can be reached by large, regional drinking water systems applying best available treatment technology."³⁸

26. 42 U.S.C. § 300g-1(b)(1)(A) (2012); OFFICE OF WATER, U.S. ENVTL. PROT. AGENCY, EPA 816-F-04-030, UNDERSTANDING THE SAFE DRINKING WATER ACT 2 (2004), <https://www.epa.gov/sites/production/files/2015-04/documents/epa816f04030.pdf> [<https://perma.cc/H3X3-ZAVE>] [hereinafter UNDERSTANDING THE SAFE DRINKING WATER ACT].

27. 42 U.S.C. § 300g-2(a).

28. TIEMANN, *supra* note 24, at 1.

29. MARY TIEMANN, CONG. RESEARCH SERV., RL31243, SAFE DRINKING WATER ACT (SDWA): A SUMMARY OF THE ACT AND ITS MAJOR REQUIREMENTS 4 (2008).

30. *Id.*

31. MICH. COMP. LAWS § 325.1003b (2017).

32. MICH. COMP. LAWS § 325.1006.

33. UNDERSTANDING THE SAFE DRINKING WATER ACT, *supra* note 26, at 3.

34. *Id.*

35. *Id.*; see also TIEMANN, *supra* note 24, at 6.

36. UNDERSTANDING THE SAFE DRINKING WATER ACT, *supra* note 26, at 3.

37. TIEMANN, *supra* note 24, at 7.

38. 42 U.S.C. § 300g-1(b)(4)(D) (2012); TIEMANN, *supra* note 24, at 6-7.

The Administrator may forgo the requirement of setting a MCL if it is not “economically and technologically feasible” to determine the appropriate amount of a particular contaminant in a public water system.³⁹ In these situations, the agency may proscribe a treatment technique that the Administrator knows will satisfactorily reduce the level of the contaminant.⁴⁰ The alternative standard or form of treatment must still minimize the overall health risk; but, it does not need to conform to what would be the preferred level of that contaminant.⁴¹ The EPA is required to make an executive decision about whether bringing a pollutant or contaminant into the determined safe zone is worth the cost.⁴² The EPA achieves this by balancing the benefits that would result from reducing the levels of the pollutant in the water system with the overall costs.⁴³ The Agency must then publish its findings as a proposed regulation and allow a notice and comment period before publication of the final rule.⁴⁴

Once a level is set, the EPA can grant variances and exemptions.⁴⁵ The Michigan SDWA limits the variances to two situations: (1) when the “supplier of water demonstrates that the characteristics of the raw water source . . . do not permit the public water supply to meet the [MCL] . . . [when] taking costs into consideration,” so long as the variance will not result in an unreasonable health risk, or (2) “a specific treatment technique is not necessary to protect the health of persons served by the public water supply.”⁴⁶ Variances can effectively abolish water quality standards and grant what comes to be a “perpetual exemption” by not requiring a specific time for compliance.⁴⁷ As noted in 42 U.S.C. § 300g-5(a)(1), a community that is struggling financially has a greater chance of being granted a variance, which leads to a greater risk of compromised drinking water.⁴⁸ This information is necessary to understand the background of the Flint

39. 42 U.S.C. § 300f(1)(C)(ii).

40. *Id.*

41. 42 U.S.C. § 300f(1)(C); TIEMANN, *supra* note 29, at 3 (stating that water systems “generally are required to comply only with regulations for contaminants that pose immediate health risks”).

42. 42 U.S.C. § 300g-1(b)(3)(C)(i).

43. TIEMANN, *supra* note 29, at 6.

44. A Guide to the Rulemaking Process, FEDERAL REGISTER, https://www.federalregister.gov/uploads/2011/01/the_rulemaking_process.pdf [<https://perma.cc/Z57Q-R4KZ>] (last visited Mar. 16, 2018).

45. MICH. ADMIN. CODE r. 325.10304 (2017).

46. *Id.*

47. RODGERS & BURLESON, *supra* note 23, at § 4:20.

48. 42 U.S.C. § 300g-5(a)(1).

Water Crisis, but there is no evidence that the Flint water system had been granted any variances or exemptions from any aspects of the SDWA.⁴⁹

C. The Switch in Flint: Violations of the SDWA and LCR

Flint's experience with violations of the SDWA began in 2013.⁵⁰ The Flint Emergency Manager, the State Treasurer, the City Council, and the MDEQ concluded that the best option for Flint's water needs was to build a new pipeline with the Karegnondi Water Authority (KWA).⁵¹ The KWA claimed the new pipeline would save \$2 million over the 25 years after completion, and, after 25 years, water costs would be 25% less than the source from which Flint had been purchasing water.⁵² While the new pipeline was being built, the City officials decided to use old pipes from the Flint water treatment plant.⁵³ Flint River, the primary source of water in Flint until the 1960s, had been prepared as an emergency, back-up water supply for Flint in 2007.⁵⁴ The only upkeep was government-mandated water softening four times a year.⁵⁵ The MDEQ warned against using the Flint River as an interim water source due to "increased microbial risks to public health," an "increased risk of disinfection by-product (carcinogen) exposure to public health," and "additional regulatory requirements under the Michigan Safe Drinking Water Act."⁵⁶ Nevertheless, in April 2013, the

49. OFFICE OF DRINKING WATER & MUN. ASSISTANCE, MICH. DEP'T OF ENVTL. QUALITY, 2014 ANNUAL REPORT ON MICHIGAN PUBLIC WATER SYSTEM VIOLATIONS 5 (2015).

50. FLINT WATER ADVISORY TASK FORCE, FINAL REPORT 16 (2016) (providing background of the Flint Water Crisis) [hereinafter TASK FORCE FINAL REPORT].

51. See generally John Bebow, *A Flawed Idea*, in POISON ON TAP 25, 27 (Bob Campbell ed., 2016) (stating how multiple people weighed in on the decision to switch to the new pipeline); Ron Fonger, *Genesee County Starts on Design of Lake Huron Water Pipeline Intake*, MLIVE (Mar. 23, 2012, 8:51 AM), http://www.mlive.com/news/flint/index.ssf/2012/03/genesee_county_starts_on_desig.html [<https://perma.cc/2SRE-TMEE>]; Letter from Andy Dillon, State Treasurer, Dep't of Treasury, to Edward Kurtz, Flint Emergency Manager (Apr. 11, 2013) <https://assets.documentcloud.org/documents/2696669/2013-04-11-Michigan-Ltr-Flint-Kwa-Approval.pdf> [<https://perma.cc/ZGL9-6FHG>].

52. See generally Bebow, *supra* note 51, at 27 (describing the annual amount Flint would save by switching water sources); Fonger, *supra* note 51 (providing estimates for cost savings).

53. Bebow, *supra* note 51, at 30.

54. See John Floren, *Get Ready for a Nice Gulp of Flint River Water*, MLIVE (Dec. 20, 2007, 11:02 AM), http://blog.mlive.com/flintjournal/newsnow/2007/12/get_ready_for_a_nice_gulp_of_f.html [<https://perma.cc/88GF-BA82>] (discussing the procedures in 2007 to make the Flint River a valid back-up source).

55. Dominic Adams, *Flint River Now an Option for Drinking Water Following Detroit's Termination of Contract*, MLIVE, (July 23, 2013, 5:29 PM), http://www.mlive.com/news/flint/index.ssf/2013/07/city_readying_water_plant_to_t.html [<https://perma.cc/J5VX-U2ES>].

