The Jordan Cove Energy Project (JCEP) proposed by the Canadian Pembina Pipeline Corporation is comprised of the Jordan Cove LNG project and the Pacific Connector Gas Pipeline (PCGP). The LNG project consists of a natural gas liquefaction and storage facility and an LNG export terminal in Coos Bay, OR; the PCGP would be a 229-mile 36-inch buried natural gas pipeline that would originate in Malin, OR at the existing hub of the Canadian GTN and U.S. Ruby Pipelines. The project would also require the expansion of the Malin compressor station.

**KEY RISKS**

√ **STRONG AND GROWING RESISTANCE**: Five federally-recognized Tribes and 415 of 420 project intervenors oppose the Jordan Cove Energy Project (JCEP); a total of nearly 90,000 comments were filed on two recent state permit applications; a 2018 statewide poll shows majority opposition.

√ **REGULATORY RISKS**: Pembina has only obtained a handful of around 50 state and federal permits or approvals for the current application; FERC denied the previous application in 2016; the Oregon Department of Environmental Quality denied the Clean Water Act permit application in May 2019.

√ **MARKET RISKS**: A tight, competitive global market and LNG glut coupled with the rise of short-term “portfolio” models makes Jordan Cove profitability a long shot.

√ **SAFETY/LIABILITY RISKS**: Terminal and facility sites are in major earthquake and tsunami zones; the pipeline would cross 229 miles including steep landslide, earthquake and/or wildfire-prone terrain.

√ **EMINENT DOMAIN**: As of the end of April, over 40% of impacted landowners have refused to sign easements; dozens of communities, several commissioners of affected counties and the majority of Oregonians oppose eminent domain for private gain.

√ **ENVIRONMENTAL JUSTICE IMPACTS**: The vast majority of potentially impacted communities have higher than average percentages of vulnerable populations. The project would bury pipe across ancestral lands of 14 Tribes.

√ **CLIMATE IMPACTS MAKE THIS IRRESPONSIBLE ENERGY DEVELOPMENT**: JCEP would add 36.8 million new metric tons of greenhouse gas emissions to the atmosphere per year.
DON'T BANK ON JORDAN COVE

The Jordan Cove Energy Project (JCEP) has been an unactualized idea for 14 years and counting.

Initially proposed as an import project in 2005, Calgary-based Pembina Pipeline Corporation bought Veresen and the JCEP export project in 2017. The new owner’s principal assets include oil pipeline networks in Alberta and British Columbia. Pembina has never successfully developed any projects in the U.S. Pacific Northwest, where fierce opposition has already scuttled more than a dozen major fossil fuel infrastructure proposals.

As global energy markets evolve dramatically with the world’s transition to renewable energy, the JCEP export terminal looks ever more at risk of becoming a stranded asset. A report on the projected full lifecycle greenhouse gas emissions from the project said this, "In order to address the global climate crisis, emissions from all sources of fossil fuel must be reduced to zero by mid-century. Building and operating this project will undermine that goal."\(^1\)

Moreover, the egregious potential impacts and intense community opposition should steer banks away from further involvement in this project. Banks financing Pembina would share responsibility for the impacts. Top bankers of Pembina include RBC, Bank of Nova Scotia, CIBC, TD and JPMorgan Chase.\(^2\)

For years, Washington Analysis was optimistic about the Jordan Cove project, but since the 2016 FERC denial they have consistently reported that the "Jordan Cove redux" is "not looking good."

"Ultimately, we remain bearish on this project’s chances of being constructed."
... the project has changed and the world has changed, meriting examining the project anew. The question isn’t whether we need to build infrastructure … but whether this large-scale fossil fuel project still makes sense.”

— U.S. Senator Jeff Merkley, December 2017
OPPOSITION IS STRONGER THAN EVER.
AND GROWING.

Southwest Oregon is home to rugged mountains, wild salmon, biologically diverse forests and strong communities that value indigenous sovereignty and property rights. Opponents believe that all of this is threatened by a fracked gas pipeline that could trample farms, ranches and traditional tribal territories to reach a proposed LNG export terminal in Coos Bay, Oregon. The majority of Oregonians—across the political spectrum—are opposed to this project as was demonstrated in a 2018 statewide poll. Pembina and its investors should expect to see continued diligent and focused resistance.

