MAPPING A MANY HEADED HYDRA
THE STRUGGLE OVER THE DAKOTA ACCESS PIPELINE
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### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tr>
<td>bpd</td>
<td>barrels per day</td>
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<td>DAPL</td>
<td>Dakota Access Pipeline</td>
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<td>EEP</td>
<td>Enbridge Energy Partners</td>
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<td>ETCOP</td>
<td>Energy Transfer Crude Oil Pipeline</td>
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<td>ETP</td>
<td>Energy Transfer Partners</td>
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<tr>
<td>IEA</td>
<td>International Energy Agency</td>
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<tr>
<td>SLAPP</td>
<td>strategic lawsuit against public participation</td>
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<td>SRST</td>
<td>Standing Rock Sioux Tribe</td>
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In April 2016, the Sacred Stone Camp was established at the confluence of the Cannonball and Missouri Rivers, near Cannon Ball, North Dakota, by LaDonna Brave Bull Allard, an enrolled member of the Standing Rock Sioux Tribe and tribal historian. Two years after learning about plans to build a pipeline adjacent to the Standing Rock Reservation, through unceded treaty land, and under the Missouri River, the Sacred Stone and subsequent camps emerged as an urgent attempt to protect ancestral burial grounds and local waterways, including the Missouri and Cannonball Rivers, by blocking construction of the Dakota Access Pipeline (DAPL). Importantly, not only would the DAPL infringe on the tribe’s downstream water rights, it was also set to pass through 1851 and 1868 Fort Laramie Treaty boundaries: land that the Oceti Sakowin never ceded to the U.S. government. Subsequent camps were established off-reservation to assert and defend this treaty territory. Water protectors and their allies held these camps for months, resolutely refusing to subject these lands and waters to the risks inherent in running an oil pipeline through this territory.

Over this time, water protectors in the off-reservation camps faced serious and escalating violence from police and private security forces: they were targeted by sound and water cannons, shot with rubber bullets and pepper spray, attacked by dogs, intimidated by riot gear and army tanks, and violently arrested.[1] Against this escalating state violence deployed in defence of the oil industry, the camps continued to grow. In early December, the U.S. Army Corps of Engineers finally stood down, denying the easement needed by Energy Transfer Partners to drill under Lake Oahe on the Missouri River, and promising to launch a full environmental impact study.[2] At the time, many hailed this as a historic victory, but with the impending Trump presidency just over a month away, concerns mounted that the win would be fleeting.[3] While the movement overall began to focus on other forms of action, many water protectors vowed to remain in the camps through the depths of the North Dakota winter. Sure enough, within his first week in office, President Trump signed executive orders expediting the review and approval of both the Dakota Access and Keystone XL Pipelines.[4]

While the off-reservation camps were forcibly evicted at the end of February 2017, the tribe has vowed to continue the struggle in court and in Washington and a global divestment campaign continues to gather steam. Beyond the DAPL, an international avowal has been issued to continue fighting the growing network of pipelines across North America.[5]

This report goes behind the scenes of the Dakota Access Pipeline. It aims to shed light on the broader continental context of contemporary oil production, transportation, and trade in North America. Along the way, it addresses themes including the geopolitics of oil, the political and corporate networks of power and finance that underpin the pipeline, and the industry’s strategies for getting oil to the world market.

When it comes to building energy infrastructure, recent years have been marked by incredible dynamism.
Repeatedly, where industry has proposed pipelines, people have resisted, forcing companies to reconfigure their plans. The result has been an intimate, dynamic, and fraught dialectic between the pushers of these infrastructure projects and the communities and movements working to protect lands, waters, and the climate. Importantly, this dynamic has a continental character: while each proposed pipeline presents as a single or isolated project, we might instead think of them as flashpoints in a much larger ongoing struggle over the expansion of settler colonial extractive capitalism on Turtle Island. In taking stock of the broader landscape of energy infrastructure, it is this continental dynamic that this report aims to illustrate. In this sense, it is not a report about the Dakota Access Pipeline—others are much better positioned to provide authoritative accounts and analyses of this struggle and the deep historical context that informs it.[6] Rather, here, by surveying and mapping the dynamic nature of North American oil pipeline proposals and efforts to protect waters and lands from these infrastructures, this report draws attention to the interconnectedness of North American pipeline projects.

What becomes clear when we trace the changing contours of these infrastructural and financial networks is that the impacts of individual flashpoints like the standoff at Standing Rock ripple through the rest of the system. That is, these pipeline projects exist not plainly in competition, but in relation to one another. This is reflected not only in the strategies used by the industry, but also in the tactics and geographies of solidarity and resistance to the DAPL and other pipelines across North America. This was on clear display when water defenders resolutely refused to abandon the camps after the Army Corps of Engineers denied the easement for the final portion of the pipeline in December.[7] By maintaining that the fight was not over

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Mapping the Many–Headed Hydra:

Key Dynamics

At the end of this report, in Section 07 and 08 (beginning on page 33), you will find a series of visuals that illustrate the flux and contestation surrounding the North American oil pipeline network. While there are many dynamics at play in these images, below are three key ones to keep in mind:

1. **Pipelines exist in relation to each other.** The conditions for one project change very quickly depending on the status of other projects, market conditions, resistance, political climate, and so on. For example, in 2011 U.S. President Barack Obama announced that he would delay the approval of Keystone XL by at least a year. In reaction to this, the government of Stephen Harper aggressively asserted energy exports as a top government priority and claimed that diversifying markets away from the U.S. was a “strategic imperative” for Canada. Holding up Asia as the key target market, the Canadian government turned its attention to pushing forward the Enbridge Northern Gateway Pipeline. Then, as resistance mounted to Northern Gateway we see the introduction of proposals for the Kinder Morgan Trans Mountain Expansion and for TransCanada’s Energy East.[1]

2. **Projects come back to life, sometimes multiple times.** Over the course of the years covered in this report, several projects have been repeatedly revived. Northern Gateway, for example, was first proposed in 2002, then shelved in 2006 in favour of focusing on new lines to U.S. markets. The company then revived the project in 2008 due to demand from producers and refiners. It was ultimately rejected by the Liberal government of Justin Trudeau in November 2016, on the same day that he approved two other major projects: the Kinder Morgan Trans Mountain project and the Enbridge Line 3 “replacement,” the largest project in Enbridge history. We see here, again, the relationship between the multiple lives of these lines and the status of other projects, market conditions, resistance, and political climate.[2]

3. **The economic justification for pipelines is always shifting.** Over the years represented here, the justification for why these pipeline projects are needed has shifted back and forth between two main poles: one, the lines are needed as a way to move oil to markets; and two, pipeline construction is needed as a form of economic stimulus. After President Obama’s delay in approving Keystone XL, for example, the Canadian government emphasised the imperative of moving tar sands oil to tidewater to enable it to fetch world prices. More recently, industry and governments have been focused on the economic benefits of the infrastructure itself. In Canada, since the crash in oil prices starting in 2014, industry advocates have been arguing that private pipeline expansion is an effective form of national economic stimulus.[3] These dynamics are also explored in Section 03.
until the project was cancelled, protesters invoked the extensive social and ecological geographies surrounding and impacted by the pipeline that defy the boundaries of the company’s tidy maps.

By highlighting some of the networks surrounding the DAPL and the struggle at Standing Rock, this report illustrates that the Dakota Access is fundamentally transnational not only for its entrenchment in transnational networks of infrastructure, commodity flows, and finance, but also in a much more basic way. This transnationalism is manifest through the local, international, and global ecologies on which we all rely and which are at stake in the expansion of this and other pipeline infrastructure. It is clear in the geographies of Indigenous territories and assertions of Indigenous sovereignty that defy and supersede the international boundaries of Canada and the United States through which the pipeline passes. And it is perhaps most evident in the social infrastructures and solidarity efforts that have coalesced around the fight at Standing Rock. Importantly, this social infrastructure has been built on the acknowledgement that the ecological and social geographies that surround the site are in no way contained to the site itself. That is, the continental geographies of North American energy infrastructure are apparent not just in the threats posed by the pipeline and the ongoing expansion of petro-capitalism, but also in the strategies employed by industry and in communities’ responses.

This analysis and the title of this report are inspired by the work of radical historians Marcus Rediker and Peter Linebaugh.[8] In their riveting history of the rebellious Atlantic, these authors invoke the metaphor of Hercules and the Hydra to describe the unruly commoners—slaves, sailors, labourers, and others—who rebelled, together, against brutal conditions of exploitation and their enrolment in the colonial expansion of North America. As the authors explain, the Hercules-Hydra myth was commonly used by rulers to convey the challenge of imposing order and discipline on this globalizing system of labour. While transatlantic networks of trade and exploitation were assembled to serve the interests of empire, these networks also built social connections and common cause amongst the exploited and dispossessed, allowing commoners to join together in rebellion across spatial distance and social difference. To the rulers, the Hydra represented this seemingly mutable mass of variously dispossessed peoples: near impossible to slay, when one of her many heads was severed, new ones would grow in its place. In this way, transnational networks of resistance haunted the expanding geographies of global capitalism.