56. TASK FORCE FINAL REPORT, *supra* note 50, at 27 n.34.

City announced that it would switch to the Flint Water Plant.⁵⁷ In April 2014, after a delay due to a disinfectant system malfunction, the City made the switch.⁵⁸

Immediately, citizens of Flint began noticing that the water was odorous and rust-colored.⁵⁹ When Flint switched to the KWA, the MDEQ decided that corrosion control would not be required immediately.⁶⁰ Instead, Flint was told to complete two six-month monitoring periods, which would be followed by a decision about whether corrosion control was necessary.⁶¹ This decision was an incorrect interpretation of the Lead and Copper Rule, which will be analyzed in the next section.⁶² In July of 2014, the MDEQ began the first six-month testing and monitoring of Flint water.⁶³ Boil advisories were issued after *E. Coli* was found in the water in August and September of 2014.⁶⁴ However, news reports claimed that water from the Flint River met “all Safe Drinking Water Standards.”⁶⁵ In September, the MDEQ requested a preemptive evaluation for disinfection byproducts in the water.⁶⁶ Other issues with the water arose, with a Legionellosis outbreak being linked to the Flint water system, but there were no state-level examinations following the concerns.⁶⁷ In October, General Motors announced that it would no longer use Flint’s water for its engine operations facility due to corrosion concerns stemming from high

57. Adams, *supra* note 55.

58. See Dominic Adams, *Flint Disinfectant System Work Delays Switch to Flint River for Drinking Water*, MLIVE (Apr. 21, 2014, 10:45 AM), http://www.mlive.com/news/flint/index.ssf/2014/04/deq_says_flint_still_needs_to.html [https://perma.cc/FYM9-LD3K] (discussing the delay in resuming water service due to problems with the disinfectant system). See generally John Bebow, *The Short-Lived Toast*, in POISON ON TAP 33, 36 (Bob Campbell ed., 2016) (outlining events during 2014 leading up to the switch in water sources).

59. OFFICE OF INSPECTOR GEN., U.S. ENVTL. PROT. AGENCY, MANAGEMENT ALERT: DRINKING WATER IN FLINT, MICHIGAN DEMONSTRATES A NEED TO CLARIFY EPA AUTHORITY TO ISSUE EMERGENCY ORDERS TO PROTECT THE PUBLIC 1 (2016); see also TASK FORCE FINAL REPORT, *supra* note 50, at 16 (noting complaints about “odor, taste and appearance”).

60. John Bebow, *They Are Basically Getting Blown off by Us*, in POISON ON TAP 77, 83 (Bob Campbell ed., 2016).

61. TASK FORCE FINAL REPORT, *supra* note 50, at 16.

62. See *infra* text accompanying notes 80–95.

63. Bebow, *supra* note 58, at 37.

64. Ron Fonger, *Tests Positive for Total Coliform Again in Water-Boil Area on Flint's West Side*, MLIVE (Jan. 17, 2015, 10:25 AM), http://www.mlive.com/news/flint/index.ssf/2014/08/water_boil_area_in_flint_gets.html [https://perma.cc/TR8W-NUMK] (reporting the discovery of coliform in the tap water).

65. See, e.g., *id.* (reporting that Flint stated that the water did not show signs of dangerous bacteria).

66. TASK FORCE FINAL REPORT, *supra* note 50, at 17.

67. See *id.* at 18 (describing only county-level investigations); see also 40 C.F.R. § 141.71(c) (2017) (defining when a system has violated treatment requirements, which are demonstrated by the outbreak of these illnesses here).

chlorine levels found in the water.⁶⁸ Still, the MDEQ declared that the levels fell within public health guidelines.⁶⁹ This lead contamination implicated the Lead and Copper Rule.

1. The Lead and Copper Rule

The EPA promulgated the LCR to reduce the presence of lead and copper in water by setting the standard for permissible levels at or close to zero because these contaminants are extremely hazardous to human health.⁷⁰ The LCR is found in Title 40, Part 141, subpart I of the Code of Federal Regulations.⁷¹ First promulgated by the EPA in 1991, the LCR required the replacement of entire contaminated Lead Service Lines (LSLs) when monitoring revealed lead above action levels.⁷² The EPA modified the rule to allow for partial service-line replacement after a D.C. Court of Appeals decision found that service lines on private property were not under the control of the public water system.⁷³ Lead exposure is typically addressed with chemical corrosion treatment.⁷⁴ The water industry takes the position that LSLs and plumbing fixtures on private property are the responsibility of the utility customer.⁷⁵ However, consumers are typically unaware of this responsibility.⁷⁶

The LCR applies to community water systems that have “at least fifteen service connections used by year-round residents or regularly serves at least

68. TASK FORCE FINAL REPORT, *supra* note 50, at 17.

69. *Id.*

70. OFFICE OF WATER, ENVTL. PROT. AGENCY, EPA 816-R-08-009, LEAD AND COPPER RULE: 2007 SHORT-TERM REGULATORY REVISIONS & CLARIFICATIONS STATE IMPLEMENTATION GUIDANCE 1 (2008).

71. 40 C.F.R. § 141.80.

72. TASK FORCE FINAL REPORT, *supra* note 50, at 4 n.5; OFFICE OF WATER, ENVTL. PROT. AGENCY, EPA 816-R-06-001, LEAD AND COPPER RULE STATE FILE REVIEW: NATIONAL REPORT 1 (2006); *Drinking Water Requirements for States and Public Water Systems: Lead and Copper Rule*, ENVTL. PROTECTION AGENCY, <https://www.epa.gov/dwreginfo/lead-and-copper-rule#rule-history> [<https://perma.cc/5M67-9XAH>] (last updated Mar. 15, 2017).

73. *Am. Water Works Ass’n v. EPA*, 40 F.3d 1266, 1275 (D.C. Cir. 1994). *Contra* TASK FORCE FINAL REPORT, *supra* note 50, at 4 n.5 (showing that some reports indicate that partial service line replacement has caused increased blood lead levels in some areas).

74. OFFICE OF WATER, ENVTL. PROT. AGENCY, EPA 816-B-16-003, OPTIMAL CORROSION CONTROL TREATMENT EVALUATION TECHNICAL RECOMMENDATIONS FOR PRIMACY AGENCIES AND PUBLIC WATER SYSTEMS 22–23 (2016).

75. TASK FORCE FINAL REPORT, *supra* note 50, at 4 n.5; *see also* MICH. ADMIN. CODE r. 325.10604f(5)(c) (2017) (defining the requirements that apply to private lines).

76. *See infra* Part III.A (“Section 300g–3 of the SDWA requires that public water systems notify their customers if the system *fails in any way to comply* with: a maximum contaminant level or treatment technique, a national primary drinking water regulation, a testing procedure, or a monitoring requirement.”).

25 year-round residents.⁷⁷ Instead of setting a MCL, the rule established an “action level” for lead, which is exceeded when lead reaches 15 parts per billion in more than ten percent of the tested water samples.⁷⁸ The Flint Water Task Force and other sources have stated that the City of Flint should have implemented corrosion control immediately under the LCR.⁷⁹ However, the LCR’s arguably ambiguous requirements have resulted in inconsistent interpretations.

Section 141.81(a) states that water “systems should complete corrosion control treatments described in § 141.82,” which refers to the LCR’s initial corrosion-control requirements.⁸⁰ This exempts systems that have optimized corrosion control in one of the situations given in § 141.81(b).⁸¹ The language of § 141.86(1) could have caused the MDEQ to believe that a system does not need corrosion control until after two six-month monitoring periods.⁸² However, this optimization pertains to systems that have been functioning with corrosion control already and are stable enough to be considered safe from routinely high lead levels.⁸³ The EPA has stated that all large systems serving over 50,000 houses are required to complete corrosion control treatment steps, unless the system has optimized corrosion control.⁸⁴

The Detroit Water and Sewerage Department (DWSD) provided Flint with water until the switch to Flint River.⁸⁵ The DWSD was optimized for corrosion control for over 20 years and would have been on a cycle of reduced monitoring.⁸⁶ Flint changed to a completely new water source, or

77. 40 C.F.R. § 141.2 (2017) (defining community water systems).