The Jordan Cove Energy Project has been proposed in some form or another for over 14 years, and yet remains fraught with controversy, complexity and uncertainty. Pembina, like its predecessor Veresen, erroneously paints a picture of a beneficial project that unequivocally deserves and will get a green light. Company spokespersons emphasize supporters and proponents who look narrowly at promises of temporary jobs and tax revenues. They tend to minimize or ignore the strength of commitment and increased effectiveness of Oregonians who resolutely oppose the Jordan Cove Energy Project. There is growing awareness of the existing industries and precious resources that would be jeopardized, as well as the costs to taxpayers and the project's likely intended and unintended consequences. In August 2018, over 40,000 comments of opposition were filed against JCEP's Clean Water Act permit application. In February 2019, more than 50,000 opponents filed comments with the Oregon Department of State Lands against the company's Removal-Fill application, protesting what would be the largest dredging project in recent Oregon history, bringing damage to coast-lines, fishing, tourism, oyster beds and marine businesses. Potential investors must exercise due diligence and learn the consequences of this proposed project.

"As I have maintained from the beginning, it is unacceptable to use eminent domain—a power designed to accomplish critical public projects—to advance a foreign-owned, private, for-profit project....Jordan Cove will contribute massively to pollution that is profoundly damaging our state and our world. Generations from now, our grandchildren will wonder why we continued to burn fossil fuels when the catastrophic consequences were so evident. Thus, it becomes clear that we have to shift from building large-scale fossil fuel infrastructure, including Jordan Cove, and instead invest massively in building the enormous backlog of infrastructure projects that will improve our state and nation, not damage it."

- U.S. Senator Jeff Merkley, Medford Mail Tribune, December 2017.
Numerous developers have attempted to use the Pacific Northwest as a thoroughfare to export fossil fuels from deposits in the western interior of North America. A sophisticated and relentless movement dubbed “The Thin Green Line” has stopped one proposal after another by working effectively within the statutory and regulatory systems designed to protect natural resources, human rights and other critical interests of the broader public. Oregonians opposing the Jordan Cove Energy Project are part of this movement.

The Federal Energy Regulatory Commission (FERC) is the major permitting authority for such projects and in 2016, they denied the Jordan Cove application primarily due to the Project’s failure to demonstrate need that would outweigh adverse effects. After failing to get a rehearing, the company reapplied the following year, beginning the FERC process for a third time. But even if the current Commission decides differently on this round, other regulatory barriers exist. Project application materials indicate that approximately 50 local, state, and federal permits are needed to proceed. Pembina’s predecessor didn’t manage to obtain more than a handful of permits before the 2016 FERC denial and the new owner is struggling, as well. In September 2018, JCEP withdrew its application to the Energy Facility Siting Council (EFSC) for an exemption to the requirement for a power generation site certificate, after reports that the Oregon Department of Energy recommended denial of the application. The subsequent design change for the electrical system requires purchase of up to 1/2 of necessary electrical power for LNG terminal. In November 2018, Oregon’s Land Use Board of Appeals (LUBA) found that Coos County had not adequately justified the project’s significant negative impacts to the Coos Bay estuary, as well as to commercial and recreational fisheries and access to shellfish beds. A few months later, a Douglas County Circuit Court Judge ruled in favor of impacted private landowners, nullifying the County’s Conditional Use Permit extensions and thereby revoking permits for construction of a section of the Pacific Connector Gas Pipeline. This sent Pembina back to square one for permission to construct the pipeline in Douglas County’s Coastal Zone Management Area. And in its most significant loss yet, on May 6, Oregon’s Department of Environmental Quality denied the project’s Clean Water Act permit application. The Clean Water Act gives states the authority to deny this essential permit if projects would degrade water quality and uses. The Pacific Connector Gas Pipeline would cross streams and rivers 500 times, many that provide critical habitat for the Endangered Coho salmon and other fish, as well as drinking water for southern Oregon residents.

Map by Sightline Institute, Dec. 2018
SAFETY RISKS

The proposed Pacific Connector Gas Pipeline would transport gas compressed up to 1,600 psig (or even 1,950 psig pursuant to later authority) along its length of 229 miles. Once in the Coos Bay area, the gas would be converted to LNG at 1/600th of its volume by freezing it to -260 degrees F and stored in tanks until export on 950-foot ships. The entire project would be sited in the region of the Cascadia Subduction Zone, deemed by foremost seismic experts to be the most likely area on the Pacific Northwest coast to experience a major (magnitude 8.7-9.2) earthquake and resultant tsunami during the lifetime of the project. The area is also subject to navigational challenges made more difficult by weather and coastal configuration.

