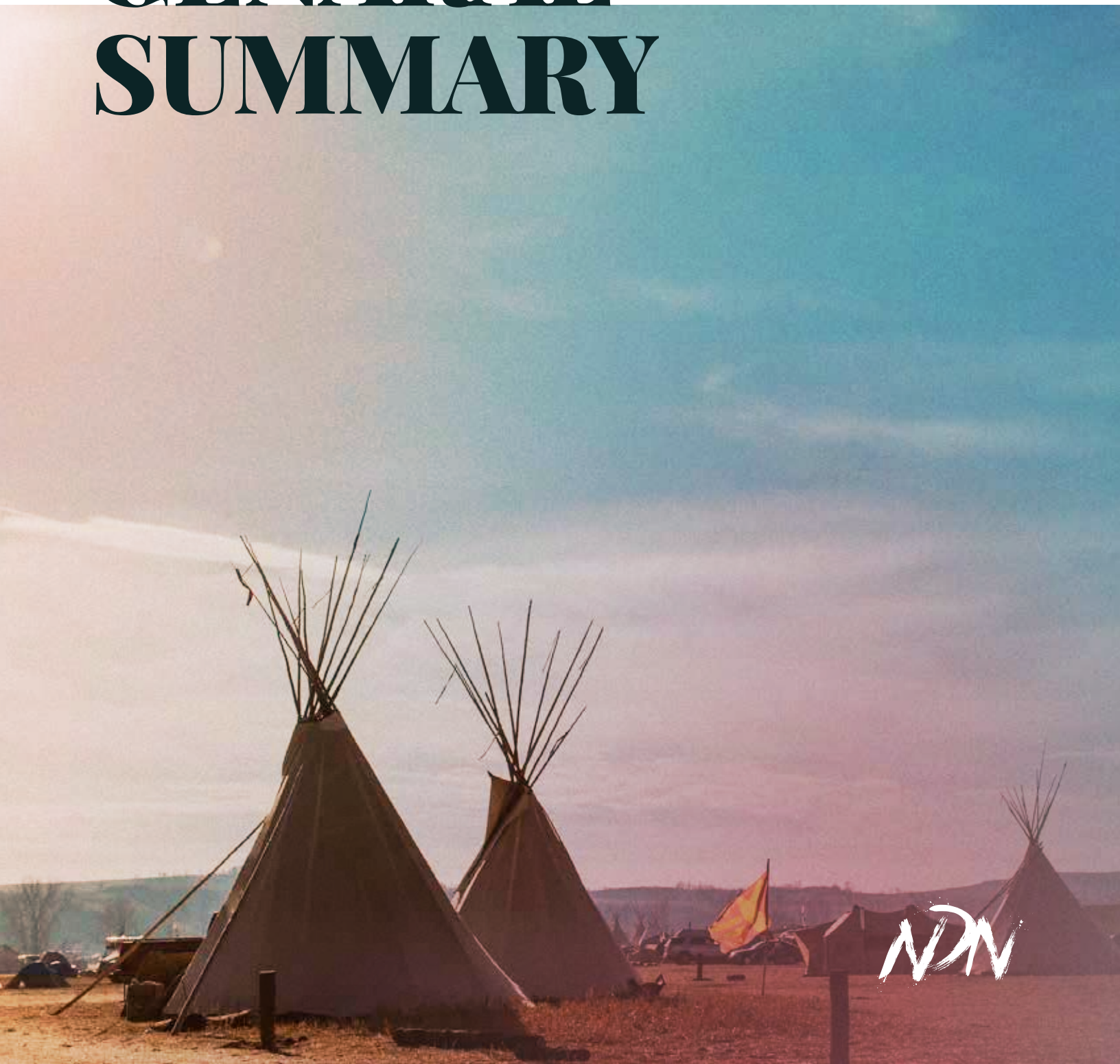


GENERAL SUMMARY



Faulty Infrastructure and the Impacts of the Dakota Access Pipeline

This report was conceived, prepared, and edited by WindHorse Strategic Initiatives, LLC (Boulder, Colorado, USA) in collaboration with Fire Heart Institute (Fort Yates, ND, USA) and NDN Collective.

Design by Brian Skeet of Brian Skeet Design LLC. and Dustin Lopez

Cover Photography by: Cadence Clare Feeley

[Ndncollective.org](https://ndncollective.org)

[Shutdownapl.org](https://shutdownapl.org)

© 2022 No part of this report may be reproduced, distributed, or transmitted by any means without prior permission from NDN Collective.



+ Photo by Gary Yost

01. General Summary

01.1 Mni Wiconi: The Fight Against the Dakota Access Pipeline Has Not Ended

The world will never forget the many Indian and non-Indian Water Protectors who stood strong and united in solidarity with the people of the Standing Rock, Cheyenne River, Oglala, and Yankton Sioux Nations in the fight against the Dakota Access Pipeline (DAPL).

Even now, though the five-year court battle (Standing Rock Sioux Tribe et al. v. Army Corps of Engineers) was dismissed in late June 2021 by the presiding federal Judge Boasberg of the District Court of the District of Columbia (“DC District Court”), the fight still continues.

And we still intend to win this fight... for Indigenous people and their way of life, for the plants and animals, for the sacred Missouri waters that give life to us all, and for climate justice.

“Climate justice, defined by Indigenous dreaming, is an invitation into complexity, a surrendering to the truth, and reckoning with extractive society in order to revitalize possibility. We must dream the Indigenous dream. And so we dream Climate Justice – and put our dreams into action.”

We ask you as a passionate Water Protector to read and familiarize yourself with NDN Collective’s first-of-its-kind report. The report will provide you with insights into the important issues on treaty rights; the technical pipeline construction, operation, safety, and spill risk; and the Army Corps’ environmental permitting and National Environmental Policy Act (NEPA) violations. By becoming more informed, we together can challenge the Army Corps of Engineers to be transparent and comprehensive in the preparation of the court-ordered DAPL Environmental Impact Statement (EIS). The EIS is well underway and the Standing Rock, Cheyenne River, and Yankton Sioux received a preliminary draft EIS (PDEIS) in July 2021. Not surprisingly, Tribes have rejected the PDEIS; it being a near regurgitation of the Environmental Assessment (EA) the Army Corps originally used to justify their permit approvals for the DAPL in 2016. That failed process ignited Water Protectors to take a stand at Standing Rock while the Tribes also began their five-year legal fight in the DC District Court.

01.2 Need and Purpose for this Report: The Indigenous Truth

Energy Transfer’s (ET) Dakota Access Pipeline (DAPL) in North Dakota, operated under its subsidiaries Dakota Access and Sunoco Logistics (Sunoco), has been operationally dangerous every minute of every day since beginning to flow toxic Bakken crude in 2017. The database of the federal agency responsible for pipeline regulatory compliance, the Pipeline Hazardous Materials Safety Administration’s (PHMSA), also makes it clear that ET/Dakota Access/Sunoco has spilled more crude oil than any of its competitors. From 2006 to 2017, ET and Sunoco had incurred 291 hazardous liquid pipeline incidents – more than any other operator for that period in the PHMSA operator database – resulting in \$56,590,698 in property damage.