78. 40 C.F.R. § 141.80(c); see also James W. Moeller, *Legal Issues Associated with Safe Drinking Water in Washington, D.C.*, 31 WM. & MARY ENVTL. L. & POL’Y REV. 661, 675 (2007) (explaining the action level established by the LCR).

79. TASK FORCE FINAL REPORT, *supra* note 50, at 50; John Bebow, ‘Wow! Did He Find the Lead!’, in POISON ON TAP 55, 59 (Bob Campbell ed., 2016).

80. 40 C.F.R. § 141.81(a).

81. *Id.* at § 141.81(a)(2).

82. *Id.* at § 141.81(b)(1) (“[A] small or medium-size system is deemed to have optimized corrosion control” and is not required to complete the applicable corrosion-control treatment steps “if the system meets the lead and copper action levels during each of two consecutive six-month monitoring periods conducted in accordance with § 141.86.”).

83. *Id.* at § 141.81(b)(2).

84. John Bebow, *What Flows from Flint: An Introduction to this Book*, in POISON ON TAP 1, 5 (Bob Campbell ed., 2016) (stating that Flint has almost 100,000 residents); Leira Lew, *Flint Water Crisis Estimated to Affect 45,000 Homes*, CHIMES CALVIN C. (Oct. 25, 2015), <https://calvinchimes.org/2015/10/25/flint-water-crisis-estimated-to-affect-45000-homes/> [https://perma.cc/65LJ-FMWJ]; ENVTL. PROT. AGENCY, IN THE MATTER OF CITY OF FLINT, MICHIGAN, EMERGENCY ADMINISTRATIVE ORDER 7 (2016) [hereinafter EMERGENCY ADMINISTRATIVE ORDER].

85. *Flint Water Crisis Fast Facts*, CNN, (Nov. 28, 2017, 9:48 AM), <http://www.cnn.com/2016/03/04/us/flint-water-crisis-fast-facts/index.html> [https://perma.cc/N8DY-4JA3].

86. TASK FORCE FINAL REPORT, *supra* note 50, at 16.

rather an old one, which had not been used for years.⁸⁷ Thus, the optimization of DWSD should have indicated that the Flint River also required corrosion control.

Even so, the Michigan Administrative Code is similarly ambiguous about when corrosion control should begin, stating:

These rules establish a treatment technique that includes requirements for corrosion control treatment, source water treatment, lead service line replacement, and public education. These requirements are triggered, *in some cases*, by lead and copper action levels measured in samples that are collected at consumers' taps.⁸⁸

The next section of the Administrative Code states that lead action levels are exceeded “if the ninetieth percentile lead level is more than 0.015 milligrams per liter (mg/l) in tap water samples collected during a monitoring period.”⁸⁹ This could have led the MDEQ to believe that they did not have to implement corrosion-control treatment until monitoring was complete. The EPA disagreed.⁹⁰ A memo from Marc Edwards, a Virginia Tech professor and water expert investigating the issue, stated in September 2015:

Effective July 1998, the federal Lead and Copper Rule (LCR) has required that all large public water systems maintain a program to control levels of lead in drinking water from corrosion. Moreover, the law also requires the City of Flint to have a state-approved plan, with enforceable regulatory limits for “Water Quality Parameters” including pH, alkalinity and/or corrosion inhibitor dose measured in the water distribution system. MDEQ never required Flint to have a corrosion control program, nor did it set water quality parameters for the new Flint River source water.⁹¹

In December 2014, the first six-month round of monitoring under the LCR was finished in Flint, revealing violations in some homes even higher

87. See Floren, *supra* note 54 (discussing how the Flint Water Plant was producing water for the first time in more than 40 years).

88. MICH. ADMIN. CODE r. 325.10604f(1)(b) (2017) (emphasis added).

89. *Id.* at 325.10604f(1)(c).

90. See EMERGENCY ADMINISTRATIVE ORDER, *supra* note 84, at 3–4 (explaining the disagreement between the MDEQ and the EPA).

91. Bebow, *supra* note 79, at 59.

than action levels at 15 parts per billion.⁹² The MDEQ did not properly inform Flint of this regulation.⁹³ The MDEQ did not tell the EPA that there were no corrosion controls in place until April of 2015, and by that time many Flint residents had been affected by lead poisoning.⁹⁴ Further questions arose concerning the manner that the MDEQ acquired samples for lead monitoring.⁹⁵

2. Collecting Samples

Michigan's Administrative Code delineates how Michigan water systems should collect samples during lead and copper monitoring.⁹⁶ A water system serving a city of Flint's size requires at least 100 samples from sites that meet the requirements listed under § 325.10710a(c), namely, homes that contain lead pipes or copper pipes soldered with lead or homes with lead service lines.⁹⁷ Some reports stated that the head of the MDEQ removed samples that violated federal regulations from its initial report.⁹⁸ These samples would have shown that the lead in the water exceeded federally mandated levels; removing them enabled the test to appear to meet the requirements.⁹⁹ The MDEQ explained that only 60 samples were acquired in the second six-month sampling period because the number of houses served by the water system was less than 100,000.¹⁰⁰ As such, 100 samples were not required by law.¹⁰¹ Other information indicates that systems were pre-flushed the night before collection of compliance samples, which clears particulate lead out of plumbing and eliminates the highest lead values.¹⁰² Flint failed to adequately monitor the new water supply's lead levels, even though the law required it, and failed to implement the mandated corrosion controls.¹⁰³

92. TASK FORCE FINAL REPORT, *supra* note 50, at 18.

93. *Id.*

94. *Id.* at 95.

95. *Id.* at 97.

96. MICH. ADMIN. CODE r. 325.10710(a) (2017).

97. *Id.* at 325.10710a(c).

98. TASK FORCE FINAL REPORT, *supra* note 50, at 99.

99. Kennedy, *supra* note 17.

100. TASK FORCE FINAL REPORT, *supra* note 50, at 18.

101. Bebow, *supra* note 60, at 83.

102. See Bebow, *supra* note 79, at 61 (referencing an email from Miguel Del Toral, the EPA Region 5 Ground Water and Drinking Water Regulations Manager, to an engineer in the MDEQ Community Water Supply Program and the Michigan program manager for the EPA Region 5 Ground Water and Drinking Water office describing the process of pre-flushing lead service lines).