This is precisely the type of dynamism that runs through contemporary North American pipeline politics. From the pipeline pushers, this is evident in the ever-changing geographies of industry’s expansion plans and the fragmentation of approval processes so as to obscure these networks. But these continental networks are reflected right back in the transnational and organizing tactics that communities are using to stop this growing network of pipe. Finally, the situation with North American energy infrastructure is changing quickly, and increasingly so under the Trump administration. This report is not intended to be a real-time account.[9] Rather, by contextualizing the Dakota Access Pipeline within the broader social and spatial relations of North American oil pipeline politics, our aim is to propose some tools to support ongoing analysis and the broader efforts to protect waters and lands against the seemingly incessant expansion of North American extractivism.
The sun rises over Oceti Sakowin, a unified encampment of Water Protectors dedicated to protecting Standing Rock Dakota / Lakota land & water against DAPL. Photograph courtesy of Charmaine Chua, 11 August 2016, Oceti Sakowin Camp, North Dakota.
Image 02. A water protector watches the sun rise from Facebook hill, the social media outpost of Oceti Sakowin. Photograph courtesy of Charmaine Chua, 11 August 2016, Oceti Sakowin Camp, North Dakota.
01
What is the Dakota Access Pipeline?

1.1 DAPL Basics

First made public in July 2014,[1] the Dakota Access Pipeline (DAPL) is a $3.7 billion, 1,172-mile underground oil pipeline that runs from six sites in the Bakken and Three Forks oil-producing regions of North Dakota, through South Dakota and Iowa, to southern Illinois. In Patoka, Illinois, the DAPL’s terminus and a key Midwest transportation hub, the pipeline links into a network of other lines that are connected to refineries in the Midwest and along the Gulf Coast.[2]

The DAPL has the capacity to transport up to 570,000 barrels per day (bpd) of crude oil—equal to about half of current Bakken production.[3] The pipeline carries this light sweet crude across 209 rivers, creeks, and tributaries, including the Missouri River, which is one of the cleanest river tributaries in the United States today.[4]

In North Dakota, which has seen the fiercest resistance to the DAPL, documents filed as part of the permitting process indicate that Energy Transfer Partners had originally planned to route the pipeline to the north of its current route, crossing the Missouri River just north of the state capital, Bismarck, and the town of Mandan.[5] After opposition from the area’s mostly white residents, based on concerns about water contamination, the proposed water crossing was moved south to its current location just upstream from the Standing Rock Sioux Reservation. The new route crosses Lake Oahe, tributaries of Lake Sakakawea, the Missouri River twice, and the Mississippi River once.[6] In late July of 2016 the Army Corps of Engineers approved permits for the project without approval from the Standing Rock Sioux Tribe.[7]

The Dakota Access Pipeline violates the Fort Laramie Treaties of 1851 and 1868. The first Fort Laramie Treaty, signed in 1851 between the United States and representatives of the Arapaho, Arikara, Assiniboine, Cheyenne, Crow, Hidatsa, Mandan, and Sioux Nations, recognized and defined bounded national territories and guaranteed safe passage through the territory for settlers heading west in exchange for goods and services. Many nations who signed the treaty never received payment. The 1868 Fort Laramie Treaty created the Great Sioux Reservation, which included all of South Dakota west of the Missouri River, including the Black Hills, and protected hunting rights in Montana, Wyoming, and South Dakota. Note that in neither of these treaties did the Sioux cede the land in question surrounding
the DAPL route. Since this time, in its rush to seize resources and secure access to land, the United States has repeatedly violated the terms of the Fort Laramie Treaties, including by occupying the territory of the Great Sioux Reservation such that today’s fragmented reservations represent a fraction of what is stipulated in the treaty.[8] As the chairman of the Standing Rock Sioux Tribe (SRST), David Archambault II, explains, the DAPL represents the third time that the Sioux Nation’s lands and resources have been taken without permission: the first time was the Black Hills gold rush in the late nineteenth century and the second in 1958, when the Army Corps of Engineers dammed the Missouri River, creating Lake Oahe. [9] While it is beyond the scope of this report, the current events at Standing Rock should be placed within this long and ongoing colonial history. To this end, the #StandingRockSyllabus is an invaluable resource, providing conceptual background, treaty and territorial histories, and a thorough timeline of U.S. settler colonialism.[10]

The ownership and financing of the DAPL is complex. The Dakota Access portion of the Bakken system was being built by Dakota Access, LLC, a subsidiary of Dallas-based Energy Transfer Partners, LP (ETP). Bakken Holdings Company, LLC, is a joint venture between ETP and Sonoco Logistics (itself a subsidiary of ETP), which owns a 75 percent interest in both Dakota Access, LLC and Energy Transfer Crude Oil Company, LLC (ETCO), the companies responsible for developing, owning, and operating the two segments of the Bakken system.[11] Seventeen major banks have extended $2.5 billion in loans to Dakota Access, LLC for the construction of the DAPL.[12] Canadian banks involved in financing the DAPL include TD, RBC, and Scotiabank.[13] In August 2016, Enbridge Energy Partners and Marathon Petroleum announced plans to buy a $2 billion stake in the project. Energy Transfer Partners and Sunoco Logistics are using some of the proceeds from this deal to pay back some of the resulting debts.[14]

1.2 The Bakken Context

North Dakota contains some of the United States’ largest oil fields and, since 2012, has been the second-largest crude-oil-producing state, after Texas. The Bakken and Three Forks production areas are part of the Williston Basin, a deposit of several hundred thousand square miles spanning North Dakota, South Dakota, Montana, and the Canadian provinces of Saskatchewan and Manitoba.[15] In 2013 the U.S. Geological Survey estimated that there were more than 7 billion barrels of technically recoverable oil in the Bakken and Three Forks deposits.[16] While the formation was discovered in the 1950s and some amount of early oil production occurred, the deposit remained largely technically inaccessible until the early 2000s, by which time advances in hydraulic fracturing and horizontal drilling techniques made exploitation of these reservoirs commercially viable. Since that time, production has exploded, with crude oil production in North Dakota increasing thirteen times between 2003 and 2014, by which time the state accounted for 12.5 percent of total U.S. crude oil production.[17]

The oil in the Williston formation is what the petroleum industry calls “tight oil”: oil that is extracted from sandstone or shale and therefore considered to be “low permeability.” Tight oil is extracted using combined horizontal drilling and hydraulic fracturing (or “fracking”) methods similar to those used to extract shale gas. This involves injecting wells with water, sand, and slickwater chemicals at high pressure in order to fracture the rock.[18] Tight oil is difficult, resource intensive, and dangerous to extract. U.S. oil production has recently reached levels not seen since the 1970s and this increase is largely due to the rise of oil fracking; in 2015 tight oil accounted for more than half of U.S. oil production.[19]

Much like with the Alberta tar sands, the rapid expansion of oil fracking has changed the geographies of oil production in the United States. Beyond the actual site of production the oil boom has also spurred changing practices and demands when it comes to the transportation of oil as industry and governments have worked to get this oil, first, to refineries and, second, to domestic and, importantly, international consumers. To this end, the DAPL is the first part in the larger Bakken System: while the DAPL transports Bakken crude from North Dakota, to the hub in Patoka, Illinois, from there, the Energy Transfer Crude Oil Pipeline (ETCOP) would run to the U.S. Gulf Coast, offering Bakken crude access to significant refining capacity and international export markets.[20] Announced in 2013, the ETCOP is a joint venture of Energy Transfer and Canadian energy delivery company Enbridge.[21] The main
part of the ETCOP is comprised of an existing 678-mile natural gas Trunkline pipeline that runs between the Gulf Coast and Illinois and Indiana. This pipeline would be converted to oil and extended by 66 miles. [22] This conversion would create the first pipeline transportation option for getting crude oil from the Midwest U.S. to the eastern Gulf Coast, providing access to refineries and ports in this “highly desirable market” for both Canadian and Bakken Crude.[23] Adjoining the two halves of the Bakken System is the Patoka tank farm, in south-central Illinois.

In August of 2016 Enbridge announced an agreement to acquire equity interest in the Bakken System as a whole. A more detailed exploration of Enbridge’s role in this story is offered below, but suffice to say for now that Enbridge’s involvement in this project signals the continental character of the events unfolding at Standing Rock, not only when we follow the money, but also when we follow the pipe. Enbridge’s investment in the Bakken system indicates not only that the company intends to expand its business in the Bakken industry; it also points to Enbridge’s interest in working around the public scrutiny that accompanies high-profile major new-build projects. By buying into already-existing pipeline, the company positions itself to expand on this infrastructure, hoping to build more piecemeal continental networks in a more expedited and low-profile way.
Led by Indigenous youth and women, the resistance to the DAPL has been strong and widespread. Not only were Indigenous nations from across Turtle Island represented in the camps, but diverse communities and peoples have been demonstrating their solidarity with Standing Rock and their resistance to pipeline expansion in their own communities as well.[1] While the focus of this report is more on industry dealings, this cannot be separated from the broad geographies of resistance that pipeline companies and their supporters have faced again and again as they have tried to expand their networks. While the account of the resistance to the DAPL provided here is brief and necessarily incomplete, it provides an illustration of the intensity of the response, as well as the geographies of solidarity and alliance across struggles, borders, and social locations.