While these egregious safety records exist, ET and Sunoco prior performance has never been considered in a valid risk assessment, and the federal DC District Circuit Court of Appeals and DC District Court has allowed the DAPL despite both courts affirming that the U.S. Army Corps of Engineers (Army Corps) – the agency responsible for conducting impact analysis under the National Environmental Policy Act (NEPA) – failed to disclose and sufficiently analyze the significant potential environmental and human impacts to the Tribes of the Great Sioux Nation.

The DAPL is without any legal rights-of-way permits from the Army Corps to construct and operate under the Missouri River at Lake Oahe, 0.5 miles north of the Standing Rock Sioux Tribe's Reservation. The illegal construction and operation under Lake Oahe and poor safety record also occurs while ET/Dakota Access/Sunoco have gained the approvals of the respective North Dakota, South Dakota, Iowa, and Illinois state public service commissions to double the volume of Bakken crude in the DAPL to over 1.1 million barrels/day (46,200,000 gallons/day or the equivalent of fueling about 3.3 million cars and trucks for one day). As of August 3, 2021, the DAPL volume in the illegal pipeline has reached 750,000 barrels/day (31,500,000 gallons/day).

Allowing the illegal and unpermitted operation of the DAPL continues to foment the existential threat to the environment and traditional culture of the Indigenous people whose livelihoods and spiritual relationship have been dependent upon the Missouri River for centuries. By downplaying the DAPL's technical integrity and safety issues, Dakota Access and the Army Corps are complicit in their continuance of the historical corporate and government policies, actions, and projects that erode the Constitutionally-guaranteed rights of American Indians to sovereignty and self-determination.

Our purpose in creating this report is to also inform and engage the industry, decision-makers, policy makers, politicians, and the public on the facts and nuances regarding:

1. Tribal treaty rights;
2. Flaws in the technical engineering of the DAPL construction and operation that threaten Tribal treaty rights and sovereignty; and
3. Six years of a failed Army Corps of Engineers NEPA process with no proper transparency or diligent assessment of the DAPL project; a process that continues in the current EIS analysis. Despite federal court rulings, the Army Corps continues to:
 - a. Blatantly ignore the Tribes' specific and legally-justified requests for detailed methodology and data that would allow the Tribes' experts to properly evaluate and challenge the DAPL's spill risk modeling and integrity management system (e.g., pipeline safety and emergency/
 - b. facility response planning in the event of a spill);
 - c. Lack transparency by continuing to withhold critical technical information requested
 - d. repeatedly by the Tribes while hiding under the guise of "national security;" and
 - e. Utilize a highly-conflicted so-called "independent third-party" NEPA EIS contractor who previously prepared the biased Keystone XL EIS and who also has blatant

financial ties to and advocacy for the oil and gas industry through membership in the American Petroleum Institute (API), an industry lobby and trade group.

Such behavior has made the Omaha District of the Army Corps nothing more than Energy Transfer's/Dakota Access' advocate by attempting to steer an unprecedentedly damaged EIS process that will allow the DAPL to continue to operate while adding to the burdens and trauma the Tribes of the Missouri River basin have historically suffered.

By getting to the heart of the real technical problems and nuanced issues of the DAPL in this report, we also go beyond the sometimes flawed or all-together dearth of information that have led to biases, mischaracterizations, and misinterpretations in the noise that often appears in typical mass and social media sources.

01.3 Who We Are

NDN Collective is an Indigenous-led and operated 501(c)(3) organization whose mission is dedicated to building the collective power of Indigenous Peoples, communities, and Nations by exercising our inherent right to self-determination, while fostering a world that is built on a foundation of justice and equity for all people and the planet. Headquartered in Rapid City, SD, our seven-member board and a professional staff of 40 Indigenous professionals focus on organizing, activism, philanthropy, grantmaking, capacity-building, and narrative change to create sustainable solutions on Indigenous terms and to equip all Indigenous Peoples with the tools needed to become architects of their future.

That document was ratified in 1788 and recognized as the "Supreme Law of the Land," and U.S. courts have consistently affirmed. Our team has successfully developed this report in collaboration and consultation with an array of skilled and respected industry Indigenous and non-indigenous specialists who also possess intimate knowledge of the DAPL. Together, these specialists represent over 250 years of modern and direct professional oil, gas, and pipeline engineering, scientific, safety, environmental, legal, and policy experience with the purpose of speaking Indigenous Truth and Wisdom about the faulty infrastructure and false sense of safety ET, Dakota Access, and the Army Corps have attempted to paint. Those professional experiences also span both international and domestic fossil fuel exploration, development, production, and transport.

The five key elements of the report are:

1. The Challenge to the Legitimacy of the DAPL on Indian Land – Treaty Rights
2. Approval of DAPL Continues as Modern-Day Dispossession of Indigenous People
3. Army Corps and the Trump Era NEPA
4. Major DAPL Routing, Engineering, Spill Risk, and Safety Issues
5. Failure to Adequately Address Environmental Justice

02. The Challenge to the Legitimacy of the DAPL on Indian Land-Treaty Rights

Tribal sovereignty has existed since time immemorial and predates the U.S. Constitution.

Ratified in 1788 and recognized as the "Supreme Law of the Land," U.S. courts have consistently affirmed that under Article I, Section 8, the 370 treaties signed with Tribal Nations until 1871 are specifically part of that supreme law of the land. Despite diverse treaty language, the Constitution and the federal courts have ruled the Tribal Nations have established unique sets of rights, benefits and conditions for the treaty-making tribes who agreed to cede millions of acres of their homelands to the United States in return for recognition of property rights in land (boundaries), resources (retain traditional hunting, fishing, and gathering rights), and federal protections (Trust responsibility), while retaining all rights not expressly granted. These retained rights cover a wide variety of subjects, including the right to hunt, fish, and gather resources – including access to traditional plants and animals – both on land the tribes ceded, as well as on land they retained.

Toward understanding these authorities and responsibilities, federal agencies have signed Memoranda of Understanding (MOUs), first issued in November 2009 under the Obama Administration and reissued again in January 2021 under the Biden Administration. Both MOUs pledge the federal agency's best efforts to identify and take greater recognition of tribal treaty rights and similar tribal rights regarding natural resources through consultation during decision-making processes. As the MOUs make clear, tribal treaty rights have the same legal force and effect as federal statutes, and they should be integrated into and given the fullest consideration throughout federal agency decision-making processes.