103. TASK FORCE FINAL REPORT, *supra* note 50, at 28.

II. ENFORCEMENT UNDER THE SAFE DRINKING WATER ACT

The SDWA gives states the power to regulate and enforce provisions of the Clean Water Act and the SDWA.¹⁰⁴ The SDWA provides an opportunity for the federal government to step in and enforce the Act when a state is not following the law.¹⁰⁵ The Flint Water Crisis serves as a reminder to the EPA of the emergency actions it can take when a state does not adequately protect the public health.¹⁰⁶

A. State Primacy

The EPA may designate Public Water System Supervision (PWSS) programs to the states, giving them primary enforcement responsibility of the SDWA.¹⁰⁷ In Michigan, the MDEQ has primary enforcement responsibility, or “primacy.”¹⁰⁸ A state has primary enforcement responsibility as long as it meets certain requirements such as adopting drinking water regulations at least as strict as the national regulations, implementing procedures for monitoring and enforcing the regulations, and having a suitable emergency plan.¹⁰⁹ If the state fails to fulfill a requirement, then the Administrator would have the authority to step in and enforce a requirement under the EPA’s emergency power.¹¹⁰ Only as a last resort would the EPA withdraw primacy from states that are not following these standards.¹¹¹

The EPA should negotiate with a state and give it an opportunity to take corrective action before formally withdrawing primacy.¹¹² Even when the EPA has determined that the state is not compliant, the EPA must first provide notice and a public hearing before the withdrawal.¹¹³ When the

104. UNDERSTANDING THE SAFE DRINKING WATER ACT, *supra* note 26, at 2.

105. OFFICE OF INSPECTOR GEN., *supra* note 59, at 6.

106. See Nancy Derringer, *Felony Charges Filed Against Three with a Promise of More to Come*, in POISON ON TAP 277, 279 (Bob Campbell ed., 2016) (describing that the emergency plan had disastrous results that the EPA should remember when dealing with similar situations).

107. *Primacy Enforcement Responsibility for Public Water Systems*, ENVTL. PROTECTION AGENCY, (last updated Nov. 2, 2016) <https://www.epa.gov/dwreginfo/primacy-enforcement-responsibility-public-water-systems> [<https://perma.cc/M3P5-7QSA>].

108. UNDERSTANDING THE SAFE DRINKING WATER ACT, *supra* note 26, at 2 (“All states and territories, except Wyoming and the District of Columbia, have received primacy.”).

109. 42 U.S.C. § 300g-2(a) (2012).

110. See *infra* Part II.B (“The Administrator can take action to protect the health of the public . . .”).

111. 40 C.F.R. § 142.17 (2017).

112. Nat’l Wildlife Fed’n v. Env’tl. Prot. Agency, 980 F.2d 765, 771 (D.C. Cir. 1992).

113. *Id.*

EPA chooses not to withdraw primacy in a given situation, it can enforce a provision of the Act or issue emergency orders requiring specific action.¹¹⁴

B. Federal Emergency Authority

After receiving the test results, the MDEQ failed to inform the City of the corrosion-control requirement and failed to notify the EPA of the lacking corrosion control.¹¹⁵ The EPA finally questioned the MDEQ's compliance with the LCR and pushed for optimized corrosion control in Flint.¹¹⁶ When the MDEQ failed to comply, the EPA waited several months to respond.¹¹⁷ The EPA finally stated that the MDEQ should have implemented optimized corrosion control when it switched to the new water source.¹¹⁸ One of the many cases filed against public officials in Flint stated that "residents of Flint ha[d] been exposed to high levels of lead in their water" for two years, and many Flint children had elevated levels of lead in their blood, some double and triple what they had been before the switch to the new water source.¹¹⁹ The plaintiffs, citizens of Flint, petitioned the EPA for an emergency order under the SDWA in October of 2015.¹²⁰ Finally, on January 21, 2016, an Emergency Administrative Order recommended citizens not to drink the water in Flint.¹²¹ The order directed:

Flint and the State of Michigan [should] take certain steps to begin to address the crisis, including providing certain information to the public on a website and to the EPA, planning for optimization of water treatment to control corrosion, and retaining personnel qualified to ensure compliance with the SDWA's requirements. The purpose of the EPA Order was to "make sure" that the defendants take "actions to protect public health ... immediately."¹²²

114. 42 U.S.C. § 300i(a).

115. TASK FORCE FINAL REPORT, *supra* note 50, at 8–9.

116. *Id.* at 9; Bebow, *supra* note 60, at 83.

117. TASK FORCE FINAL REPORT, *supra* note 50, at app. V. See generally John Bebow, 'Running Out of Ideas,' in POISON ON TAP 62, 62–69 (Bob Campbell ed., 2016) (describing, through a timeline, what occurred between the MDEQ failing to comply and the EPA taking action).

118. John Bebow, *Cleanup and Probes Begin*, in POISON ON TAP 147, 148 (Bob Campbell ed., 2016).

119. Concerned Pastors for Soc. Action v. Khouri, 194 F. Supp. 3d 589, 594 (D. Mich. 2016) (quoting EMERGENCY ADMINISTRATIVE ORDER, *supra* note 84, at 1).

120. *Id.* at 595.

121. *Id.*

122. *Id.*

Since the switch to the Flint pipelines in 2014, the MDEQ unjustifiably delayed its response to the lead presence and the need for corrosion treatment.¹²³ The MDEQ failed to meet primacy enforcement standards by failing to conduct proper monitoring and inspections as required by the LCR.¹²⁴ EPA Region 5, the local branch of the EPA, should have reacted more quickly to enforce the LCR by at least implementing corrosion control and providing alternative water.¹²⁵ It instead stated that the State's (albeit minimal) actions were a jurisdictional bar preventing the EPA from acting.¹²⁶ This was not an accurate statement of law. The Administrator can take action to protect the health of the public when she receives information that there is a contaminant in the water that (1) "may present an imminent and substantial endangerment to the health of persons, [and when (2)] appropriate state and local authorities have not acted to protect the health of such persons."¹²⁷

The Administrator can then take steps "as [s]he may deem necessary in order to protect the health of such persons."¹²⁸ Suggested actions include: (1) issuing public advisory warnings to protect the health of anyone using a non-complying public water system or (2) using a civil action such as a permanent or temporary injunction against the water system.¹²⁹

The Administrator can also take action in a non-emergency situation, but must first engage in a compliance dialogue with the state and public water system, giving advice on how the state could "bring the system into compliance with the requirement by the earliest feasible time."¹³⁰ If the state fails to act within 30 days of the Administrator's notification, the Administrator must issue an order requiring the public water system to comply with the requirement or face civil action by the Administrator.¹³¹ The order must state the nature of the violation with "reasonable specificity."¹³² Failing to comply with an order can result in a penalty of up to \$25,000 a day.¹³³

123. See generally *Bebow*, *supra* note 58, at 33–36 (describing, through a timeline, how Flint officials knew of the water issue yet did not take immediate action).

124. TASK FORCE FINAL REPORT, *supra* note 50, at 52.

125. OFFICE OF INSPECTOR GEN., *supra* note 59, at 1.

126. *Id.*; 42 U.S.C. § 300i(a) (2012).

127. 42 U.S.C. § 300i(a).

128. *Id.*

129. *Id.*

130. 42 U.S.C. § 300g–3(a)(1)(A)(ii); see also 42 U.S.C. § 300g–3(g)(2) (stating that the Administrator must provide "the State with an opportunity to confer with the Administrator" before the order takes effect).

131. 42 U.S.C. § 300g–3(a)(1)(B).

132. 42 U.S.C. § 300g–3(g)(2).

133. 42 U.S.C. § 300g–3(g)(3)(A).