For a more complete timeline of events, see http://sacredstonecamp.org/dapl-timeline/.

2.1 Why People Are Resisting the DAPL

As opposition to the DAPL has grown and diversified, so too have the motivations for this opposition. The Standing Rock Sioux Tribe has led the resistance to the DAPL. Not only did permits get approved and construction begin without any meaningful consultation with the tribe, but the first draft of the plan did not even mention the tribe, through whose treaty and ancestral land the pipeline would directly pass.[2] While the SRST has opposed the project since they learned about it in 2014, resistance intensified when the construction of the pipeline reached the segment that runs through unceded treaty territory within half a mile of the reservation. Central to the fight is the protection of water and sacred places: the construction of the pipeline threatens to desecrate tribal burial grounds and contaminate the river. The Missouri River not only provides drinking water to the tribe and millions of Americans; it also supports thousands of acres of ranching and farming lands in the region. To this end, others who depend on the river—ranchers, farmers, and nearby small towns—have stood in support of the protests.[3] In July 2016 the Standing Rock Sioux Tribe filed a complaint in federal court in Washington, D.C., charging that the Army Corps of Engineers did not consult with the tribe or examine the tribe’s objections, and overlooked the potential impact of the pipeline on ancestral lands.
But, these specific grievances exist within a much broader set of political struggles that also underpin what is happening at Standing Rock: struggles over Indigenous jurisdiction and sovereignty, for the protection of water, for climate justice, and for a future that is not rooted in violent social and environmental exploitation.

2.2 North Dakota: The Standing Rock Sioux Tribe and the Sacred Stone Spiritual Camp

Since the Standing Rock Sioux Tribe discovered that the Army Corps of Engineers had given its approval for the DAPL on July 26, 2016, the centre of resistance to the DAPL has been in North Dakota, on and surrounding the Standing Rock Sioux Reservation.

2.2.1 A Movement led by Youth and Women

Since its beginning, the movement at Standing Rock was led by youth and women of the Oceti Sakowin. Upon learning about the pipeline proposal, it was youth who acted first, launching a campaign called Rezpect Our Water. Beginning in July, 38 youth from the Standing Rock Reservation ran over 2,000 miles from their homes in North Dakota to Washington, D.C., to protest the Dakota Access Pipeline. Upon arrival, they hand-delivered a petition with 160,000 signatures opposing the pipeline to the U.S. president.[4] Indigenous youth continued (and continue) to play a central role in the Standing Rock movement as it unfolded. This and other Indigenous youth-led movements are clear about the interlocking systems of oppression at play and insist that struggles for environmental justice must also be struggles for decolonization and land restitution.[5]

Kim TallBear explains the leadership of women and youth—in this and other social and environmental movements—within an ethics of caretaking. As she explains it, this leadership is rooted in principles of caretaking, not only for people and nations, but also for the land and relations that are other-than-human. In this way, movements led by Indigenous women “provide alternative visions for being better relatives with each other and the planet.”[6]
Water protectors gather near Standing Rock Reservation across the water from the sacred ground of Turtle Island, as police line the island hill beyond them. Photographs courtesy of Madison Van Oort, 11 August 2016, North Dakota.
Image 03. Water protectors gather near Standing Rock Reservation across the water from the sacred ground of Turtle Island, as police line the island hill beyond them. Photographs courtesy of Madison Van Oort, 11 August 2016, North Dakota.
people to return home in light of the decision, the severity of the looming North Dakota winter, and the mounting strain on the tribe’s resources.[14] While groups began working to smoothly transition the movement away from the camps and toward economic sanctions and other forms of action, some water defenders remained at Sacred Stone Camp.[15]

President Trump signed an executive order demanding the expedited completion of the DAPL’s new environmental review on January 24 and, by February 1, the Army Corps of Engineers had received directives to proceed with the easement needed to drill under the river, despite its earlier commitments to conducting an environmental impact study.[16] The following day North Dakota police arrested over 70 water protectors and, on February 7, the Army Corps provided notice of its intent to grant the easement, signalling that construction was imminent.[17] Later that month the camps were forcibly evicted.[18]

2.2.3 The Courts

On July 27, 2016, the day after discovering that the Corps had granted approval to the DAPL, the Standing Rock Sioux Tribe filed a complaint in federal court in Washington, D.C., charging that the Army Corps of Engineers did not consult with the tribe or examine the tribe’s objections, and overlooked the potential impact of the pipeline on ancestral lands.[19]

On August 15, 2016, Dakota Access, LLC filed a strategic lawsuit against public participation (SLAPP) in federal court in Bismarck, North Dakota, against a number of individuals including the SRST Chairman, David Archambault II. Dakota Access, LLC sought an injunction against anyone interfering with construction of the pipeline.[20] This lawsuit was an attempt to silence their opposition to the project and to get the pipeline built before the federal lawsuit filed by the tribe in July could be decided.[21] On September 19 a federal judge dropped the temporary restraining orders against Archambault II and other tribal leaders.[22]

A ruling on the SRST’s original challenge to federal regulators was due in early September, but was delayed. On September 5, the SRST filed an emergency motion for a temporary restraining order after burial sites and other sacred sites were destroyed by pipeline construction.[23] The next day a federal judge in Washington, U.S. District Judge James Boasberg, ordered a temporary halt to construction on some, but not all, of the section of Dakota Access being opposed by the Standing Rock Sioux Tribe and the Standing Rock encampment.[24] He ruled that work would temporarily stop between North Dakota State Highway 1806 and 32 kilometres east of Lake Oahe, but that work would continue west of the highway because he believed the U.S. Army Corps of Engineers does not have jurisdiction on private land. The restraining order did not include the portion of land on which protesters had forced a stop to construction because it contains sacred burial sites.[25]

On September 9, District Judge James Boasberg ruled against the SRST’s request to stop work on the pipeline.[26] Despite Judge Boasberg’s ruling, the Department of Justice, Department of the Army, and Department of the Interior issued a statement saying that the army would not authorize construction on Army Corps land bordering Lake Oahe until it could determine whether any decisions regarding the site made under the National Environmental Protection Act or other federal laws should be reversed. The army requested that in the meantime the company voluntarily stop construction within 20 miles east or west of the lake. The joint statement also committed to conducting “government-to-government” consultations related to tribes’ concerns about this type of large infrastructure project.[27]

Later that month, the D.C. Circuit Court of Appeals temporarily halted construction of the pipeline within 20 miles of either side of Lake Oahe along the Missouri River, citing the need for more time to rule on the SRST’s request for an emergency injunction against construction. The ruling made mandatory Obama’s request that companies voluntarily stop construction in this same area.[28] Then, in mid-October, the D.C. Circuit court denied the tribe’s appeal of the September 9 ruling.[29]

2.3 Resistance in Iowa

While the centre of resistance has been at Standing Rock, farmers, ranchers, and local communities who rely on the impacted land and watershed are also voicing their concern. Here too, people have protested and tried to block construction.[30]
In Iowa, local farmers are worried that the construction was disturbing the quality of their soil.[31] In this state, the company used eminent domain law—which gives the state the power to seize private property and assets for public uses—in order to secure access to land. Fifteen farmers filed a lawsuit against Dakota Access, LLC challenging the use of eminent domain to seize private property.[32] But in August the Iowa Utilities Board denied a request by the landowners to halt construction while their case was heard.[33]

The Mississippi Stand Camp was established at the point where the DAPL was set to cross under the Mississippi River in southeast Iowa. Here, too, campers and their supporters used direct action to try to block construction of the pipeline. While the camp was evicted in early October, their action continues.[34]

2.4 Geographies of Solidarity: Alliances across Struggles and Borders

As the fight at Standing Rock intensified, support and solidarity spread both geographically and across social struggles. Supporters flocked to the camps not only from far and wide, but from a wide range of social locations. Whether driven by shared histories of dispossession, principles of solidarity, obligations and responsibilities rooted in treaty histories, the sheer urgency of our collective need for clean water, or countless other motivations, diverse groups and peoples have been standing together against this project both at Standing Rock and in their home communities across North America and globally. Increasingly, supporters declared: what’s happening at Standing Rock is everyone’s issue.