Thus far, the Army Corps has failed on all counts to meet the expectations contained in the Presidential MOUs, claiming in their NEPA 2016 Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) that, "Although the history of Tribes and treaty rights is beyond the scope of the EA, no impact to tribal treaty rights are anticipated due to construction or operation of the pipeline within the Project Area or Connected Actions. No treaty rights have been identified that would be adversely affected by project permitting, construction or operation." These words speak volumes about the Army Corps' lack of respect for the Tribes.

Furthermore, the Army Corps and Dakota Access have stated in the 2016 EA and FONSI that the Lake Oahe crossing "is not injurious to the public interest" and "does not constitute a major federal action that would significantly affect the quality of the human environment" in terms of elements important to the Tribes, including but not limited to surface water, ground water, cultural resources, and environmental justice. In March 2020, the District Court concluded that, considering comments pointing to serious gaps in the Corps' remand analysis ordered in June 2017, the pipeline easement's effects were likely to be highly controversial, directing the Corps to complete an EIS, and finding that vacating the easement was warranted. In August 2020, the D.C. Circuit Court of Appeals partially upheld the District Court's decision that the Corps violated NEPA by failing to prepare an EIS and affirmed the vacating of the DAPL easement but reversed the lower court's injunction ordering Dakota Access to shut down and empty the pipeline of oil.

The DAPL in North Dakota continues to trespass and operate illegally through treaty lands granted under the Fort Laramie Treaties of 1851 and 1868 (Figure ES-1), and despite most of the DAPL right-of-way occurring on private lands, numerous cultural and spiritual sites significant to the Standing Rock Nation and the Tribes of the Great Sioux Nation occur along its length in North Dakota.

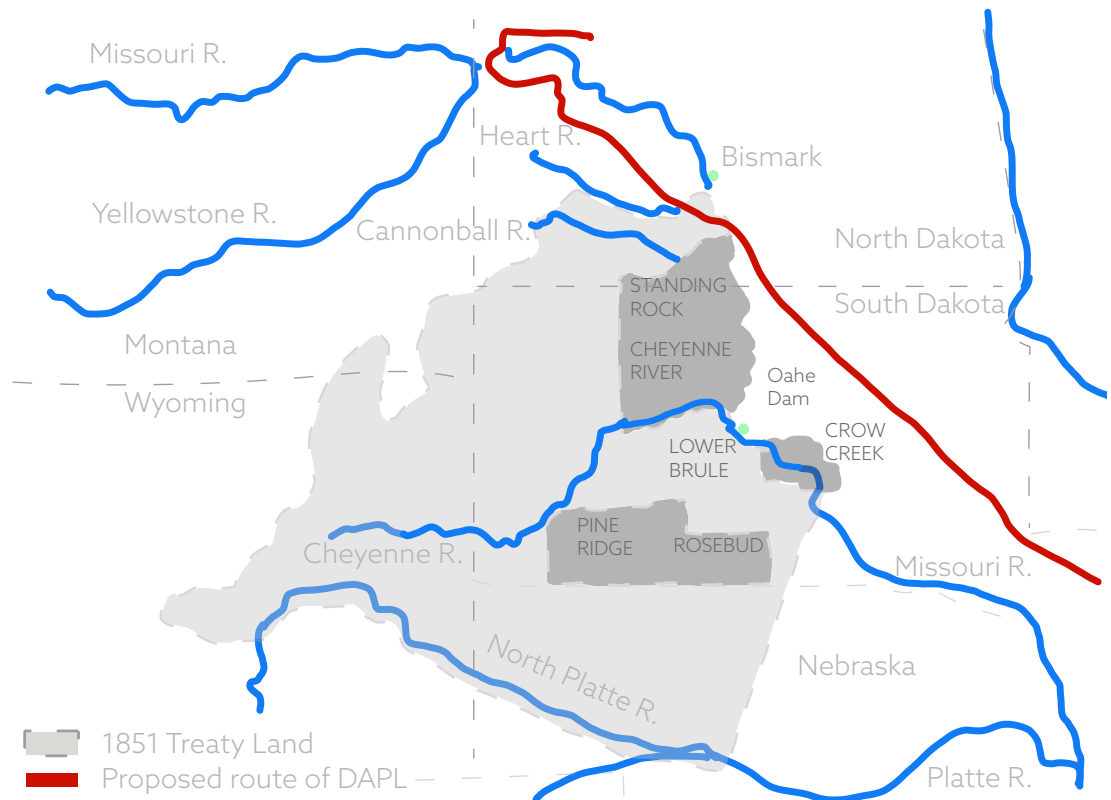
03. Approval of DAPL Continues as Modern-Day Dispossession of Indigenous People

As we note above, historical biases, mischaracterizations, misinterpretations, and poor understanding of Indigenous issues and our people have persisted since the earliest Europeans first set foot on Turtle Island. Throughout the 20th and into the 21st century, these issues continue to keep contemporary American Indians invisible and/or affixed to the past while holding back American Indians from achieving political, economic, and social equality, as well as accurate and respectful representation.

In 1958, the Army Corps constructed Lake Oahe and the Oahe Dam on the Missouri River between North and South Dakota. To construct the dam and reservoir, the Army Corps flooded over 160,000 acres of lands owned by the Standing Rock Sioux Tribe and the Cheyenne River Sioux tribes. The Tribes' prime wildlife habitat was decimated by the development of Oahe Dam and Reservoir, which destroyed nearly 56,000 acres of wooded Missouri River bottomlands on the Standing Rock Indian Reservation. Four Tribal communities were relocated by the Corps of Engineers in 1960, from the bottomlands to the plains above bottomlands area. The entire fabric of the Lakota and Dakota way of life on the Standing Rock Reservation was disrupted by the Army Corps.

Since its creation, and despite the loss of a once-vibrant traditional hunting, fishing, and food and medicinal plant gathering in the bottomlands, Lake Oahe continues to be the necessary critical link for the successor tribes of the Great Sioux Nation who are dependent on the lake's water for drinking, agriculture, industry, recreation, and sacred religious and medicinal practices.

Subsistence hunting, fishing, and gathering are integral to the Lakota and Dakota way of life on the Standing Rock and Cheyenne River reservations. The Lakota believe that all things in creation have a spirit and are relatives to the Lakota. The stories that have been passed down for generations instruct that the land, water and living things that depend on them are all entitled to respect. Thus, the harvesting of fish, wildlife, and plants is conducted



» Figure ES-1. The Dakota Access Pipeline project and unceded tribal treaty territory and reservation lands.

in a sustainable and respectful manner. Prayer and offerings are part and parcel of the subsistence experience.

Historically, within the Tribe, there are various societies, or groups with common expertise or gifts. The different societies gave everyone a place in the community; for example, the prestigious Kit Fox Society was a prominent men's society of hunters and warriors. Today, young men are taught to contribute to the well-being of their extended family (tiospaye) and their community by engaging in subsistence hunting and fishing and sharing their harvest with elders. Subsistence hunting and fishing, and the cultural norms that remain intact, are jeopardized by an oil spill from the DAPL.