The Flint Water Crisis was likely an “imminent and substantial endangerment to the [public] health” justifying the use of federal emergency power.¹³⁴ As soon as Flint switched from the existing water source to the Flint River, contaminants in the water necessitated boil advisories.¹³⁵ Many citizens had side effects; for instance, in the summer of 2014, a local Flint mother realized her children were breaking out with rashes and other ailments that seemed to result from their exposure to the water.¹³⁶ After persistent complaints, city officials finally tested her water and found high levels of lead—104 parts per billion.¹³⁷

The second part of the “imminent and substantial endangerment” test requires that local authorities failed to enforce measures of the SDWA.¹³⁸ In April 2015, the State officially informed the EPA that no corrosion control was in place for the new Flint drinking water system, with at least four homes containing lead above federal action levels.¹³⁹ State and local authorities had not taken affirmative action at this point and had not admitted or disclosed the risk of lead exposure to the public.¹⁴⁰ EPA Region 5 identified lead in Flint water systems in June 2015, but in July, the Flint mayor assured Flint residents that their water was safe to drink, even drinking a glass of Flint water on TV to illustrate his faith in the water.¹⁴¹ General Motors opted out of the Flint system because the water was corroding its manufacturing parts; yet, City authorities continued to advise Flint residents that their water was safe to drink.¹⁴²

The MDEQ and Flint argued that they had up to five years to optimize corrosion control.¹⁴³ This “minimalist” approach is not within the nature and purpose of the SDWA, which aims to protect public health as quickly and effectively as possible.¹⁴⁴ The SDWA cannot effectively protect public health if both the state and the federal agency are not enforcing critical provisions in a timely manner. The EPA should have stepped in and enforced the requirements of the LCR as soon as they became aware that the Flint River pipeline had not been properly treated with corrosion control.

134. 42 U.S.C. § 300i(a).

135. See *supra* text accompanying notes 70–95.

136. Ted Roelofs, *A Tenacious Flint Mom Warned, Rallied a Public*, in *POISON ON TAP* 125, 125 (Bob Campbell ed., 2016).

137. TASK FORCE FINAL REPORT, *supra* note 50, at 18.

138. 42 U.S.C. § 300i(a).

139. OFFICE OF INSPECTOR GEN., *supra* note 59, at 4.

140. *Id.*

141. *Id.* at 5.

142. Derringer, *supra* note 106, at 279.

143. OFFICE OF INSPECTOR GEN., *supra* note 59, at 5.

144. Bebow, *supra* note 60, at 83.

As a takeaway from Flint, EPA Region 5 should oversee lead requirements in Flint and should ensure lead monitoring and corrosion control is sufficient under the LCR.¹⁴⁵ But the MDEQ should enforce the LCR in its entirety.¹⁴⁶ If the MDEQ fails to perform again, the EPA should step in, or in the alternative, the MDEQ could share monitoring with the Department of Health and Human Services to better protect the health of the public.¹⁴⁷ With the help of a tenacious EPA official who believed something was wrong in Flint from the start, EPA Region 5 finally investigated Flint's and the MDEQ's actions therein, including the lack of optimized corrosion-control treatment at the Flint water treatment plant.¹⁴⁸

C. Citizen Suits

Under the SDWA, citizen suits are allowed but usually restricted.¹⁴⁹ In *Mattoon v. City of Pittsfield*, the public water system became contaminated with the *Giardia lamblia* pathogen, causing hundreds of cases of giardiasis after the city switched to an old reservoir to obtain water while city water facilities were undergoing construction.¹⁵⁰ Among other claims, the plaintiffs brought a claim for equitable relief and civil penalties under the SDWA, a public nuisance claim under federal common law, and a § 1983 claim for damages.¹⁵¹ The court held that the SDWA preempted common-law claims and placed the regulation of public water systems in the control of expert regulatory agencies, not the courts.¹⁵²

Citizens can initiate enforcement proceedings against any person who violates any part of the SDWA, including governmental agencies, or against

145. See generally Memorandum from Peter C. Grevatt, Dir., Office of Ground Water & Drinking Water, to EPA Reg'l Water Div. Dirs., Regions I-X (Nov. 3, 2015) (focusing on concerns about the LCR).

146. TASK FORCE FINAL REPORT, *supra* note 50, at 34; JOINT SELECT COMM. ON THE FLINT WATER PUB. HEALTH EMERGENCY, REPORT OF THE JOINT SELECT COMMITTEE ON THE FLINT WATER EMERGENCY 21 (2016).

147. TASK FORCE FINAL REPORT, *supra* note 50, at 6.

148. *Id.* at 18; Roelofs, *supra* note 136, at 127.

149. See generally *Mattoon v. City of Pittsfield*, 980 F.2d 1, 6 (1st Cir. 1992) (discussing how Congress has construed the SDWA's citizen suit provision to only cover "continuous or intermittent violation[s]") (quoting *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc.*, 484 U.S. 49, 64 (1987)).

150. *Id.* at 2.

151. *Id.* at 3; see 42 U.S.C. § 1983 (2012) (granting citizens a right to sue for their alleged deprivation of rights); see Kaiman, *supra* note 20, at 1328 (explaining that citizens in environmental suits may be victims of environmental injustices, especially in instances where minorities are discriminated against, and that the law often lacks adequate remedies).

152. See generally *Mattoon*, 980 F.2d at 5–6 (reasoning that in the absence of congressional intent to "preserve a right of action under section 1983," appellants could not pursue their § 1983 claims).

the Administrator of the EPA for a failure to perform non-discretionary duties under the SDWA.¹⁵³ The courts have held that this exhibits a “clear congressional intent to preempt relief” of claims under § 1983 and federal common-law claims.¹⁵⁴ The court held that the plaintiffs must address an ongoing violation to allege a claim under the SDWA.¹⁵⁵ Standing requires pollutants in the water to be at levels known to cause injury, or higher than MCL levels.¹⁵⁶ This could be too strict to provide relief for injured citizens when erroneous test results show that lead is below MCL levels, as in Flint, or when a variance has been granted to that public water system.¹⁵⁷

Citizens in Flint have brought several lawsuits against the city, governmental authorities, emergency managers, and the EPA, but citizen suits face many challenges.¹⁵⁸ The case of *Boher v. Early* was dismissed in early 2016 for lack of subject-matter jurisdiction because the plaintiffs brought suit under other federal law instead of the SDWA.¹⁵⁹ One scholar recognized the importance of citizen suits, describing their intended purpose as follows:

Congress recognized the many problems with existing enforcement mechanisms and sought to supplement the EPA’s enforcement ability by partially delegating enforcement power to concerned citizens. Congress’ idea was to allow for multiple enforcers of the environmental statutes. Furthermore, Congress hoped that the provision would prompt the government to enforce on its own, while still allowing a citizen redress in federal court in the absence of government enforcement. Congress thought of citizen suits as a way to encourage the meaningful participation of citizens in the

153. *Id.* at 6; 42 U.S.C. § 300j–8(a).

154. *Mattoon*, 980 F.2d at 6.

155. *Id.*

156. *See Emerald Coast Util. Auth. v. 3M Co.*, 746 F. Supp. 2d 1216, 1228, 1232 (N.D. Fla. 2010) (holding in favor of defendant’s argument that there was no injury for standing purposes because chemicals in the water “did not exceed federal or state MCL”).

157. *See RODGERS & BURLESON*, at § 4:20 (discussing the holding in *Emerald Coast* where the court adopted the defendant’s position that because the PFOA and PFOS levels did not exceed MCL levels, plaintiffs had not suffered an injury sufficient for standing).

158. *See generally* Jennifer Chambers, *Hundreds of Flint Lawsuits at Standstill*, DETROIT NEWS (Oct. 17, 2016, 11:59 PM), <http://www.detroitnews.com/story/news/michigan/flint-water-crisis/2016/10/17/hundreds-flint-lawsuits-standstill/92333444/> [https://perma.cc/B27D-JXA5] (discussing the more than 450 civil lawsuits related to the Flint Water Crisis); Teresa Lo, *Flint Class Action Lawsuit Thrown Out by Federal Judge*, JD J. (Feb. 3, 2017), <https://www.jdjournal.com/2017/02/03/flint-class-action-lawsuit-thrown-out-by-federal-judge/> [https://perma.cc/4Z8A-2ZTS] (discussing how a class-action suit was dismissed from federal court based on a finding that the suit would circumvent the procedures of the SDWA).