The Coos Bay area will suffer almost unimaginable human and property damage when the inevitable earthquake occurs. Facilities, built on sand, silt, organic mill waste and dredging spoils, may not withstand liquefaction caused by the shaking. The massive tsunamis that would follow will cause their own form of damage, which would be exacerbated exponentially if by happenstance an LNG tanker were present. State hazard experts have raised concerns that safety measures incorporated into the proposed Jordan Cove LNG terminal design fall short of adequacy. FERC, in the 2015 Final Environmental Impact Statement for the last iteration of this project, estimated that over 16,000 Coos Bay residents lived within Zones of Concern where they would likely be at least injured by an incident involving the release of highly flammable LNG and ignition sources.

The 229-mile pipeline could increase wildfire risks across a four-county region that already reels from wildfire costs and damage. The DEIS for the project (pp. 4-770-71) indicates that 95% of the pipeline would be built to Class 1 specifications—the lowest legally allowed in terms of design, materials, testing and operational standards. In case of fire, for example, application materials indicate that shut-off valves across most of the pipeline could be as much as 20 miles apart (Resource Report 11, p. 7). An explosion during southern Oregon’s lengthening and intensifying fire season could be catastrophic, costing state and local communities millions of dollars in fire-fighting costs, timber and property loss and reduced tourism revenue. A buried, highly pressurized natural gas pipeline could preclude effective fire-fighting techniques simply by its presence. Wildfire concerns are among the numerous factors that the Jackson County Board of Commissioners featured in their oppositional comment to the Department of State Lands on the Removal-Fill permit sought by JCEP. The pipeline would also traverse 117 miles of steep slopes; 94 miles of pipeline would be buried in soils that have been identified as having a high or severe erosion potential.

TSUNAMI: Oregon Department of Geology and Mineral Industries map showing projected inundation from earthquake scenarios. Proposed LNG terminal location shown inundated at top. CLIMATE CHANGE: Oregon’s climate is projected to warm on average 3–7°F by the 2050s with decreased snowpack and drier summers that make forests more susceptible to bigger, more dangerous wildfires.
INDIGENOUS RIGHTS

Jordan Cove LNG would cross the traditional territories of 14 federally recognized Tribal Nations. FERC has invited all impacted Tribes to participate in the licensing process of the Jordan Cove project. Six Tribes, including The Klamath Tribes; the Confederated Tribes of the Grand Ronde Community of Oregon; the Yurok Tribe; the Karuk Tribe; the Confederated Tribes of Coos, Lower Umpqua & Siuslaw Indians (CTCLUSI); and the Cow Creek Band of Umpqua Tribe of Indians have filed as intervenors in the federal regulatory process. The Klamath Tribes, the Yurok Tribe, the Karuk Tribe, the Confederated Tribes of Siletz Indians and the Tolowa Dee-Ni Nation have all declared strong opposition to the proposed project, while other tribes like the CTCLUSI have filed numerous comments stating concerns regarding impacts to their cultural resources. Representatives of several Tribes spoke passionately against the project at the June 8, 2018 meeting of the Oregon Environmental Justice Task Force. The Task Force concluded the meeting with agreement that the Jordan Cove Energy Project is not in the best interests of the State of Oregon.

Many banks, including some that finance Pembina, have policies in place requiring them to comply with the United Nations "Universal Declaration of Human Rights," which includes the United Nations "Declaration on the Rights of Indigenous Peoples." The implementation of these policies means that,

[Businesses] should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved. The responsibility to respect human rights is a global standard of expected conduct for all business enterprises wherever they operate. It exists independently of States' abilities and/or willingness to fulfill their own human rights, obligations, and does not diminish those obligations. And it exists over and above compliance with national laws and regulations protecting human rights. The responsibility to respect human rights requires that business enterprises seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.

Banks have demonstrably contributed to human rights abuses through their financing of several fossil fuel infrastructure projects and bear the same risk in the case of the Jordan Cove Energy Project. The large and visible public campaign against Wells Fargo for its support of Energy Transfer Partners in the wake of the Standing Rock resistance, with myriad abuses of the human rights of indigenous people, is evidence of the hazards of financing such projects. Electing to fund companies that attempt to construct fossil fuel projects without obtaining the "Free Prior and Informed Consent" of Native Peoples can result in significant public relations troubles; it is clear that many of Oregon's native people do not consent to installation of the Pacific Connector Pipeline. Don Gentry, Chairman of the Klamath Tribes, stated in a letter to FERC while the agency was considering JCEP's request for rehearing of FERC's 2016 denial:

The route of the LNG pipeline shows it going through areas where villages once existed and it may unearth human remains since graves with human remains have been found in these areas....The route also would go under the Klamath and Rogue Rivers, which since time immemorial have been and continue to be important sources of fish for Tribal members. The losses of our cultural resources and risks presented by the Project clearly outweigh any benefits to the public from building the LNG pipeline and the Jordan Cove terminal for the export of LNG.