The result has been a transnational network of support. Early support came not only from local farmers and nearby residents, but also from social movements including Black Lives Matter, Labour for Standing Rock, religious organizations, and many others.[35] When thousands of military veterans coordinated and self-deployed to Standing Rock from across the U.S. in December, this massive show of solidarity that built on months and years of organizing and direct action finally pushed the Army Corps to halt construction by denying the easement needed by Energy Transfer Partners to drill under Lake Oahe.[36]

These networks of solidarity have also extended far beyond the site of the protest camps. In these cases, the continental network has been deployed as an explicit strategy to stand against industry’s own dispersed character: its vast international linkages and tendency to shift territorially as a way to skirt resistance. Efforts to target the project’s funders through the #DefundDAPL campaign, for example, have invoked global financial networks, inspiring action across the countries that are home to these financial institutions.[37] December 2016 was declared a global month of action against the DAPL and communities around the world took direct action targeting the banks behind the pipeline.[38]

In a more grounded example, in early February 2017, land defenders and water protectors from Canada and the United States met in Secwepemc ul’ecw (Kamloops, British Columbia) to build alliances against tar sands and pipeline expansion. At the gathering, called Standing Rock to Secwepemc ul’ecw: Pipeline Resistance North and South of the Medicine Line, Indigenous leaders shared lessons from Standing Rock and drew links between the DAPL and the recently approved Kinder Morgan Trans Mountain pipeline. The gathering led to a declaration that included an avowal to stand with water protectors at Standing Rock and across Mother Earth.

Perhaps the clearest example of this type of continental strategizing is the Treaty Alliance Against Tar Sands Expansion: a pan-continental treaty between Indigenous nations vowing to resist the use of their territories for the expansion of the Alberta tar sands, including for transportation.[39] While not specific to the Dakota Access project, the continental treaty is a testament to the linkages between North American pipeline projects and the imperative of coordinating resistance. To date, the treaty has over 100 signatories across Canada and the northern United States, including the Standing Rock Sioux. By aligning across such a vast territory, signatories hope to limit industry’s ability to escape the problem of resistance by simply finding alternate routes and locations for their infrastructure projects. [40]
The Continental Contingency of North American Pipelines

Despite the dubious grounds on which pro-pipeline arguments are built—explained below—Canadian and American politicians remain committed to the relentless expansion of oil and gas production and transportation. As oil workers and communities embedded in the industry have suffered job losses, underemployment, and real hardship as prices and production have declined over the past three years, especially in Canada, pipelines have been heralded as the solution to this social devastation. This section provides a brief round-up of the key pipelines that have been proposed for transporting Alberta and Bakken crude to tidewater for export and to key sites of concentrated refining capacity. This is by no means a full picture of the North American crude pipeline network; rather, it represents the major oil pipeline projects that have come under great public scrutiny. The routes to the Gulf of Mexico that have served as alternatives to the Keystone XL have been completed in a piecemeal fashion and have been subject to expedited approval processes (see section 3 for details on Nationwide Permit 12); together this has enabled TransCanada and Enbridge to usher in these new networks without the level of public scrutiny these other lines have seen. As becomes clear from reading the following synopses, in the face of barriers to expanding their networks, the energy delivery industry, backed by governments, has been extremely adaptable. As people have risen up across North America in defence of land, water, and the future, pipeline companies have repeatedly worked to circumvent these geographies of resistance. Despite the long approval processes, huge geographical expanses, and massive capital investment characteristic of these projects, the result of this dialectic has been a high degree of connectivity and dynamism throughout the industry.

Especially in the wake of the election of U.S. President Donald Trump, at the time of writing, the fate of several key pipelines remains unclear. This environment of uncertainly encompasses not only the DAPL, but also the Keystone XL Pipeline, which President Trump has tried to revive, despite its 2015 rejection by the President Obama. But what this report aims to make clear is that this contingency is not contained to these individual projects. Rather, North American pipelines comprise a network with a series of moving and flexible parts; a single development on a single project—say, the
revival of the Keystone XL—has effects that ripple through the rest of the system. Approvals, rejections, and movements to resist U.S. pipelines reorganize the incentives and viability of other U.S. projects, but also pipeline projects in Canada. The current contingency, as such, is a continental contingency. In taking stock of the shifting status of individual projects, the section below hopes to illustrate these continental connections and resultant contingency.

3.2 The Dubious Economics of North American Oil Pipelines

The events at Standing Rock are informed by the broader scramble to get North American oil to refineries, ports, and markets, and to build the transportation infrastructure that would make this possible. This drive has been particularly intense in the context of the Alberta tar sands—but is also, as we have seen, present in the Bakken context—as industry and decision makers have repeatedly invoked the “imperative” of accessing new markets.[1]

The explanation for why new pipelines are needed is a confusing cocktail of economic arguments. In the case of tar sands bitumen, this so-called imperative has been framed, on one hand, as a solution to the problem of Western Canada having exceeded its pipeline capacity—which is said to keep prices low. On the other hand, by facilitating access to international markets, it is presented as a way to close the price gap between North American and global oil markets. Because the infrastructure is not there to transport this crude to marine ports, pipeline boosters claim, Canadian producers have been beholden to the U.S. market and, as a result, unable to get world prices for their product.[2] By getting oil to tidewater, we’re told, companies will be able to access world oil prices, boost sales, and reinvest in increased production. [3]

More recently, industry and governments are heralding the economic benefits of the infrastructure itself: most notably, infrastructure expansion, including pipelines, has formed a central part of U.S. President Trump’s agenda. In Canada, since the crash in oil prices starting in 2014, industry advocates have also been drumming up an argument that—despite its terrible performance as a job creator—private pipeline expansion is an effective form of national economic stimulus.[4] The active debate that surrounds these different claims has thrown into question the “need” for expanded pipeline capacity.[5] But after months of study, the main conclusion we drew from scrutinizing these arguments and debates was that this is the wrong conversation.

First, these technical and market-based arguments are opaque. After sifting through them, we have been unable to discern a clear or convincing consensus as to why new pipelines are needed. But, more importantly, there is a problem with the fundamental terms on which these arguments are based: economic and technical arguments for pipeline expansion are predicated on an assumption of continued expansion of oil production. This declared need for incessant economic growth limits the debate, steering the conversation away from the urgent need to question this assumption.

Crucially, researchers have found that new pipeline projects would only be needed “if significant future expansion of oil sands production were to occur at levels that would push Canada well beyond established climate pollution limits and Alberta’s emission cap.”[6] Way back in 2011, the International Energy Agency (IEA) flagged the centrality of energy infrastructure to the fate of the climate, warning that investing in new fossil fuel infrastructure (buildings, plants, pipelines, etc.) risks locking us into a future of expanded fossil fuel production beyond what the planet can bear.[7] The IEA’s analysis indicated that 80 percent of the total carbon dioxide (CO₂) emissions permissible through 2035 under the 450 Scenario—the IEA’s widely used but conservative scenario in which the rise in average global temperature is limited to 2°C[8]—was already “locked-in” by infrastructure currently in place or under construction in 2011.[9]

While pipeline boosters have been widely—and rightly—critiqued on the basis of their factual accuracy, findings like these highlight the degree to which the pipeline question is ultimately a key political question about the vision of the future we are willing to accept. We need to reclaim this crucial conversation from a narrow economic rhetoric that assumes incessant growth and externalizes the real social and ecological consequences of this agenda.
3.3
The Fate of Canadian Tar Sands Pipelines

This section provides a brief round-up of the key pipelines that have been proposed for transporting Alberta bitumen to tidewater, through both Canada and the United States.

3.3.1
Enbridge Northern Gateway (Rejected)

The proposed Enbridge Northern Gateway pipeline would have shipped 525,000 bpd of tar sands crude 1,177 kilometres from near Edmonton, Alberta, to Kitimat, British Columbia. From here, the oil would have been loaded onto tankers, where it would have travelled through the rough, pristine, and remote waters of the Douglas Channel, on its way to Asian markets. The most controversial of domestic Canadian pipelines, the Northern Gateway drew massive resistance for its incursion into unceded Indigenous lands, its threat to environmentally sensitive areas, and its promise to expand tar sands production.

In June 2016, the Canadian Federal Court of Appeal ruled that the project approval granted in 2014 must be set aside because the government had failed in its duty to consult with Indigenous peoples who would be impacted by the project. In September 2016 proponents and the federal government both announced that they would not appeal the decision. Two months later the federal cabinet finally and ultimately rejected the proposed project.

3.3.2
Kinder Morgan Trans Mountain (Approved)

Built in 1953, the Trans Mountain pipeline is currently the only line that carries oil from Alberta (Edmonton) to the British Columbia coast (Burnaby), where it can access ports for export across the Pacific. In April 2012, Kinder Morgan Canada proposed to expand the capacity of the 1,150-kilometre line from 300,000 to 890,000 bpd. The Trans Mountain expansion was the subject of the “battle of Burnaby Mountain” in the fall of 2014. As surveying for the pipeline began, protests and civil disobedience on the mountain prevented crews from carrying out work for a time. After the company sought an injunction to direct the Royal Canadian Mounted Police to prevent protesters from interfering with drilling, in a huge show of opposition to the pipeline, crowds continued to grow, hundreds risked arrest, and the protests stayed in the public eye. After the British Columbia Supreme Court rejected an injunction extension, the company was eventually forced to withdraw from the mountain.