The Army Corps have previously failed in their NEPA EA to consider the cumulative impact of the potential harm from an oil spill with the loss of habitat caused by the construction and operation of Oahe Dam. Indian peoples' stand against the Dakota Access Pipeline (DAPL) at Standing Rock shined a light on the historical legacy of the Army Corps' actions that have continued to cause Indian disenfranchisement and dispossession into the 21st century. However, the protests that occurred at Standing Rock accelerated a growing and powerful momentum for environmental and social justice led by Indigenous people and organizations. To say that the DAPL galvanized the contemporary social and environmental justice witnessed today would be an understatement. This movement has not only engaged Indian Country in new ways, from tribal leadership to the grassroots, but has also brought global awareness and support for the rights of Indigenous and other disenfranchised people of color from non-Indigenouss across many sectors.

04. Army Corps and the Trump Era NEPA

Since its creation, NEPA has given voice to communities, both human and natural, that face possible harm through industry actions. It has successfully rerouted highways that would have destroyed wildlife habitat and displaced residents from their homes, halted pipelines, protected important cultural sites from mining, and provided a platform for people disproportionately impacted by environmental injustices. On July 15, 2020, the Trump administration's Council on Environmental Quality (CEQ) released the final text of a rule that dismantles these crucial public safeguards of community health and wild lands. The new rules that took effect in October 2020:

- + Exempts many projects from the public review process that NEPA requires; and
- + Allows agencies to issue permits without considering the climate impacts of projects such as the DAPL.

Industry groups like the American Petroleum Institute (API), who funded the DAPL economic study and subsequently filed an *Amici Curiae* with the D.C. Circuit Court of Appeals in July 2020 supporting Dakota Access' and the Army Corps appeal of the D.C. Court's ruling to shut down the DAPL, have long lobbied for such NEPA changes. The Trump administration and its industry allies claimed that "permitting reform" was necessary to conduct infrastructure upgrades. This is false. The Treasury Department has noted that "a lack of funds is by far the most common challenge to completing" major infrastructure projects.

In July 2021, the Army Corps claimed that the DAPL EIS would be "following the older NEPA guidelines as the Notice of Intent (NOI; dated September 9, 2020) was filed under that time." This too is false.

04.1 Violations of Government-to-Government Consultation & Cooperating Agency Status

Sovereignty is not a set of "special" rights. Rather, its roots lie in the fact that Indian Nations pre-exist the United States and their sovereignty has been diminished, but not terminated. Tribal sovereignty is recognized and protected by the U.S. Constitution, legal precedent, and treaties, as well as applicable principles of human rights. Non-Indians are often confused when tribes claim to be "nations." Don't they know that they have been absorbed by the United States? Weren't the tribes conquered long ago? The fact that non-Indians can ask these questions reflects a failure of understanding of U.S. history and law. The Army Corps' and Dakota Access' collective failure of understanding could not be more profound.

The treaties recognize and preserve tribal sovereignty: In return for giving up almost all the land in the U.S., the U.S. made promises to the Tribes. It promised to respect their rights over reserved lands and to recognize that those lands would be governed by tribes, not by the state governments. Those tribes that did not sign treaties were similarly protected by the U.S.

Executive Order 13175 of November 2000 (Consultation and Coordination with Tribal Governments) and the Presidential Memorandum issued on January 26, 2021 (Tribal Consultation and Strengthening Nation-to-Nation Relationships) reaffirm honoring the

federal government's commitments to speak with and listen to Tribal leaders in formulating federal policy actions that affect Tribal Nations.

While the D.C. District Court dismissed *Standing Rock Sioux Tribe v. United States Army Corp of Engineers* case in June 2021, the District Court and the higher D.C. Circuit Court of Appeals made it clear that the Army Corps must conduct the DAPL EIS process, by not only formally consulting with Tribes, but also actively engaging them as Cooperating Agencies as a partner in developing the EIS from agreeing to the range of alternatives that would be analyzed in the EIS, to providing data, to scrutinizing and analyzing the impacts assessed by the Army Corps, its third-party NEPA contractor (ERM - Environmental Resource Management), and the Tribes' own staff and experts.

In mid-July 2021, the Army Corps provided the Cooperating Agency Tribes (Standing Rock, Oglala, and Cheyenne River Sioux) with a preliminary draft EIS (PDEIS) which can only be described as a disrespectful and grotesque regurgitation of the DAPL EA. The PDEIS revealed not only the dysfunctionality of the EIS process but the Army Corps' ongoing NEPA violations, including the following:

04.2 Failure to Engage Tribes in a Timely and Appropriate Manner as Cooperating Agencies

The Tribes were not engaged prior to commencing the formal scoping process in September 2020, a violation of NEPA Section 1506.1. The Corps' path continued to sideline the Tribes as the formal Cooperating Agency agreement was not finalized until April 2021, nearly 8 months into the Army Corps' process.

The Army Corps also continues its practice of not disclosing technical material underlying the EIS. This problem plagued the 2017 remand process, during which the Corps relied on spill risk and fate analyses prepared by Dakota Access' contractors but never shared that information with the Tribes until after the remand was complete in 2018. Once Tribal experts had the opportunity to review that information, the flaws and mistaken assumptions became apparent. But because they had been withheld from the Tribe, the remand conclusions suffered from this lack of input. The result was the invalidation of the Army Corps' remand decision by the courts.

The Tribes have also submitted extensive detailed technical information showing that a closure of DAPL would have limited impacts on oil markets and even North Dakota production. That information is not reflected anywhere in the DEIS, even though it is better documented and more credible.

The Army Corps repeatedly makes this mistake throughout the PDEIS, relying on analysis and data prepared by DAPL, which the Tribes have had no opportunity to review and comment on.



+ Photo by Cadence Feeley

04.3 Limiting Consideration of the Range and Impact of Alternatives

The PDEIS considers both abandonment of the pipeline and rerouting to the North Bismarck route. However, the PDEIS effectively collapses these alternatives by assuming, with no basis, that if the easement is denied that: a) DAPL will simply build a new pipeline in a different place, and/or b) without the pipeline, the identical amount of oil will continue to be transported under some form of transportation. Both assumptions are unsupported, both are likely factually incorrect, and both significantly impact the conclusions of the EIS. To have a meaningful comparison of alternatives, the PDEIS should have considered the impacts of abandonment separate from the impacts of rerouting.

The PDEIS also assumes—again without support or foundation—that 100% of the oil that DAPL carries will shift to other modes of transportation, primarily rail, but also by truck. The PDEIS also lacks a market analysis to assess the impact of closing the pipeline, but PDEIS includes only unsupported assumptions that favor DAPL as it simultaneously concludes that: a) closure of DAPL will result in the same amount of oil as is carried by DAPL being transported via other means; and b) closure of DAPL will result in a collapse of North Dakota oil production. Both of those things cannot logically be true. Neither of them is true.