159. *Boher v. Early*, No. 16-10323, 2016 U.S. LEXIS 51866, at *10 (E.D. Mich. Apr. 19, 2016), *rev’d*, 865 F.3d 391 (6th Cir. 2017).

administrative process, as well as a means to perform a public service, and thus encouraged courts to be receptive to these suits.¹⁶⁰

In order for the SDWA to sufficiently protect the needs and health of citizens, citizen suits should be more accessible. Citizens must first satisfy federal standing requirements, which require them to prove: (1) that they have suffered an “injury in fact”—an injury that is concrete and particularized, actual or imminent, and not speculative; (2) a causal relationship between the injury and the conduct alleged to be harmful; and (3) redressability, which is not speculative.¹⁶¹ The citizens of Flint were forced to drink and use lead-contaminated water for nearly two years before action was taken, which should show that there was an injury in fact.¹⁶² The EPA, the MDEQ, and city officials had a responsibility to take measures to avoid the harm and failed in various ways to do so.¹⁶³ The effects of this are still felt today, and a judge could rule that damages or equitable relief is justified, which satisfies redressability.¹⁶⁴ Therefore, citizen suits brought by Flint residents have the potential of being successful.

There are multiple actions pending against state actors. For example, citizens of Flint are currently pursuing an action against city officials in *Concerned Pastors for Social Action v. Khouri*.¹⁶⁵ The defendants moved to dismiss, alleging that the Eleventh Amendment barred the claims because the plaintiffs could not sue the defendants in their official capacities for retrospective relief without a federal-law violation.¹⁶⁶ However, the court stated that the harm was the leaching of lead pipes into the water system, which would not be remedied until all pipes were replaced due to continuing medical problems and health violations; therefore, it was not retrospective relief.¹⁶⁷ Further, the citizens alleged violations under the LCR

160. Christine L. Rideout, *Where Are All the Citizen Suits?: The Failure of Safe Drinking Water Enforcement in the United States*, 21 HEALTH MATRIX 655, 676 (2011) (citations omitted).

161. *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560–61 (1992).

162. See TASK FORCE FINAL REPORT, *supra* note 50, at 17–18 (providing a timeline of the Flint Water Crisis).

163. Kennedy, *supra* note 17; see OFFICE OF INSPECTOR GEN., *supra* note 59, at 2 (explaining that EPA had “national oversight responsibility for state administration and enforcement of SDWA”).

164. See *generally id.* at 8–9 (recommending next steps to prevent another Flint Water Crisis).

165. *Concerned Pastors for Soc. Action v. Khouri*, 194 F. Supp. 3d 589, 589 (E.D. Mich. 2016).

166. *Id.* at 601.

167. *Id.* at 603.

and other sections of the SDWA, which were federal laws, enabling the citizens to sue the defendants in their official capacities.¹⁶⁸

Under the Clean Water Act, citizen suits enable plaintiffs to obtain monetary compensation and injunctive relief for violations.¹⁶⁹ However, the SDWA does not contain a provision allowing for citizens to pursue civil penalties from defendants,¹⁷⁰ possibly because public water systems are often implicated and would not have the funds to compensate citizens.¹⁷¹ Citizen suits brought by Flint residents under the SDWA may further the process of pipe replacement and force an injunction against continued contamination but will not alleviate residents' monetary needs.¹⁷²

III. PREVENTING REOCCURRENCES

To rebuild Flint and prevent similar avoidable water crises, there must be adequate funding, revised reporting requirements under the LCR, and more accountability for city officials and drinking water systems. Michigan senators and other concerned representatives have introduced several bills suggesting needed updates and improvements to the SDWA and, specifically the LCR, in 2016.¹⁷³ None of these bills have yet to gain traction in the House or the Senate.¹⁷⁴ Laws that recommend lowering lead allowances to five parts per billion have been suggested and could be a

168. See *id.* (reasoning that Eleventh Amendment sovereign immunity does not bar suits alleging violations of federal law).

169. See 33 U.S.C. § 1365 (2012) (discussing the provision in the Clean Water Act that allows for citizen suits and the related section that allows for damages and injunctions).

170. See 42 U.S.C. § 300j-8 (discussing that citizens may not bring civil actions for violations against public water systems).

171. See *Rideout*, *supra* note 160, at 692 (discussing the possibility of congressional intent to exempt public water systems because Congress did not want to bankrupt small municipal governments).

172. See *Concerned Pastors for Soc. Action v. Khouri*, 194 F. Supp. 3d 589, 603–04 (E.D. Mich. 2016) (holding that the remedy plaintiffs sought for replacement of lead pipes and an injunction were proper, yet monetary relief is barred by sovereign immunity); see also *Rideout*, *supra* note 160, at 688 (discussing that greater publicity through citizen suits may lead to much needed improvements in Flint's drinking water). See generally *Boler v. Early*, No. 16-10323, 2016 U.S. Dist. LEXIS 51866, at *4 (E.D. Mich. Apr. 19, 2016), *rev'd on other grounds*, 865 F.3d 391 (6th Cir. 2017) (finding that state-law claims may contain provisions providing for recovery of damages).

173. See, e.g., National Opportunity for Lead Exposure Accountability and Deterrence Act of 2016, H.R. 6311, 114th Cong. (2016) (outlining a proposal to improve transparency under the national primary drinking water regulations for lead and copper); Protecting Families from Lead Act of 2016, H.R. 5110, 114th Cong. (2016) (outlining a proposal to amend the SDWA to lower the action level for lead to 5 parts per billion).

174. See generally H.R. 6311 (114th): *National Opportunity for Lead Exposure Accountability and Deterrence Act of 2016*, GOVTRACK, <https://www.govtrack.us/congress/bills/114/hr6311> [<https://perma.cc/8F8K-FT83>] (last visited Mar. 17, 2018) (outlining the progress and eventual failure of H.R. 6311).

helpful step to prevent dangerous lead levels from being released.¹⁷⁵ Laws should also be passed to revise notice requirements on a federal level. Congress should also ensure that the provisions detailing enforcement of the SDWA, specifically those pertaining to lead, are clear and concise to prevent confusion.¹⁷⁶

A. Revising Notice Requirements

Citizens have a right to be informed of changes and updates in their public water supply systems.¹⁷⁷ The 1996 amendments to the SDWA ensured that citizens would have access to information regarding changes within their water systems.¹⁷⁸ The amendments require state or community water systems to publish “consumer confidence reports” for citizens, informing them of regulated contaminants that were found in the water system.¹⁷⁹ Michigan recently amended its counterpart of this requirement, with the changes coming into effect on March 29, 2017.¹⁸⁰ Until that date, the law stated:

(1) If water delivered by or the operation of a public water supply is found not to be in compliance with the state drinking water standards, the department shall require the supplier of water to notify its users of the extent and nature of the noncompliance. Notification of users shall be in a form and manner prescribed or otherwise approved by the department.

(2) Notification received pursuant to this section or information obtained from the notification may not be used against a person in a litigation, except a prosecution for perjury or for giving a false statement.¹⁸¹

The amended statute now says that notification of users in subsection (1) “*must* be in a form and manner prescribed.”¹⁸² Subsection (2) became

175. H.R. 5110.

176. *Id.* See generally Safe Drinking Water Act Improved Compliance Awareness Act, H.R. 4470, 114th Cong. (2016) (suggesting added improvements that failed to pass).

177. MICH. COMP. LAWS § 325.1014 (2017).

178. See 42 U.S.C. § 300g-3(c)(3)(A)(i) (2012) (outlining requirements of states to provide information regarding violations of national drinking water regulations by the public water system to the public).