The National Energy Board conditionally approved the expansion in May 2016, naming 157 conditions. After the approval, in response to widespread concern that the review process had been biased, the federal government tasked a three-member panel to provide further questions for cabinet to consider. In its report, released in November 2016, the panel responded to outstanding questions about federal commitments on climate change and Canada’s relationship with Indigenous peoples. At the time, Vancouver Mayor Gregor Robertson warned, “I think you’ll see protests like you’ve never seen before on this one,” should the federal government approve the pipeline.

Prime Minister Justin Trudeau and his cabinet gave final approval to the project on November 29, 2016.

3.3.3
TransCanada Keystone XL (Rejected and Revived)

TransCanada submitted its application for the Keystone XL Pipeline to the U.S. government in 2008. The proposed pipeline would transport tar sands oil 1,897 kilometres from Hardisty, Alberta, to Steele City, Nebraska, picking up Bakken crude along the way. Total capacity of the proposed line would be 730,000 bpd. From Steele City, the Keystone XL would hook into the broader Keystone network, which extends to the Gulf of Mexico. The Keystone XL is a high-profile proposal: unlike the DAPL and the other sections of the Keystone system, because the Keystone XL crossed an international boundary, it required approval from the U.S. State Department. The Canadian National Energy Board approved the Canadian portion of the project in 2010. But after a seven-year review process and widespread resistance, President Obama rejected the Keystone XL Pipeline in November 2015.

In January 2016, TransCanada launched a U.S. $15 billion challenge under the North American Free Trade Agreement.
Trade Agreement. It has also launched a separate federal lawsuit seeking a declaration that Obama overstepped his constitutional power.[19]

The election of Donald Trump, with his promise to invest in major infrastructure projects alongside his commitment to rolling back climate policy, reinvigorated the debate about the pipeline.[20] In his first week in office, President Trump signed an executive order expediting the review and approval of the Keystone XL Pipeline and in April the project entered its final review.[21]

3.3.4 Enbridge Line 9B (Operational)

Approval for the reversal and expansion of Enbridge Line 9B was issued in March 2014. Four decades old and originally constructed to run west to east, the line had been reversed in the late 1990s. The most recent re-reversal and expansion allows for the shipment of 300,000 bpd of Western crude, through densely populated south-eastern Ontario, to Quebec refineries. Construction on the project began in the fall of 2014 and the line is now operational.[22]

3.3.5 TransCanada Energy East (Under Review)

While the proposed Energy East pipeline is the longest and highest-capacity pipeline in the queue, it has, thus far, received less public attention. The Energy East line would run 4,600 kilometres from Hardisty, Alberta, transporting 1.1 million bpd of oil to the Irving refinery and export terminal in Saint John, New Brunswick. Along the way, it would cross through six provinces, under 2,963 identified waterways, and through or near 51 First Nations.[23] About two-thirds of the route would consist of a repurposed old natural gas line, while new pipe would be built through Alberta, Quebec, and New Brunswick, including through Wolastoqiyik and Mi’kmaq territories covered by Peace and Friendship Treaties and recognized as unceded by the Supreme Court of Canada.[24] While the pipeline has been billed as a nation-building project that will bring jobs and more affordable oil to Eastern Canada, refineries along the pipeline’s path do not have the capacity to refine this oil, suggesting that the oil will be loaded onto ships in the Bay of Fundy and exported. [25] In December 2016, the Senate Standing Committee on Transport and Communications recommended that the National Energy Board examine the Strait of Canso, in Cape Breton, Nova Scotia, as an alternative endpoint for the line.[26]

Energy East was first announced publicly in August 2013, in the midst of debates about Keystone XL and Northern Gateway. National Energy Board hearings on the project were delayed in the summer of 2016 when it was revealed that two board members had met privately in 2015 with former Quebec premier Jean Charest, who was a consultant for TransCanada at the time. TransCanada projects that the line will be operational by 2021.[27]

3.4 Oil by Rail: The Lac-Mégantic Disaster and the Focus on Safety

The other key event that informed the politics of pipeline expansion during this period was the tragic Lac-Mégantic rail disaster. In the early morning of July 6, 2013, an unattended Montreal, Main and Atlantic Railway freight train carrying 7.7 million litres of crude oil in 72 cars derailed in the Quebec town of Lac-Mégantic. According to the Transportation Safety Board of Canada, 6.6 million litres of crude were immediately released, sparking fire and explosions that destroyed much of the community’s downtown and killed 47 people, making it one of the deadliest train accidents in Canadian history.[28] The train was carrying Bakken crude from New Town, North Dakota, to the Irving refinery in Saint John, New Brunswick.

The disaster immediately reinvigorated calls for pipeline expansion, this time on the basis of safety. Drawing on familiar arguments, boosters argued that rapid expansion of oil production in Alberta and the Bakken region had outpaced the expansion of North American pipeline infrastructure, forcing producers to rely on dangerous modes of transportation, including rail.[29] Industry and governments claimed that production would expand regardless; blocking pipeline expansion would do nothing but ensure that communities along these rail lines remained at risk.
Pipeline boosters continue to push the “imperative” of pipeline expansion on safety grounds by exploiting the real tragedy and fear surrounding the Lac-Mégantic disaster.[30]

3.5 Completing the Route to the Gulf Coast

While all eyes were on TransCanada’s proposed Keystone XL project, between 2012 and 2014 Enbridge was quietly assembling and expanding an alternative network that would give Alberta and Bakken producers increased access to the U.S. Gulf Coast. Segment by segment, Enbridge has been working to expand the capacity of this Great Lakes network.[31]

3.5.1 The TransCanada Network

In 2014 Canadian company TransCanada built the Gulf Coast Project from Cushing, Oklahoma, to Nederland, Texas, on the Gulf Coast as an attempt to relieve the glut of oil in the Midwest. Part of the broader Keystone system, this was phase three in a network meant to run from Hardisty to the Gulf Coast. The Keystone XL Pipeline was meant to be phase four, connecting the Gulf Coast extension, through the Keystone–Cushing extension, directly to Hardisty.[32] Like the DAPL, the Gulf Coast Project was approved using Nationwide Permit 12 (see section 04).[33]

3.5.2 The Enbridge Network: The Superior Terminal

Constructed in 1950, the Superior Terminal in Superior, Wisconsin, has increased in significance in recent years with the expansion of tar sands and Bakken pipe networks through the Midwest United States.[34] The Superior Terminal sits at a key junction in Enbridge’s alternate route to the Gulf, connecting Hardisty, Alberta (through the Alberta Clipper line), with Midwest refineries and storage (through the Southern Access Extension Project) and, ultimately, the Gulf Coast (through the Flanagan South and Seaway Pipelines). In 2012 Enbridge, through its partial ownership of North Dakota Pipeline Company, LLC, also began permitting for the Sandpiper Pipeline Project, which would connect Bakken crude into the Clearbrook, Minnesota, and Superior, Wisconsin, hubs.[35] The Sandpiper was eventually cancelled (see details below).

3.5.3 The Enbridge Network: Line 67 Expansion

Often known as the Alberta Clipper Pipeline, Line 67 runs about 1,000 miles along Enbridge’s mainline corridor between Hardisty, Alberta, and the Superior Terminal in Superior, Wisconsin, transporting Alberta oil to the U.S. market for refining and export. Because this line crosses the international border, it required approval from the U.S. State Department, and when it approved the Alberta Clipper in 2009, the department limited Enbridge to importing 450,000 bpd. But in a sneaky move that involved re-routing the oil into another older line for the border crossing, and then back to Alberta Clipper on the other side, Enbridge was able to skirt these limitations on the line’s expansion.[36] By adding and modifying pump stations along the line, in a two-phase expansion, Enbridge increased the capacity of this line to its full design capacity of 800,000 bpd.[37]

3.5.4 The Enbridge Network: Line 61 Upgrade

Referred to as the Southern Access Pipeline Project during construction, Line 61 runs from the Superior Terminal to Enbridge’s Flanagan Terminal near Pontiac, Illinois, where it networks with the Gulf-bound Flanagan South–Seaway system. Line 61 became operational in 2009 and has since been subject to a two-phase expansion involving the construction of new pump stations. This expansion, which will bring Line 61’s capacity to 1.2 million bpd, was set to be completed in 2016.[38] The second phase of the expansion was deferred in February 2017. The company explained that, based on current supply projects, the plans to expand Line 3 (see below) and the expandability of other lines, the added capacity of the Line 61 Phase 2 expansion is no longer needed. [39]
3.5.5
The Enbridge Network:
The Flanagan South and Seaway Pipelines