04.4 Elimination of Direct and Indirect Effects and Failure to Appropriately Assess the DAPL Expansion and the Cumulative Impacts of Greenhouse Gases (GHGs)

While the Army Corps contends that the EIS process follows the pre-Trump era NEPA regulations, the impact analysis in the PDEIS indicates otherwise. While in essence, all impacts are “direct” impacts, the PDEIS makes no mention or distinction between the direct and indirect impacts of the DAPL project.

Furthermore, the PDEIS—unsurprisingly, considering the failures documented above—muddles the key issue of the relationship between the pipeline’s authorization and the climate crisis. That is because the Army Corp’s PDEIS declines to delve into the key question of whether authorization of the pipeline will contribute to more production and consumption of fossil fuels, and for longer, compared to the closure of the pipeline. The PDEIS also incorrectly and unlawfully deems such impacts “outside the scope” of the NEPA review, and

then compounds that error by assuming that the existence of the pipeline has no impact on the amount of oil that is produced or consumed.

Instead, the PDEIS focuses on the relative minutiae of greenhouse gasses from construction of pipeline segments, or alternative transportation. The Biden Administration reinstated the 2016 GHG Guidance in its Executive Order issued January 2021. On April 5, 2021, the federal D.C. Circuit Court of Appeals vacated a Trump-era rule that would have prevented the Environmental Protection Agency (EPA) from setting greenhouse gas (GHG) emissions standards for almost any class of stationary sources, except for fossil fuel-fired electric generating units. The court's decision, issued at the request of the new Biden EPA, clears the way for new sector-by-sector GHG regulations should the new administration seek to set new GHG standards under Section 111 of the Clean Air Act (CAA). Given the renewed emphasis on the country's need to address climate issues and the August 2021 Intergovernmental Panel on Climate Change (IPCC) report that climate change is widespread, rapid, and intensifying, the Army Corps must assess the far more meaningful question of how ongoing operation of the pipeline—presumably for decades—will impact the nation's commitments to reducing global GHG emissions.

04.5 DAPL Expansion

While it is appropriate to disclose these GHG emissions, it is not the major concern—which is the fate of the doubling of the volume to 1.1 million bpd to be carried in the expanded pipeline. All the Tribe's concerns about the risks and impacts of crude oil spills are compounded by DAPL's plans to double the capacity of the pipeline.

The PDEIS as presented to the Cooperating Agency Tribes contains nowhere near enough information to assess the increase in risk or the increase in potential impacts to the Tribes associated with a doubling of the original capacity. The complete avoidance of any discussion related to the existing natural resource condition, and what potential impacts are, lessens what the true impacts are, and is a dereliction of duty to the Tribes and the greater public.

The Tribes' experts have gone to substantial lengths to explain why capacity increases increase risk as well as potential impact, but the Army Corps continues to ignore that information in favor of that provided by Dakota Access. And it is even more startling that the Army Corps is intent on signing off without any of the careful analysis required by law. While the four state public service commissions, including the North Dakota Public Service Commission (NDPSC), have papered over these expansion issues, the Army Corps has an independent duty to disclose and consider the adverse impacts and consequences of operating an already unsafe pipeline at a substantially increased level.

04.6 Agency Responsibility for NEPA Documents and NEPA Contractor

First, the Army Corps has relied on an external consultant – Environmental Resource Management (ERM) – as its “independent third-party contractor” to handle drafting and impact analysis of the EIS process. Although that both the original environmental assessment and subsequent Court-ordered remand report have been found to have violated NEPA, the Army Corps continues to rely on third-party contractors with deep connections and interest in supporting their industry clients. ERM had similar conflict as the contractor for the Keystone XL Pipeline (KXL) and it continues its conflicted history in this case in preparing the DAPL EIS.

- ✦ ERM’s close ties to the oil industry render it incapable of providing the honest and candid “hard look” at DAPL’s risks and impacts that the law requires. While use of consultants is not prohibited, per the code of federal regulations C.F.R. § 1506.5, the Army Corps must undertake full responsibility for the final analysis and independently evaluate the consultant’s findings and ensure their accuracy and compliance. This has never happened.

ERM is also a dues-paying member of the American Petroleum Institute (API) – the largest trade and lobbying organization devoted to the promotion of oil and gas. API’s mission is to “influence public policy in support of a strong, viable U.S. oil and natural gas industry.” ERM staff also testified in favor of other Energy Transfer oil and gas permits before state agency commissions. This alone reveals a conflict of interest that is wholly unacceptable. Implementing regulations requires contractors to disclose such conflicts in writing (NEPA Section 1506.5(c)). If ERM has failed to submit such a statement, that is grounds alone to disqualify them. If they have, the existence of the conflict also disqualifies them. Either way, they cannot continue to oversee this EIS process.

Second, NEPA Section 1501.5(b) states a contractor shall be selected by the lead agency or where appropriate under Section 1501.6(b), a cooperating agency. “It is the intent of these regulations that the contractor be chosen solely by the lead agency, or by the lead agency in cooperation with cooperating agencies, or where appropriate by a cooperating agency to avoid any conflict of interest.” As with the remand analysis, the Army Corps has failed to work in cooperation with the Tribes to select a contractor that meets that regulatory bar.

Finally, there are plainly lines of communication between the consultant and DAPL itself – communications which are unavailable to the public and opportunities to shape the outcomes that are not available to others, including the Tribes. As noted above, there are many places the PDEIS relies on information provided by Dakota Access, but excluded information provided by Tribe’s technical experts. The Army Corps displayed similar behavior in the way it handled the remand analysis. For example, Dakota Access provided the information indicating the economic losses resulting from the shut down and removal of the pipeline from service.

This information as well as a lack of transparency regarding, for example, technical and unredacted information on spill modeling and risks raise the obvious questions:

- ✦ Where is that information?

- + How will Dakota Access' self-interested submissions be subject to scrutiny?
- + What independent checks has the Army Corps provided on this information?

The SRST (Standing Rock Sioux Tribe) has submitted extensive detailed technical information showing that a closure of the DAPL would have limited impacts on oil markets and even North Dakota production. That information is not reflected anywhere in the PDEIS, even though it is better documented and more credible by the SRST technical experts.

05. Major DAPL Routing, Engineering, Spill Risk, and Safety Issues

"The Dakota Access Pipeline is built to be one of the safest, most technologically advanced pipelines in the world. Its safety factors and state-of-the-art construction techniques and redundancies, including construction and engineering technology, meet or exceed all safety and environmental regulations."

-Energy Transfer, web: dapipelinefacts.com

"... if existing safeguards are inadequate to mitigate spill risk from a pipeline tunneling ten miles from a city, they nevertheless protect federally reserved tribal waters less than one mile from an Indian Reservation."