179. 42 U.S.C. § 300g-3(c)(4)(A).

180. MICH. COMP. LAWS § 325.1019.

181. MICH. COMP. LAWS § 325.1019 (2004) (amended 2017).

182. MICH. COMP. LAWS § 325.1019 (1) (2017) (emphasis added).

subsection (3) and a new subsection (2) was inserted, devoted specifically to notification of lead violations.¹⁸³

When a test reveals that the water system has violated federal levels of a substance such as lead that “has the potential to have serious adverse effects on human health, the public water system is to give notice to all persons served by the system of the failure to comply with the applicable MCL or treatment or testing requirements or monitoring requirements.”¹⁸⁴ City officials did not notify Flint residents of the possibility of contaminants after switching to a new water supply, other than a brief boil warning with no explanation.¹⁸⁵

In fact, they were told their water was perfectly safe.¹⁸⁶ The plaintiffs in *Concerned Pastors for Social Action v. Khouri* petitioned the EPA for an emergency order in response to the water crisis in October of 2015.¹⁸⁷ It was not until January of 2016 that the EPA issued an emergency order requiring Flint and Michigan to begin addressing the crisis by informing the public, planning optimization of the water to control corrosion, and ensuring qualified personnel oversaw the situation.¹⁸⁸

Section 300g–3 of the SDWA requires that public water systems notify their customers if the system *fails in any way to comply* with: a maximum contaminant level or treatment technique, a national primary drinking water regulation, a testing procedure, or a monitoring requirement.¹⁸⁹ The Administrator of the EPA must take into account the seriousness of the violation and could prescribe notice in certain ways such as publication in prominent newspapers.¹⁹⁰ Not only that, but if it is a violation with “the potential to have serious adverse effects on human health”¹⁹¹—and a violation of a lead requirement almost definitely meets this standard—then notice should be given “no[] later than 24 hours after the occurrence of the violation.”¹⁹² Notice includes “a clear and readily understandable explanation” of the violation, its potential adverse effects, steps taken to

183. *Id.*; see MICH. ADMIN. CODE r. 325.10410 (2017) (proscribing administrative procedures in accordance with Michigan’s amended SDWA).

184. 42 U.S.C. § 300g–3(c)(2)(C); MICH. ADMIN. CODE r. 325.10410.

185. Jeremy C.F. Lin et al., *Events that Led to Flint’s Water Crisis*, N.Y. TIMES (Jan. 21, 2016), <https://www.nytimes.com/interactive/2016/01/21/us/flint-lead-water-timeline.html> [https://perma.cc/9MHQ-9S5W].

186. Bebow, *supra* note 58, at 36.

187. *Concerned Pastors for Soc. Action v. Khouri*, 194 F. Supp. 3d 589, 595 (D. Mich. 2016).

188. *Id.*

189. 42 U.S.C. § 300g–3(c)(1).

190. 42 U.S.C. § 300g–3(c)(2)(C)(iv)(II).

191. 42 U.S.C. § 300g–3(c)(2)(C).

192. 42 U.S.C. § 300g–3(c)(2)(C)(i).

correct it, and the need to acquire alternative water supplies in the interim.¹⁹³

These provisions make clear that the legislature intended to inform the public of potential risks in their drinking water as quickly as possible. In Flint, it took months of diligent work by a Virginia Tech professor and persistent outcry from a local mother to even expose the dangerously high lead levels to the public.¹⁹⁴ That mother had her water tested after complaining at a public hearing.¹⁹⁵ The first test reported lead levels of 104 parts per billion and the second reported 397 parts per billion—26 times the accepted level.¹⁹⁶ The MDEQ and city officials maintained that the water was safe until a Flint pediatrician released a study showing that the amount of lead in young children in the Flint area had doubled since the switch to the KWA water source.¹⁹⁷ This was hardly the quick, direct public notice that the SDWA requires.¹⁹⁸

Many of the children of Flint have been exposed to irreversible lead poisoning.¹⁹⁹ The MDEQ should have quickly responded to the allegations of the lack of corrosion control and high lead levels instead of trying to evade the LCR requirements to provide a more financially friendly way to support Flint's water system. This clearly violates the citizens' right to the monitoring of the public water system. This violation should not have occurred.

The Copper and Lead Evaluation and Reporting Act of 2016 (CLEAR Act of 2016), which failed to achieve support in the House, would have amended 42 U.S.C. § 300g-1(b) by requiring the Administrator of the EPA to adopt detailed reporting requirements whenever lead levels were found that would cause an infant's blood lead level to exceed five micrograms per deciliter.²⁰⁰ Action must be taken within 28 days of a household report

193. 42 U.S.C. § 300g-3(c)(2)(C)(ii).

194. John Bebow, *Edwards: Don't Drink the Water Without Filters*, in POISON ON TAP 97, 99 (Bob Campbell ed., 2016); John McQuaid, *Without These Whistleblowers, We May Never Have Known the Full Extent of the Flint Water Crisis*, SMITHSONIAN.COM (Dec. 2016), <https://www.smithsonianmag.com/innovation/whistleblowers-marc-edwards-and-leeanne-walters-winner-smithsonians-social-progress-ingenuity-award-180961125/> [<https://perma.cc/3ME6-JK2G>].

195. John Bebow, *The Persistent, Heroic Four . . . and Others*, in POISON ON TAP 123, 126 (Bob Campbell ed., 2016).

196. *Id.*

197. *Id.* at 127.

198. See 42 U.S.C. § 300g-3(c)(2)(C) (requiring specific information dissemination within 24 hours after the violation).

199. John Bebow, *The Doctor Changes Everything*, in POISON ON TAP 108, 117 (Bob Campbell ed., 2016).

200. Copper Lead Evaluation and Reporting Act of 2016, H.R. 4806, 114th Cong. § 2 (2016).

indicating illegal lead levels.²⁰¹ These actions include notifying consumers through public health agencies and multimedia, reporting to public health agencies, examining all affected lines in the public water system, and initiating the removal of faulty lines.²⁰² This legislation would have also modified lead monitoring requirements, provided frequent updates to vulnerable populations of the risks of lead contamination, and provided an opportunity for consumers to request lead sampling and information on how to reduce risks of lead contamination.²⁰³ This bill failed to achieve much recognition in Congress.²⁰⁴ Congress should implement similar legislation on a federal level to promote consumer confidence, giving citizens a better opportunity to be informed about the status of their lead lines and the potential of water contamination. By fostering awareness of lead contamination in public drinking water systems, citizens can take steps to control their own health as soon as there is a potential problem in their water system. They would not have to wait for disastrous consequences or health effects before abstaining from drinking or using their tap water. Though Michigan recently updated their citizen notification law in recognition of lead violations, other states may not have adequate laws in place yet.²⁰⁵ Using multimedia and social media services to disseminate local drinking water test results would promote consumer safety and peace of mind. Because of the seriousness of health problems when there are high lead levels in drinking water, citizens should be able to readily access the lead test results of local public water systems to seek additional water supplies as soon as possible.

B. Monetary Remedies

The influence of money is a key factor in public water debates, which disproportionately affects minority communities.²⁰⁶ The price of household water in large cities has continued to rise in recent years as conservation efforts have resulted in a backwards supply and demand.²⁰⁷ Thus, public

201. H.R. 4806 § 2(16)(A)(i).

202. H.R. 4806 § 2(16)(A).

203. H.R. 4806 § 2(16)(E).

204. *All Information (Except Text) for H.R.4806 - CLEAR Act of 2016*, CONGRESS.GOV, <https://www.congress.gov/bill/114th-congress/house-bill/4806/all-info> [https://perma.cc/QPM7-QQKU] (last visited Mar. 17, 2018).