In 2012 Enbridge and Enterprise Products Partners completed a project to reverse the flow of the Seaway Pipeline, which runs from Cushing, Oklahoma, to Freeport, Texas. Two years later, the Seaway was twinned, more than doubling its capacity.[40] In late 2014, Enbridge completed the Flanagan South line, which runs 593 miles from Pontiac, Illinois, to the massive tank farm in Cushing, where it can pump crude from Alberta and the Bakken region into its Seaway connection to the Gulf.[41] As then-Premier of Alberta Jim Prentice explained, “The completion of these pipelines creates the first large-volume, direct link of Canadian crude to the U.S. Gulf Coast, where North America’s largest concentration of heavy oil refineries is located.”[42] In early 2015, Canadian crude began to flow through this network, doubling the shipments reaching the Gulf Coast.[43] Like the DAPL, the Flanagan South line was approved using Nationwide Permit 12 (see section 5).[44]

3.5.6
The Enbridge Network:
Line 3 “Replacement”

The original Line 3 was constructed in 1960 and entered into operation in 1968. It begins in Edmonton and, like Line 67, runs along the Enbridge Mainline corridor to the Superior Terminal. Because of its fragility (due to age and poor practices at the time of construction), the line is under pressure restrictions and unable to operate at capacity.[45] Rather than replace the aging line, as the project name suggests, Enbridge is seeking to abandon the line in place and build a new, higher-capacity line that would run along the same route as the original Line 3 (the Mainline corridor) between Hardisty, Alberta, and Clearbrook, Minnesota. Between the Clearbrook Terminal and the Superior Terminal, the route veers to the south of the original line, where it would follow the same route as the proposed Sandpiper line (see below).[46] According to Enbridge, this re-routing is due to the fact that the right of way that currently runs from Clearbrook to Superior is full as it already contains Lines 1, 2, 3, 4, 67, and 13.[47] But the southern route would pass through Minnesota’s lake country, farmland, 1855 treaty territory, and an area of abundant wild rice—an important source of food, income, and meaning for the Anishinaabe people whose traditional territory this is.[48]

The $7.5 billion Line 3 “replacement” program is the largest project in Enbridge history.[49] But by characterizing this replacement and relocation of the line as simply maintenance, Enbridge managed to convince the State Department that no review is needed for what is, in essence, a new project. The Canadian government, meanwhile, approved the project in November 2016.[50]

The expansion of the Alberta Clipper line will free up this new Line 3 to transport 790,000 bpd, expanding Enbridge’s capacity to transport tar sands crude across the border (Lines 3 and 67) from 840,000 to 1.6 million bpd—about twice the capacity of the proposed Keystone XL.[51] Of course, the abandonment of the original Line 3, which the company promises to seal, raises a host of other questions about safety and contamination.

3.5.7
The Enbridge Network:
The Sandpiper Project (Cancelled)

Originally proposed in 2013, the Sandpiper Pipeline Project aimed to increase Enbridge’s capacity to move Bakken oil. The Sandpiper was a proposal to construct a new 616-mile, 375,000 bpd crude oil pipeline from Enbridge’s Beaver Lodge Station, near Tioga, North Dakota, to the Superior Terminal.[52] On September 1, 2016, after almost three years of regulatory delays, Enbridge Energy Partners withdrew its applications with the Minnesota Public Utilities Commission for the Sandpiper Pipeline Project.[53] In a news release the company explained that “the project should be delayed until such time as crude oil production in North Dakota recovers sufficiently to support development of new pipeline capacity. Based on updated projections, EEP believes that new pipeline capacity will not likely be needed until beyond the partnership’s current five-year planning horizon.”[54] One month earlier, the company had indicated its intention to focus on the Bakken System by announcing its $1.5 billion investment.[55]
3.5.8
The Enbridge Network:
The Energy Transfer Crude Oil Pipeline (ETCOP)

In 2013, Enbridge struck a deal with Energy Transfer Partners on what is now the southern part of the Bakken System. In a fifty-fifty joint venture, the companies proposed to convert the more than 700-mile Trunkline natural gas system to oil, allowing for the transport of crude from the Patoka, Illinois, hub to the eastern Gulf Coast. Energy Transfer said that what was then called the Eastern Gulf Crude Access Pipeline Project would be the first line to carry crude from the Midwest to the eastern Gulf Coast.[56] Vern Yu, vice president of business development and market development for Enbridge, said of the deal: “It should help producers with their pricing because it opens up a significant new market for both Bakken and Canadian heavy.”[57] As we have seen in reviewing the expansion projects above, at this time, Enbridge was investing in a lot of projects that networked through the Patoka hub; the Trunkline conversion constituted an important part of that network expansion. Now this line constitutes the southern part of the Bakken System and is called the Energy Transfer Crude Oil Pipeline. The line will terminate in Nederland, Texas, and was originally projected to be in service by the end of 2016.[58]

3.6
The Forest for the Trees:
The Enbridge GXL

The Enbridge GXL system[59]—the network that spans the Great Lakes and U.S. Midwest before reaching for the Gulf Coast—cumulatively, represents an alternative route to the Keystone XL for transporting both Alberta and Bakken crude to Gulf refineries and ports. In their detailed study of this network, Bruno et al. argue that the together, the pipelines in the Enbridge GXL system can carry 2.5 million bpd.[60] Like each segment of the GXL, the Dakota Access Pipeline also sits within this broader context of the growing oil transportation networks that criss-cross North America, the sum of which is much greater than its individual parts. By buying into the Bakken System, Enbridge continues to expand its networks that connect increasing amounts of Alberta and Bakken crude to refineries and global markets.
Because the Keystone XL would cross an international boundary, it triggered a State Department analysis, thereby leaving the approval decision with the U.S. president. Being a domestic pipeline, the Dakota Access project, conversely, was subject to a much different—less robust and much faster—approval process. Unlike most other major energy projects, domestic pipelines built largely on private land in the United States don’t usually require overarching permits from the federal government.

Increasingly, these projects are assessed using something called Nationwide Permit 12 (Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act), which is designed to increase efficiency for the approval of projects that are anticipated to have minimal environmental impact. Rather than assess these pipelines as major projects, the U.S. Army Corps of Engineers, which issues permits for construction on and near waterways, approaches them as a series of fragments. As such, each line is assessed as a series of individual projects, with a focus on the individual water and wetland locations rather than the overarching or cumulative effects of the project. This process grants exemption from the environmental reviews that are required under the Clean Water Act and the National Environmental Policy Act. These exemptions are granted on the basis that the pipeline is treated as a series of small construction sites.[1]

The controversial Nationwide Permit 12 was widely used under the Obama administration. Parts of both Enbridge’s Flanagan South and TransCanada’s Gulf Coast Pipelines were expedited under Nationwide Permit 12.[2] According to comments submitted to the Army Corps of Engineers from a collective of environmental organizations in August 2016, it is only since 2012—following the rejection of the fist application of the Keystone XL pipeline—that the Corps has used Nationwide Permit 12 to approve major pipeline projects.[3]

The Dakota Access Pipeline was fast-tracked from the beginning using the Nationwide Permit 12 process. In the case of the DAPL, reviewing the project under Nationwide Permit 12 relieved it from being subject to other forms of evaluation including broader public review, evaluation through the National Environmental Policy Act and the Endangered Species Act, and other regulations.[4] Nationwide Permit 12 was not designed to streamline major projects, like the Dakota
Access, that have broad environmental impacts. But by dividing these projects into smaller segments, companies have been able to access this expedited approval process and skirt the type of scrutiny to which the Keystone XL was subject.
In addition (and related) to the fast-tracking, fragmentation, and avoidance of approvals processes, companies are focusing in on another important strategy for skirting public scrutiny: the consolidation of corporate control and an increased emphasis on “pipe in the ground.” [1] As industry and governments have repeatedly encountered opposition to new-build projects, companies are beginning to understand the political advantages of consolidating control over existing infrastructure. Enbridge offers a clear example of this trend: over the past year, the company has been focused on expanding its ownership of the North American network. This is part of an effort to neutralize opposition and to build flexibility into Enbridge’s operations.