**-Hilary Tompkins, DOI Solicitor, suppressed
"M-Opinion," December 4th, 2016**

Perhaps, no statement is more emblematic of the environmental justice and technical construction and operation issues that have plagued the DAPL project since its inception than Solicitor Tompkins' "M-Opinion." It's no wonder the Trump Administration attempted to suppress the DOI's chief legal officer's legal opinion. As for the ET statement that the DAPL is "one of the safest, most technologically advanced pipelines in the world," the saying also goes... "Repeat a lie often enough and it becomes the truth." Such is the law of propaganda. Among psychologists, ET's statement is something known as the "illusion of truth" effect.

While ET, the parent company of Dakota Access LLC, and its allies and supporters repeat their illusion of truth, the Tribes' technical team of pipeline engineering, safety, environmental justice, and policy experts have methodically been challenging DAPL's safety assertions and the Army Corps' near-blind current acceptance of them. Section 5 of this reports looks deeply at the key issues that have yet to be addressed substantively by the Army Corps in the Standing Rock Sioux Tribe v. Army Corps court proceedings, and certainly not in their "technical" analysis of the impacts of a DAPL oil spill as remanded by the D.C. District Court in June 2017. Those main issues are summarized below.

05.1 Pipeline Routing

Dakota Access and the Army Corps documentation and analysis has lacked transparency and is poorly documented regarding the route selection methodology used to conduct spatial analysis in the evaluation of potential pipeline routes. Justification for the particular DAPL datasets used and a clear understanding of ranking/weighting methodology is similarly lacking. It doesn't appear that the Army Corps is willing to conduct a truly robust "least cost" analysis that properly weighs the risks and benefits of the relevant engineering, environmental, and social costs, and constraints of various pipeline route alternatives, including the route north of Bismarck.

While we acknowledge that a kind of constraints analysis may have been conducted to evaluate the relative risk of the DAPL routes, the conclusions in the EA/FONSI – and again parroted in the PDEIS – regarding route selection also relied on a vague reference to a qualitative "desktop evaluation" of about 25 elements (see EA, Table 2-1, page 9). Additionally, a comparison of costs, the number of bores, and the number of mainline valves (see EA/FONSI; Table 2-2, page 11) were included in the EA/FONSI to justify selection of the southern route crossing Lake Oahe. We note that the EA/FONSI states that the "desktop evaluation" was conducted only after public input was received during the scoping and public comment periods of the EA process. As we noted, other than accepting scoping comments from the Tribes, the Tribes were not otherwise engaged by the Army Corps in the EIS scoping period that occurred from September 9 to November 24, 2020, where route selection and the range of alternatives analyzed in the EIS were discussed and agreed upon.

Thus, it is beyond illogical that Dakota Access LLC – supported by the Army Corps – would claim to the D.C. District Court and on the DAPL Facts website that the DAPL was one of the safest and technologically-advanced pipelines ever built. So safe that it could subsequently cross a PHMSA-designated High Consequence Area (HCA) near the Standing Rock Reservation, but apparently not safe and not technologically advanced enough to cross a shorter distance under the Missouri River at a designated HCA location ten miles north of Bismarck. Not to be lost in the shuffle, non-pipeline oil transport alternatives (e.g., trucks and trains) must also be evaluated equally.

05.2 Pipeline Design, Construction and Hydraulic Directional Drilling Issues at Lake Oahe

Horizontal Directional Drilling (HDD) has become a favorable method of pipeline installation for crossing beneath obstacles such as rivers and roads. HDD is defined as a steerable system for the installation of pipes, conduits and cables in a shallow arc using a surface-balanced drilling rig. Due to work being done underground blindly, it is important to conduct a risk evaluation prior to actual construction.

Transportation of crude oil via pipeline is an effective way to carry fluid (liquid or gaseous) products from one point to destination, depending on the properties and sensitivities of

the specific project. In the Bakken and Three Forks region, current alternatives used for transportation include truck and/or rail transportation.

Since the pipelines generally have very long routes, they cross wetlands, rivers, roads, railways, and other environmental and geographic features, which are inevitably named as special crossings. DAPL also crosses federal flowage easements near the upper end of Lake Sakakawea, the Missouri River and Lake Oahe.

The HDD method involves first drilling a pilot bore in the location(s) as indicated on the plans, and then next enlarging the drilled pilot bore to facilitate the installation, welding sections together, and then pulling the string of welded sections through the pilot bore to a bore on the opposite side.

Except for offshore applications, there are no similar applications to the DAPL involving crude oil as the product fluid in a long HDD bore in a large diameter/volume pipeline application underneath a wide freshwater waterbody like Lake Oahe. This should have been a red flag in the initial Army Corp review process. Additionally, most global permitting authorities would have seen such a large undertaking as just cause for a more detailed and rigorous assessment of the potentially significant environmental risks. Given that the HDD of Lake Oahe was 7,800 ft long and perhaps the longest and largest diameter HDD efforts under a freshwater body, the Army Corps failed to incorporate a detailed and rigorous risk analysis in their 2016 EA, relying instead on accepting the calculations of the HDD contractor to support their issuing rights-of-way easements across and underneath Lake Oahe. Given the Army Corps' continuing disregard for an administratively effective NEPA process and coupled with a continuing lack of transparency with the Tribes as either Cooperating Agencies or in the Constitutionally and legally required, but separate government-to-government consultation, the risk and impact analysis of the HDD in the EIS is highly unlikely to see any improvement in rigor.

05.3 Underestimation of Spill Risk, Leak Detectability, and the Lack of

"They're never the worst one. But they're always in the top 10."

Carl Weimer—Founder and Former Executive Director, Pipeline Safety & Trust, Bellingham, Washington, who worked with PHMSA & industry groups to develop performance standards—commenting on Energy Transfer in 2020.

Dakota Access' and Army Corps' documentation have failed to effectively identify the specific hazards of Bakken crude oil, and its continued operation makes human health and the environment vulnerable to harm if not addressed. Bakken crude is extremely flammable and can pose greater health and safety risks than heavier crude oil. Vapor samples from Enbridge's Berthold, ND terminal crude storage tanks were determined to contain more than 1200 ppm of hydrogen sulfide – twelve times the level immediately dangerous to life and health. Elevated concentrations of benzene in Bakken crude oil poses significant negative human health and environmental impacts. Addressing the elevated hazards of Bakken crude

in the risk assessment (spill consequences) and the dangers facing emergency responders is necessary to protect lives and the environment. The Army Corps has failed to do so, however. Dakota Access' and the Army Corps' acceptance of the worst-case discharge (WCD) calculations lack any documented methodology or supporting data. Dakota Access' informal WCD calculations take a "best case" approach and grossly underestimate the likely volume of Bakken crude oil released. This flaw underestimates the potential hazards from a release 92-feet or more under Lake Oahe. Other more realistic performance-based approaches would show a much greater WCD. DAPL's approach severely underestimates the potential WCD, leaving out important considerations from both the regulatory requirements and good practice safety guidelines.