"As long as this proposal hangs over the river, the Klamath will stand in fierce, firm and unwavering opposition."

LANDOWNER RIGHTS

Fossil fuel developers and investors would be wise to recognize that the use of eminent domain by a private corporation to seize private property is perceived across the political spectrum as an iniquitous infringement on private property rights. County Commissioners in Jackson and Douglas Counties have commented to FERC and the Army Corps of Engineers—formally opposing the potential use of eminent domain by this project. Likewise, Oregon’s U.S. Senators Jeff Merkley and Ron Wyden have spoken out against eminent domain and Congressman Peter DeFazio introduced legislation in 2012 (H.R. 3913) and again in 2019 (H.R. 2198) to prohibit eminent domain for construction of pipelines serve an LNG terminal for export.

As of April 26, 2019, approximately 40% of landowners have refused to sign right-of-way easements and dozens of impacted landowners have denied access for a variety of surveys needed. In fact, the inability of the project sponsors to secure easements from landowners for the pipeline was responsible in part for the rejection of the project by FERC in 2016.

Oregonians have proven to be fiercely protective of their land, lifestyles and property rights. After living under threat of an intrusive pipeline for over a decade, many landowners have vowed not to settle with the company. Pembina has likely underestimated these landowners' resolve, setting the stage for a prolonged and very public battle over the legitimacy of a Canadian fossil fuel corporation seizing property from American citizens.

Brown Family Farm
The Brown Family maintains 253 acres of farm and forest land that has been in their family since the 1930s. Neal Brown purchased the property shortly before shipping out for World War II, later telling his children he would never live anywhere other than his farm and forest land in Douglas County’s Camas Valley. Daughter Pamela Brown Ordway says, “This land is part of my Dad’s legacy and because of our connection to this place and our love for our father, we are committed to protecting it for future generations.” Ordway and sisters Barbara Brown and Liz Hyde vow the Brown Family will remain steadfast in their opposition to the Pacific Connector Gas Pipeline.

Gow Family Ranch
"I own a 2,500-acre ranch where I’ve made a living running cows since 1991…. About 12 years ago, a company told me they wanted to run a gas pipeline right through the middle of my land. I said no, and I’ve been saying no ever since….Jordan Cove cannot be built without eminent domain. I’ve endured 12 years of living hell fighting this thing…. And I’ll keep fighting, because I don’t put a price on my family, and I don’t put a price on my land or my health." - Bill Gow, Medford Mail Tribune, December 2017.
ENVIRONMENTAL JUSTICE

The Environmental Protection Agency defines environmental justice as, “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.” The agency declares a goal that, “everyone enjoys the same degree of protection from environmental and health hazards, and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.” These environmental justice goals are major issues in fossil fuel development. For example, a federal court in *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers* found among other issues that the environmental justice analysis that is required under NEPA had been inadequately performed and that potential negative environmental impacts on Tribal rights guaranteed by Treaty had been ignored. That finding stalled the project. Repercussions from this and other cases strongly suggest that minority and vulnerable populations affected by fossil fuel infrastructure will continue to gain high profile attention, and may even obtain specific remedies.

Across nearly its entire geographic extent, the Jordan Cove project’s negative impacts will be borne by some of the state’s most vulnerable communities. Demographics from all but one Census tract involved from Coos Bay to Malin show higher percentages of American Indian, low-income, elderly, people of color and disabled populations than state averages. Historically, boom and bust developments like Jordan Cove and the Pacific Connector Pipeline have brought with them increased crime, domestic violence, traffic congestion, noise and air pollution and pressure on existing services, as well as housing shortages and unaffordability. There is no reason to believe that this project will be any different.

Pembina is proposing to expand the compressor station in Malin, OR in order to transport gas from connecting pipeline infrastructure to the export terminal. The community of Malin is 65% Latino/a, while the rest of Klamath county is only about 13% Latino/a, placing a harmful burden disproportionately on people of color. In 2018, Oregon’s Environmental Justice Task Force held meetings in Klamath County that focused on concerns about the pipeline and compressor station, including proposed air quality degradation from methane and other toxic emissions and noise pollution.