On August 2, 2016, Enbridge announced that Enbridge-held company Enbridge Energy Partners would acquire 27.6 percent interest in the full Bakken System, consisting of the Dakota Access Pipeline and the Energy Transfer Crude Oil Pipeline. The acquisition is part of a joint venture with Marathon Petroleum Corporation, which entered into an agreement to acquire a 49 percent equity interest in the holding company that owns 75 percent of the “System” from an affiliate of Energy Transfer Partners, LP and Sunoco Logistics Partners LP.[2] In the press release, the president of EEP, Mark Maki, explained the advantages of the Bakken System: “This acquisition is an attractive opportunity to participate in a pipeline system that will transport crude oil from the prolific Bakken formation in North Dakota to markets in eastern PADD II and the U.S. Gulf Coast (“USGC”) providing another important link in our market access strategy that is driven by improving netbacks and access to the best markets for our customers...Potential also exists for expansion of the pipelines should customer demand warrant.”[3]

Then in September, Enbridge announced plans to merge with Spectra Energy: a Houston-based pipeline and midstream company. The merger renders Enbridge the largest energy infrastructure company in North America and endows it with major new gas pipeline infrastructure to add to its extensive collection of liquids pipelines. JPMorgan Chase analyst Jeremy Tonet called the combined Enbridge-Spectra entity an “energy infrastructure colossus.”[4] The $37 billion Enbridge-Spectra merger is the third-largest mergers and acquisitions deal ever involving a Canadian company and the largest deal in Canadian oil patch history.[5] The
new company is said to have a $74 billion “growth backlog” of potential new development.[6] The merger was completed on February 27, 2017.[7]

Analysts place this merger within the context of widespread resistance to pipelines in Canada and repeated delays in the approval and construction of new-build projects. In a quote to the *Calgary Herald*, Harrie Vredenburg of the University of Calgary School of Business explained, “They’re trying to grow and build their business and they’ve been frustrated because they’ve become a lightning rod for environmental opposition—climate change opposition to oil pipelines particularly—and they’re looking for alternative growth strategies. They’re not alone in doing this.”[8] Analysts predict that this sort of cross-border merger of assets—including, crucially, infrastructure assets—will become more common within this context as an alternative to building new pipeline.[9]
About the Enbridge-Spectra deal, Enbridge’s chief financial officer emphasized the company’s drive to diversify geographies, commodities, and regulatory jurisdictions. “Pipe in the ground is worth a lot these days,” he explained, “and the ability to expand and extend existing systems...is a lot easier sometimes than building one-off, large mega-projects”—the reason being, of course, that these megaprojects have been met, again and again, with resistance from communities.[1]

Enbridge’s interest in “pipe in the ground” is a new approach to slaying the many-headed hydra: the thickening network of resistance that has mimicked the expansion of pipeline infrastructure across North America. This change in strategy signals not only the success of this widespread resistance, but also the fundamentally transnational nature of both the threat and the response.

At the most literal level, the DAPL could divert Bakken oil and free up space in Enbridge’s other networks for Alberta crude to flow south to the Gulf Coast. But beyond this, examining the networks of energy infrastructure that snake across North America highlights that the pipeline fight is inherently transnational in a much deeper way. At the end of the day, contaminated waterways and a warming climate have little respect for international borders. In many ways, the resistance at Standing Rock mirrors these fluid geographies: Indigenous nations whose land these growing networks traverse and threaten to contaminate, predate, transcend, and defy the U.S.-Canada border, and the support that surrounds Standing Rock and other pipeline resistance are transnational illustrations of solidarity across causes, borders, and social locations. In this way, too, the Dakota Access Pipeline is a transnational issue: through both the threat of and the resistance to projects like the DAPL, our relations get redefined not along the arbitrary contours of national boundaries, but along lines of social and ecological interdependence and connection.
The images on the following pages are meant to offer a loose timeline of the contestation surrounding each of these selected pipeline projects. The images are developed based largely on information derived from a survey of media coverage. The image highlights select key events, or flashpoints, in the timeline of each project and is not meant to be a comprehensive account. Rather, this timeline image is meant to offer a sense of the relationship between community pressure to protect lands and waters against the project, and industry and government pressure to push the project through. While the image here offers a representation of the balance of power at any given moment, these two forms of pressure clearly co-exist throughout the lifetime of these proposed projects.
Image 01 & 02 (this & the following page). A timeline of six key oil pipeline projects, including Northern Gateway, Trans Mountain, Line 9, Keystone XL, Energy East, and Dakota Access. Research by Martin Danyluk and Katie Mazer, visualization by Martin Danyluk.

### Northern Gateway
1. Enbridge rekindles Northern Gateway project, citing strong demand.
2. Enbridge submits application to National Energy Board.
3. First Nations across British Columbia and Alberta sign Save the Fraser Declaration banning oil tankers from their territories.
4. Thousands participate in Defend Our Coasts action at the BC legislature in Victoria, followed by more than 70 actions province-wide.
5. Joint Review Panel recommends approval of Northern Gateway with 209 conditions.
6. Residents of Kitimat, British Columbia, vote against project in municipal plebiscite.
7. Prime Minister Stephen Harper’s cabinet approves Northern Gateway.
9. Prime Minister Justin Trudeau’s cabinet rejects Northern Gateway.

### Trans Mountain
1. Kinder Morgan proposes to nearly triple Trans Mountain’s capacity.
2. Squamish and Tsleil-Waututh Nations sign historic declaration to protect the Salish Sea.
4. Mayor of Burnaby, British Columbia, issues stop-work order to prevent crews from cutting trees.
5. Protests reach a peak during month-long “Battle of Burnaby Mountain.”
6. Participants withdraw from National Energy Board hearings, citing “flawed” process.
8. Federal government approves Trans Mountain project.

### Line 9
1. Enbridge CEO says company is considering reversing Line 9.
2. Enbridge files first application to National Energy Board for Line 9 reversal.
5. National Energy Board approves second phase of project with 30 conditions.
6. Four activists lock themselves to gates of Suncor oil refinery in Montreal.
7. Phase II of reversed pipeline enters operation.
**Keystone XL**
1. TransCanada announces Keystone XL project.
   Canada’s National Energy Board approves Keystone XL with 22 conditions.
2. Civil disobedience campaign launched at White House. President Obama rejects Keystone XL.
3. TransCanada files new federal application for northern part of Keystone.
5. President Obama rejects Keystone XL.
6. President Trump orders expedited review of Keystone XL.

**Dakota Access**
1. Energy Transfer Partners announces Dakota Access Pipeline project.
2. Standing Rock Sioux Tribe establishes Camp of Sacred Stones at Cannonball, North Dakota.
3. US Army Corps of Engineers grants permit for Missouri River crossing.
4. US Army Corps of Engineers issues eviction notice to Oceti Sakowin Camp.
5. Global month of action.
6. Arrests and eviction of camp after US Army Corps of Engineers announces it will grant permit.

**Energy East**
1. TransCanada presents conceptual proposal of new pipeline to Atlantic.
2. TransCanada publicly announces Energy East project.
3. Anti-pipeline protests are held across Quebec.
4. Almost 2,000 people march against proposed export terminal in Cacouna, Quebec.
5. TransCanada launches public campaign for Energy East project.
6. TransCanada drops plans for export terminal in Cacouna, Quebec.
7. Wolastoq Grand Council in New Brunswick announces unanimous opposition to Energy East project.
These maps were developed using information from company communications, media coverage, and regulatory filings and decisions. Grey lines indicate the existing network of oil pipelines. Coloured lines indicate various stages of approval for the projects over time. Some of these are new-build projects (e.g. DAPL), while others are expansions and/or reversals of existing lines (e.g. Kinder Morgan) or a combination (e.g. Energy East). In all cases these projects represent a contribution to the expansion of oil transport capacity. Please refer to Section 03, The Broader Pipeline Context, which provides details about most of these projects.

In general, a project was considered to be “proposed” once the company officially announced plans to pursue the project. But in some cases “proposed” refers to announcements made at industry conferences or to the media, or, in one case (the Portland-Montreal Pipeline), the community’s early anticipation of the project. Projects were considered to be “under review” when applications were filed to the respective regulatory bodies. In cases where projects had multiple phases, we used the earliest application date. Projects were considered to be “approved” once the final stage of the project received final approval. For example, in the Canadian case, after the NEB recommends approval of a project, the project ultimately requires approval by the federal cabinet. In the case of transnational lines (e.g. Keystone), the map shows the separate approval processes in Canada and the U.S.

The maps also show terminals, including construction or expansion of ports, that are affiliated with these pipeline projects. Like with the lines themselves, we have indicated cases where proposed terminals were cancelled or deferred as a result of community pressure (e.g. Cacouna) and/or project cancellations (e.g. Kitimat).
The Continental Context

Legend

- OIL PRODUCTION TERMINAL
- PIPELINE – DAKOTA ACCESS
- PIPELINE – NORTHERN GATEWAY
- PIPELINE – ENERGY EAST
- PIPELINE – KEYSTONE XL
- PIPELINE – TRANS MOUNTAIN
- PIPELINE – LINE 9
The Dakota Access Pipeline

Legend

- **OIL PIPELINE – NETWORK EXISTING**
- **PIPELINE – DAKOTA ACCESS**
- **OIL PRODUCTION AREA**
- **OIL PRODUCTION TERMINAL**
January 2008
January 2015

Legend
- OIL PIPELINE – NETWORK EXISTING
- PIPELINE – CANCELLED/DEFERRED
- PIPELINE – COMPLETED
- OIL PIPELINE – NETWORK SHIPPING
- PIPELINE – PROPOSED
- OIL PRODUCTION AREA
- PIPELINE – UNDER REVIEW
- OIL PRODUCTION TERMINAL
- PIPELINE – APPROVED

Scale 1:22,500,000

Mapping a Many-Headed Hydra

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January 2017

Legend

- OIL PIPELINE – NETWORK EXISTING
- OIL PIPELINE – NETWORK SHIPPING
- OIL PRODUCTION AREA
- OIL PRODUCTION TERMINAL
- PIPELINE – CANCELLED/DEFERRED
- PIPELINE – PROPOSED
- PIPELINE – UNDER REVIEW
- PIPELINE – APPROVED
- PIPELINE – UNDER REVIEW
- PIPELINE – COMPLETED

scale 1:22,500,000
Notes

00 Introduction

Images 01 & 02 provided by Charmaine Chua. 11 August 2016, Oceti Sakowin Camp, North Dakota.