Recently constructed pipelines can have serious spills, and the leak detection systems for oil pipelines have a poor record of effective operation. Dakota Access' WCD calculation of a 9-minute shutdown time was limited to calculations based on pump shutdown time. Such a calculation is incomplete and grossly underestimates the WCD. The WCD fails to consider other alternatives such as a smaller leak below the detection limit.

Detection limits are important, because software-based leak detection systems are notoriously unreliable. Pinholes and other types of weaknesses at faulty welds often cause tiny leaks that form in pipelines at the welded joints of the individual 40 ft. long pipeline sections and can be a big problem as they can lead to spills that possibly will not be detected over a long time. These leaks can then spill over weeks or months and will not be recognized with the conventional leak detection systems.

At Lake Oahe, a leak below the detection limit may go undetected for a much longer period as the DAPL below Lake Oahe is assumed to be 92 ft. below the lakebed. The precise location under Lake Oahe is unknown, as Dakota Access and the Army Corps have been unwilling to share the HDD drilling logs with Tribes. HDD bore logs would show the specific depths and any construction issues encountered in boring the pipeline. And no construction bore, particularly a 7,800-ft long attempt, would occur unimpeded and in a straight line. The shear physical force required to pull the approximate 200 40-ft. sections or 784 tons (~7,800 lbs. per 40 ft. section x 200 pipe sections) exerts tremendous force on the welds as the pipeline sections and welds effectively "stretch" like an elastic rubber band and "snap" back together. As with the HDD bore logs, Dakota Access and the Army Corps are also unwilling to share with the Tribes any pipeline weld inspection reports to demonstrate that the integrity of welds and the pipe are uncompromised below Lake Oahe.

Resulting pinholes or other small leaks caused by compromised welds are one of the main concerns. DAPL's automated leak software detection system, LeakWarn, would not be able to detect leaks representing 1 percent or less of the pipe's flow rate, which is the industry standard for leak detection limits. Judge Boasberg, the presiding D.C. District Court judge in *Standing Rock Sioux Tribe v. Army Corps*, specifically pointed out that the Tribes' pipeline experts raised legitimate questions about the reliability of the DAPL leak-detection system. Boasberg also noted that other key issues such as WCD have gone unanswered, despite his previous orders remanding the Army Corps to prepare additional environmental reports.

Detection time is a critical factor in WCD. In some cases, it takes hours or even days to detect a slow leak before shutdown is initiated. For example, in the 2016 Permian Express II pipeline crude oil spill of 361,000 gallons, it took ET 12 days to detect the spill and shut down the pipeline. The spill from the central Texas pipeline, which had only been operational for one

year, led to a reported \$4 million in property damage. Yet, in the case of DAPL, Dakota Access lacks any substantive evidence, such as performance metrics, that could suggest they have the capability and capacity to instantaneously detect any spill of the DAPL.

Again, NDN Collective asks the same question the DOI Solicitor asked in 2016: "If the DAPL is one of the safest and most technologically advanced pipelines ever constructed, can be shut down instantaneously, and safe enough to be located 0.5 miles from the lands of the Standing Rock Sioux Tribe, why can it not be located 10 miles north of Bismarck?"

Assuming a 1.1 million barrels per day transportation rate (46.2 million gallons), and the stated LeakWarn lower detection limit of 1 percent, a leak of 11,000 barrels per day (462,000 gallons) would go undetected by the DAPL LeakWarn system. If ET/Dakota Access/Sunoco failed to respond so miserably as they had in Texas, 132,000 barrels (5.5 million gallons) could be released by the DAPL before a spill is visually spotted on the ground and/or in combination with visual observation from aerial inspections. Given that the pipeline is supposedly buried 92 ft below Lake Oahe, and the long periods of ice cover on the lake during winter months, an undetected, 11,000 barrel per day leak could not be visually spotted and would continue over a long period (days, weeks, even months), resulting in a massive accumulation of crude oil.

Pipeline shutdown times provided to regulators in Facility Response Plans (FRPs) for WCD calculations also can be grossly inaccurate. Dakota Access' and Army Corps' documentation lacks a detailed technical spill plan or a realistic WCD calculation – both are essential for effective emergency response planning. DAPL does not address the adverse weather impact on the WCD for the shutdown of the pipeline. Issues include harsh ND winter conditions, deep snow, extreme cold, and availability and operation (e.g., lack of battery back-up, which is standard integrity management globally outside of the U.S.) of the shutdown valves in extreme environments.

Likewise, spill remediation can leave a significant volume of unrecovered crude oil with the potential for persistent threats to human health and the environment. The D.C. District Court's June 2017 decision remanding the Army Corps to properly evaluate the impacts of an oil spill from the DAPL on fish and wildlife on the Standing Rock Indian Reservation have fallen short and should not be allowed to be incorporated as valid in the EIS. Dakota Access' and the Army Corps' current estimates of a worst-case oil release into the Missouri River and underlying aquifer are based upon unrealistic assumptions, and the environmental impacts of an oil spill may be far greater than disclosed in the Final Environmental Assessment, 2018 Remand Analysis, and what may be included in the EIS. The reservoir conditions and amount of stored water in Lake Oahe at the time of a release of oil into the Missouri River will affect its impacts on fish and wildlife. The Army Corps must implement its Reservoir Simulation Model to determine the impacts of an oil spill under the divergent reservoir conditions caused by the operation of Oahe Dam.

In 2017, the Standing Rock Sioux Tribe Department of Game and Fish prepared a report entitled, Missouri River High Consequence Area Assessment: Establishing Baseline Ecological Information and Impacts to Hunting and Fishing from the Proposed DAPL Pipeline in the Event of an Oil Spill in the Missouri River in North Dakota Adjacent to the Standing Rock Reservation. This report documents the significant impacts of an oil spill on sensitive wetland habitat, macroinvertebrates, shellfish, fish, birds, and waterfowl, as well as on mammals and big game on the Standing Rock Reservation. The report finds that subsistence hunting

and fishing by Tribal members would be severely adversely affected by an oil spill from the DAPL. In its response to the Tribes' comments on the Remand Analysis, the Army Corps downplayed the severity of contamination to fish and wildlife, and further stated that in the event of a spill, and as a mitigation measure to prevent consumption of contaminated fish and wildlife, "signage and fencing" would be erected to warn tribal members of potential hazards. The Army Corps' blatant disregard for the seriousness of such impacts is appalling. Where leaks occur and repair/replacement costs are high, the record indicates that the pipeline operator, Sunoco, would continue operating without redress of the leaks. As noted, PHMSA data from 2006 to present demonstrate that ET/Sunoco's past and present record is to continue to operate leaking pipelines by hiding, masking, or downplaying the significance of leaks rather than disclosing and remedying the situation. Sunoco's abysmal operating record is discussed in more detail in Section 5.3.3, Leak and Spill Detection and Response.