“I do not think a private, for-profit company should be able to condemn private property in order to build a pipeline through someone’s backyard. The U.S. Constitution limits the use of eminent domain to actions necessary for ‘public use.’”

- U.S. Representative Peter DeFazio, December 2018.
Banks have policies to promote responsible energy development through their investment practices. A 2018 study of project GHG emissions found that it would result in 36.8 million metric tons of CO2e per year, or the annual equivalent of emissions from 7.9 million passenger vehicles. Furthermore, the study found that not only is there no evidence that LNG exports replace coal in global markets, the projected methane leakage associated with the Jordan Cove Energy Project would result in greater GHG emissions than would be associated with a coal-fired power plant. 

In November 2018, Governor Kate Brown was re-elected to office with a mandate to take action on climate change. Three years earlier, she committed with other state and local government officials to reduce GHG emissions by 80%-95% below 1990 levels by 2050. If the JCEP were to be built, its proportional share of the allowable emissions would necessarily grow while providing no energy benefit to the state. Hosting this project would thwart Oregon’s goals against its own best interests.

The effects of climate change are being felt progressively more intensely. The urgent messages from the scientific community calling for dramatic reductions in fossil fuel are coming forth loud and clear, and increasing numbers of Oregon’s and the world’s citizens are calling for action.

"The project would increase the flow of fossil gas to the global market and in doing so would run counter to the goals of the Paris Agreement on Climate Change. The project would undermine Oregon’s potential to play a leadership role in addressing global climate change.”

NOTES


10 Oregon Department of Geology and Mineral Industries comments in “State Agency Consolidated DEIS Comments to FERC,” April 12, 2015, p. 149; Ted Sickinger, Jordan Cove series in The Oregonian, June 27, 2014.


12 Motion to Intervene of Seneca Jones Timber Company, FERC Docket #CP17-494-000, November 21, 2017


14 Jackson County Board of Commissioners to Oregon Department of State Lands re: Application APP0060697, January 22, 2019.


16 The FERC Docket for the Jordan Cove LNG and Pacific Connector Gas Pipeline (Dockets CP17-494-000 and CP17-495-000) includes letters to the 14 Federally Recognized tribes that would be impacted by the proposed project. On the eLibrary (https://elibrary.ferc.gov/idmws/search/fercgensearch.asp) search key words "Letter Inviting."

17 See the following for Tribal intervenor filings:
   • The Klamath Tribes (https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20171023-5044);
   • The Klamath Tribes Youth Leadership Council (https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20171026-5286);
   • Confederated Tribes of the Grand Ronde Community of Oregon (https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20171116-5009);
   • Yurok Tribe (https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20171026-5286);
   • Karuk Tribe (https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20171026-5145);
   • Confederated Tribes of Coos, Lower Umpqua & Siuslaw Indians (https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20171025-5223);
NOTES

18 See the following for Tribal Government Positions of Opposition:
• The Yurok (https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20170714-0104);
• The Tolowa-Di-Ni (https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20181214-4001);


23 156 total ROW easements on the DEIS’s preferred route have been recorded at Coos, Douglas, Jackson, Klamath counties as of April 26, 2019 out of the approximately 257 timber and non timber private landowners affected on the preferred route. https://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20190329-3018.


25 https://www.epa.gov/environmentaljustice.


30 Rogue Climate Facebook Page.

31 Oil Change International, p. 5.


33 Oil Change International, p. 8.

34 For example, Intergovernmental Panel on Climate Change, Global Warming of 1.5 °C, October 2018 and U.S. Global Change Research Program, Fourth National Climate Assessment, November 2018.

www.rogueclimate.org

J o r d a n C o v e L N G w a s a l s o f e a t u r e d a s a c a s e s t u d y i n B A N K I N G O N C L I M A T E C H A N G E : F O S S I L F U E L F I N A N C E R E P O R T C A R D 2 0 1 8 , b y R a i n f o r e s t A c t i o n N e t w o r k , B a n k T r a c k , I n d i g e n o u s E n v i r o n m e n t a l N e t w o r k , S i e r r a C l u b , O i l C h a n g e I n t e r n a t i o n a l , a n d H o n o r t h e E a r t h : J O R D A N C O V E I S R I S K Y B U S I N E S S