Note that all actions that resulted in arrests happened off-reservation. While these camps were established on unceded 1851 Treaty territory, because they were off-reservation, they were subject to state and federal jurisdiction. As such, the Army Corps, private security, and law enforcement agencies were able to harass, arrest, and evict water protectors in these camps; they had no authority on-reservation. The fact that most camps were established off-reservation signals that this struggle was not just about protecting the SRST’s water rights, but was a much broader stand in defence of treaty territory.


00 Mapping the Many–Headed Hydra


01 What is the Dakota Access Pipeline?


6. NYC Stands with Standing Rock Collective, '#StandingRockSyllabus'.


8. NYC Stands with Standing Rock Collective, ‘#StandingRockSyllabus’.


10. NYC Stands with Standing Rock Collective, ‘#StandingRockSyllabus’.


17. Ibid.


19. Ibid.


23. Enbridge Inc. and Energy Transfer, ‘Enbridge and Energy Transfer Join’.

02 Protecting the Waters

Images 01–03 provided by Madison Van Oort. 11 August 2016, North Dakota.

1. For a list of solidarity events and cities in solidarity see ‘#NoDAPL Archive’.


3. Ibid.


18. ‘#NoDAPL Archive’; ‘Sacred Stone Camp - Iŋyaŋ akháŋagapi Othí’.


21. Ibid.


30. In early September about 30 people were arrested in Iowa for attempting to block construction. Democracy Now!, ‘Eminent Domain? Iowans Sue to Stop Dakota


32. Democracy Now!, ‘Eminent Domain?’


36. ‘Thousands of Vets Descend on Standing Rock’.


03 The Broader Pipeline Context


5. Around 2012 world oil market conditions began to change in a number of ways that would depress prices and, ultimately, challenge the idea that new Canadian pipelines would allow Canadian oil to fetch a higher price. In the North American context, the construction of new pipeline capacity between Illinois, Oklahoma, and the Gulf Coast in 2013 and 2014 functioned to relieve the regional transportation bottleneck in the U.S. Midwest (see details in section 5). Expansions in shale production, alongside this increased transportation capacity, led to a glut in the Gulf refineries and a drop in prices. As a result of these conditions, some have argued that what was once a wide gap between Western Canada Select and U.S. (West Texas Intermediate) oil prices closed significantly after 2014. The price gap that remained was a result of the oil’s quality and geography, not pipeline capacity. According to this argument, even from a strictly economic perspective, without a significant price differential between domestic and world markets, the construction of new pipeline capacity would be unlikely to increase crude prices. Even those in the industry began saying that expanded transportation infrastructure would not solve the problem and, in the spring of 2016, the CBC obtained a secret government memo, dated December 2015, that said exactly this: addressing the specific case of the Energy East Pipeline, the finance department document explained that, given the declining price differential since 2012, the economic benefits of the pipeline had been largely curtailed. Drew Anderson, ‘Energy East Pipeline Benefits Questioned in Secret Government Memo’, CBC News, 31 May 2016, http://www.cbc.ca/news/canada/calgary/energy-east-pipeline-memo-benefits-1.3609851.

In February 2016 D.C.-based non-profit Oil Change International released a report challenging the claim that Canada is running out of pipeline capacity. According to its findings, the "need" for expanded capacity is predicated on expanded production. Research conducted by the Canadian Centre for Policy Alternatives has arrived at the same conclusion. In economic terms, there was a pipeline bottleneck in 2012–13, which resulted in a transport-related price gap; the construction of pipelines to transport Alberta bitumen to Canadian tidewater was meant to capitalize on this price differential. This research concludes that any price discount that could be relieved by building pipeline capacity to Canada’s east and/or west coasts no longer exists. Hannah McKinnon et al., ‘Tar Sands: The Myth of Tidewater Access’ (Oil Change International, The Natural Resources Defense Council, Environmental Defence, March 2016), http://priceofoil.org/2016/03/17/tar-sands-the-myth-of-tidewater-access/; Adam Scott and Greg Muttitt, ‘Briefing: Canada Not Running Out of Pipeline Capacity’ (Oil Change International, October 2016), http://priceofoil.org/2016/10/18/brief-canada-not-running-out-of-pipeline-capacity/; J. David Hughes, ‘Can Canada Expand Oil and Gas Production, Build Pipelines and Keep Its Climate Change Commitments?’ (Canadian Centre for Policy Alternatives, June 2016), https://www.policyalternatives.ca/publications/reports/can-canada-expand-oil-and-gas-production-build-pipelines-and-keep-its-climate.

6. Scott and Muttitt, ‘Canada Not Running Out of Pipeline Capacity’, 1; see also Hughes, ‘Can Canada Expand Oil and Gas Production’.


8. The report explains: “The 450 Scenario, by definition, achieves a long-term atmospheric concentration of 450 ppm CO2-eq (resulting in average warming of 2°C). Such a temperature increase (even without allowance for additional feedback effects) would still have negative impacts, including a sea-level rise, increased floods, storms and droughts.

The new evidence has led some researchers to conclude that even keeping the temperature rise to 2°C may risk dangerous climate change, and that an even lower temperature threshold and corresponding stabilisation target (such as 350 ppm) should be set (Anderson and Bows, 2011; Hansen et al., 2008; Rockström et al., 2009; Smith et al., 2009). The uncomfortable message from the scientific community is that although the difficulty of achieving 450ppm stabilisation is increasing sharply with every passing year, so too are the predicted consequences of failing to do so.” Ibid., 207.

9. Looking forward to 2017, the report warns: “If internationally co-ordinated action is not implemented by 2017, we project that all permissible CO2 emissions in the 450 Scenario will come from the infrastructure then existing, so that all new infrastructure from then until 2035 would need to be zero-carbon. This would theoretically be possible at very high cost, but probably not practicable in political terms.” Ibid., 205.


16. Tasker, 'Trudeau Cabinet Approves Pipelines'.


18. Adams, 'Major Canadian Pipelines'.

19. The details on both challenges are available here: TransCanada, 'About the Project', TransCanada: Keystone XL, 2016.


27. Adams, 'Major Canadian Pipelines'.


30. References to the disaster for this purpose continued long after the events. The Fraser Institute continued to reference the disaster in its promotion of pipeline expansion; see, for example, Kenneth P. Green and Taylor Jackson, 'Rail Is Quite Safe, but Pipelines Are the Safest Way to Transport Oil and Gas', National Post, 14 August 2015, Online edition, http://news.nationalpost.com/full-comment/green-jackson-rail-is-quite-safe-but-pipelines-are-the-safest-way-to-transport-oil-and-gas. More recently, the disaster figures into debates surrounding resistance


36. For the full details see Bruno et al., ‘Enbridge Over Troubled Water’.


44. Horne, ‘Big Oil Pushed for Expedited Permitting’.


47. Bruno et al., ‘Enbridge over Troubled Water’.

48. Ibid.


50. Tasker, ‘Trudeau Cabinet Approves Pipelines’.


55. Cryderman, 'Enbridge Defers $2.6-Billion Sandpiper Pipeline Project'.

56. Enbridge Inc. and Energy Transfer, 'Enbridge and Energy Transfer Join'.


59. This name for the network comes from Bruno et al., 'Enbridge over Troubled Water'.

60. Ibid.

**04 Approving the DAPL**


2. Horne, 'Big Oil Pushed for Expedited Permitting'.


4. Yardley, 'There's a Reason Few Even Knew'.

**05 Consolidating Control: The Enbridge Example**


3. Ibid.


Varcoe, ‘If You Can’t Build Pipelines’.


8. Varcoe, ‘If You Can’t Build Pipelines’.


**06 Continental DAPL, Continental Fight**

1. Quoted in Varcoe, ‘If You Can’t Build Pipelines’.

**07 Flashpoints: A Timeline of Key Oil Pipeline Projects**

Timeline of key oil pipeline projects researched by Martin Danyluk and Katie Mazer. Visualization by Martin Danyluk.

**08 A Cartographic Time Series**

The cartographic time series was researched by Martin Danyluk and Katie Mazer. Visualization by Martin Danyluk.
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Mapping a Many Headed Hydra: The Struggle Over the Dakota Access Pipeline

A report prepared for the Infrastructure Otherwise Project

Research:
Katie Mazer
& Martin Danyluk

Text:
Katie Mazer

Maps and Timeline:
Martin Danyluk

Photographs:
Charmaine Chua
& Madison Van Oort

Design & Layout:
Elise Hunchuck