205. MICH. COMP. LAWS § 325.1019 (2017).

206. Martha Davis, *Let Justice Roll Down*, 23 GEO. J. POVERTY L. & POL'Y 355, 356 (2016).

207. Brett Walton, *Price of Water 2017: Four Percent Increase in 30 Large U.S. Cities*, CIRCLE BLUE (May 18, 2017), <http://www.circleofblue.org/2017/water-management/pricing/price-water-2017-four-percent-increase-30-large-u-s-cities/> [https://perma.cc/VL9G-XDE2].

water systems raise prices and “punish” conservation in the process.²⁰⁸ It was the high price of water and low income of Flint citizens that led to the Flint Water Crisis in the first place, and there have been many issues with financing recovery from the lead contamination.²⁰⁹ Prioritizing money over health adds fuel to the environmental injustice outcry, demonstrating a need for a source of funding that is less likely to be affected by politics.

The 1996 amendments to the SDWA established the Drinking Water State Revolving Loan Fund (DWSRF) program to finance public water systems and projects that needed assistance in complying with SDWA regulations.²¹⁰ The EPA grants money to a state’s revolving loan fund, and the state must then match 20% of the grants and develop a plan that specifies how it will use the funds each year.²¹¹ States are to direct up to 30% of DWSRF loans toward economically struggling communities such as Flint.²¹² However, money from these loans does not seem to be sufficient to prevent struggling communities from compromised drinking-water quality.²¹³ Funds from private donors have been pouring in, but bringing long-lasting change requires larger comprehensive action.²¹⁴ Many pipes in the United States have been in place since the 1950s—before the understanding that lead lining was dangerous.²¹⁵ To help prevent lead contamination, the City will need to completely replace lead pipes, including in private homes, and Flint does not have the money to do it.²¹⁶ Private action has been one of the most successful and immediate forms of

208. Brett Walton, *U.S. Urban Residents Cut Water Usage; Utilities Are Forced to Raise Prices*, CIRCLE BLUE (Apr. 19, 2010), <http://www.circleofblue.org/2010/world/u-s-urban-residents-cut-water-usage-utilities-are-forced-to-raise-prices/> [https://perma.cc/EV6U-6QA5].

209. Davis, *supra* note 206.

210. TIEMANN, *supra* note 24, at 14.

211. *Id.*

212. TIEMANN, *supra* note 29, at 11.

213. MARY TIEMANN, CONG. RESEARCH SERV., RS22037, DRINKING WATER STATE REVOLVING FUND (DWSRF): PROGRAM OVERVIEW AND ISSUES 6 (2008).

214. See Emmanuel C.M., *10 Hip-Hop Artists Donating to Help Flint Water Crisis*, XXL (Jan. 28, 2016), <http://www.xxlmag.com/news/2016/01/rappers-donating-water-flint-michigan/> [https://perma.cc/H7K2-K48M] (detailing one example of private donors to the Flint Water Crisis).

215. John Wisely & Todd Spangler, *Where Are the Lead Pipes? In Many Cities, We Just Don't Know*, DETROIT FREE PRESS (Feb. 28, 2016, 7:52 AM), <http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/02/27/lead-water-lines-lurk-unknown-many-cities/80551724/> [https://perma.cc/M2Y2-JMBQ].

216. See Matthew Dolan, *Replacing Flint's Lead Pipes Is Double the Estimate*, DETROIT FREE PRESS (May 28, 2016, 9:04 AM), <http://www.freep.com/story/news/local/michigan/flint-water-crisis/2016/05/27/flint-lead-lines-water-crisis/85032096/> [https://perma.cc/P9A4-LTQ3] (discussing that Flint faces a \$460 million shortfall when the estimated replacement cost of pipes is around \$55 million); see also Daniel C. Vock, *Flint Crisis Calls to Replace All Lead Pipes in America*, GOVERNING (Feb. 3, 2016), <http://www.governing.com/topics/transportation-infrastructure/gov-flint-water-crisis-replace-all-lead-pipes.html> [https://perma.cc/577L-PMHZ] (explaining the need for full replacement of lead pipes in Flint).

relief in Flint²¹⁷ since many citizens could not even afford the estimated \$100 to replace their faucets.²¹⁸ The EPA should provide extra funding from the DWSRF to Flint and place a priority on financing lead-inflicted communities.

Finally, cities should avoid appointing emergency managers in financially burdened communities such as Flint. It was an emergency manager who decided to switch to the Flint River as Flint's primary water supply source.²¹⁹ As identified in the Flint Taskforce Report, "Emergency Managers charged with financial reform often do not have, nor are they supported by, the necessary expertise to manage non-financial aspects of municipal government."²²⁰ The Emergency Financial Manager erroneously put more emphasis on the benefit of a cheaper water supply than the cost of protecting public health.²²¹ Emergency managers should not be used in this capacity, not only because of the risk of decisions that compromise health, but also because they are not publicly elected officials and therefore not accountable to the people.²²²

CONCLUSION

The situation in Flint has demonstrated that the EPA needs to better enforce the provisions of the SDWA that require state environmental quality regulators to notify the public of any change in the public water systems that serve them. Congress could replicate the revision to the Michigan Administrative Code at a federal level to ensure adequate notification to citizens. The Flint Water Crisis also has revealed the need for the EPA to step in when a state agency is slow to conform to the requirements of the SDWA. There should also be federal funding on reserve for communities that encounter lead or copper contamination in

217. See generally Eric Lacy, *Plumbers Descend on Flint to Install Water Filters*, USA TODAY (Feb. 3, 2016, 10:00 AM), <http://www.usatoday.com/story/news/nation-now/2016/02/03/flint-water-crisis-plumbers-install-filters/79746044/> [<https://perma.cc/WQ6Z-8ZGN>] (describing one example of private action and support of Flint when union plumbers volunteered their time to install filters and replace faucets in affected Flint homes).

218. Elyse Wanshel, *300 Plumbers Poured into Flint, Michigan, to Install Water Filters for Free*, HUFFPOST (Jan. 24, 2017), https://www.huffingtonpost.com/entry/300-union-plumbers-flint_us_56b0e3c3e4b0a1b96203ce9e [<https://perma.cc/S2BK-8AN8>].

219. TASK FORCE FINAL REPORT, *supra* note 50, at 7.

220. *Id.* at 8.

221. Bebow, *supra* note 51, at 27; see Bosman & Davey, *supra* note 14 (explaining the community of Flint's opinion that emergency managers were more concerned with finances than public health).

222. See Bosman & Davey, *supra* note 14 (explaining the managers' lack of accountability to the public).

order to replace pipes and water lines as quickly as possible, especially in financially disadvantaged communities.

Further, the MDEQ needs to update or clarify its drinking water regulations so that corrosion control begins immediately upon a switch to a new drinking water system or a change in the drinking water system. Citizens can also be more involved with the process of determining the safety of their water to ensure that local officials are held accountable to their actions and cost-benefit analyses do not become the center of the public water debate. We do not want another Love Canal or Toms River situation.²²³ Every person can become involved in obtaining clean water access for all by monitoring the safety of their own water and not being afraid to question the systems that are in place to protect them when it seems the system is failing.

223. See generally FAGIN, *supra* note 6, at (explaining the situation of chemical pollution in the Toms River that caused an outbreak in childhood cancer); GIBBS, *supra* note 8 (discussing the health impacts that the environmental pollution of Love Canal had on New York residents).