06. Failure to Adequately Address Environmental Justice

The issue of Environmental Justice has been a key feature of the Tribes' fight since project inception. In 2017, the D.C. District Court held that the Army Corps violated the law by failing to grapple with the environmental justice implications of siting a major pipeline at the SRST's doorstep. On the D.C. Court's remand, the Army Corps only compounded those flaws, leading to another legal challenge. The PDEIS reads as if none of this ever happened, and the Army Corps simply repeats the fiction that there are no environmental justice implications of siting this pipeline on stolen lands yards upstream from the reservation boundary.

The Army Corps continues to disregard key aspects of the study and expert opinions that the SRST submitted to the Army Corps in 2018 entitled, *An Environmental Justice Analysis of Dakota Access Pipeline Routes*. Neither the study nor the expert opinions are mentioned in the PDEIS. The study correctly compared the racial and socioeconomic compositions of the Lake Oahe and North Bismarck crossings to find a clear environmental injustice in siting DAPL at Lake Oahe. The Army Corps never expressly acknowledges the obvious environmental injustice here – the DAPL is in an area where American Indians, very low-income households, and other socioeconomically vulnerable population groups are disproportionately located.

Further, the Army Corps again misses the mark in finding that impacts to environmental justice communities would be minor for the North Bismarck crossing because such crossing involves private land, which subsistence harvesters cannot access. More obvious is the fact that the North Bismarck crossing area is not in an environmental justice community and does not pose an environmental injustice. It is in an area with very low minority percentages and lower average poverty rates compared to the Lake Oahe site. The Army Corps never expressly confirms the obvious and indisputable disproportionate impact on the SRST from siting the DAPL at Lake Oahe.

The PDEIS environmental justice section is also replete with inconsistencies and references to secret documents favoring DAPL, much like the rest of the PDEIS. For example, the Army Corps brazenly concludes that the potential for a crude oil release at the Missouri River during operation at the North Bismarck site would be "minor to moderate" and for some reason also states that such potential would be "like the risk of a release at the Lake Oahe crossing." Bizarrely, the Army Corps goes on to conclude that even though it admits it cannot assess the likelihood of a release at the Missouri River "without additional details such as burial depth and overlying soil types."

In contrast, the Army Corps readily asserts that the risk of crude oil release at Lake Oahe is "negligible" (not "minor to moderate") because the likelihood of a spill is "remote." The Army Corps finds such a "remote" likelihood based on a 2020 RPS oil spill study prepared by DAPL which the Tribes have not had an opportunity to review or comment upon. The Army Corps then uses this "remote" likelihood as a reason for finding no significant impact on environmental justice communities for the Army Corps' chosen alternative, which is to leave the pipeline in place.

The Army Corps continues to persist in its absurdity by increasing its "buffer" area of 0.5 miles to one mile to capture environmental effects on low-income, minority, and tribal populations from a potential crude oil release. This arbitrary increase to merely one mile is unexplained and unsupported, especially given that the Army Corps discusses the impacts of spills further downstream in other sections of the PDEIS, including where it clearly benefits the DAPL, such as 160 miles downstream when analyzing the potential impacts of removing the existing unpermitted pipeline.

Such an arbitrary increase to a mere one mile is further inappropriate considering that the communities downstream, which are entirely within the SRST reservation, will bear the impact of an oil spill. As the SRST has already pointed out to the Army Corps, in the environmental justice analysis for the EIS for the Keystone XL project, the agency took a far broader approach, assessing environmental justice impacts a full 14 miles downstream of areas wherever the pipeline crossed water.

Another pipeline EIS looked at spill impacts 40 miles downstream. Although the Army Corps briefly analyzes the downstream effects of certain spill scenarios at the Lake Oahe site, it finds the likelihood of such spill scenarios remote and therefore negligible based on the secretive 2020 RPS oil spill study prepared by DAPL which the Tribes have not seen. Importantly, the only government capable of a timely response to a spill emergency is the Tribes' first responders.

And despite acknowledging that Executive Order 12898 requires federal agencies to identify the human health effects of federal actions on Tribes and to find ways to provide appropriate protections, the Army Corps completely sidesteps any analysis of historical trauma. The Army Corps simply defines historical trauma and asserts that "a health impact assessment in the area of psychology is beyond the analysis that can be performed in this EIS." A psychological assessment of each Tribal member is not required to examine and conclude that historical trauma, as evidenced through historical loss symptoms, plagues the Tribes and their members from the intergenerational disruptions by the federal government to their way of life.

Aside from the egregious violations of treaty rights, the Standing Rock, Cheyenne River, Oglala, and Yankton Sioux tribes have incurred a plethora of tangible and intangible costs stemming from the operation of the DAPL. The Tribes clearly suffer disproportionate and unaccounted costs in the construction and operation of the pipeline. Ignoring or suppressing known costs leads to inequitable and economically inefficient outcomes, as happened with DAPL. A proper accounting of the actual cost borne by the Tribe is required under Executive Order 12898 on Environmental Justice.

06.1 Report Conclusion – The DAPL is Illegal, Dangerous, and Should be Ordered to be Abandoned

An EIS and a Record of Decision (ROD) rendered by the Army Corps that continues to allow Dakota Access to flow over 1 million barrels of toxic Bakken crude daily, one of the most toxic forms of crude oil known despite its seemingly benign designation of "light, sweet crude" would not only further jeopardize Indian people, but in fact millions of people up and down the Missouri River basin and across the country at a time when the climate science clearly demonstrates that fossil fuel consumption is the single greatest threat to humans, wildlife, plants, water, and lands on which we all depend.

With nearly five years of litigation culminating in a federal court ordering the Army Corps to conduct an Environmental Impact Statement (EIS) for the Dakota Access Pipeline (DAPL)

project – a litigation and National Environmental Policy Act (NEPA) process that has been wholly ineffective at assuaging the concerns and presenting the perspectives of Tribes from project inception in 2014 – the need for reclaiming Indigenous Truth could not come at a more vital time.

We squarely challenge the oil, gas, and pipeline industry and government narrative by speaking from a place firmly rooted in thousands of years of Indigenous Truth and Wisdom supported by modern-day engineering, science, and policy. For too long, the industry and certain federal and state agencies with responsibility for approval and regulatory authority have attempted to capture and control the decision-making process by creating a false narrative that they alone possess the unique and best knowledge and expertise to make the “appropriate” technical engineering, scientific, legal, and policy decisions on energy development and transport.

And throughout modern history, the record also shows how industry entities and government decision-makers proceed, in particular, with limited to no regard for Indigenous rightsholders’ knowledge and expertise, or for the non-indigenous specialists with whom Indigenous people, communities, and Nations consult. This report sets that record straight.