The Critical Concerns intersection with **Extractivism**

MERCY LENS

Through Mercy we are continually shaped by our desire to embrace more fully the Gospel in the tradition of Catherine McAuley. We commit ourselves to live in solidarity with the suffering Earth and all of creation and to grow in integrity of word and deed. Guided by our Critical Concerns and our commitment to the Works of Mercy, we seek to grow in awareness and to deepen our response against systems that oppress Earth and the suffering poor. We are called to listen deeply to those most impacted by oppression. We are called to name our complicity, to commit to a conversion of lifestyle and to act in solidarity with those most impacted by extractive industries, addressing systemic change in the exploitative extractive development model and systems of oppression.

Using our Mercy Lens, we explore some impacts of extractivism as it relates to each of our Critical Concerns. ***To learn more about how extraction industries impact a particular Critical Concern, click on the related circle below.***

How does extractivism impact our Critical Concerns?

Immigration

Believing firmly in the dignity of every person, we work for just and humane immigration laws in the U.S., address policies that push people to flee their countries, and examine the global impact of immigration.

Earth

We believe in the need for sustainability of life, supporting both a lifestyle and legislation that acknowledge everyone's right to water and the need to address climate change.

Racism

We believe racism is an evil affecting us all. We work to recognize and dismantle institutional racism in order to become an anti-racist multicultural community.

Nonviolence

We work for peace through prayer, education, personal and communal practices of nonviolence, and legislative advocacy to reduce armed conflicts, gun violence and human rights abuses.

Women

Through our schools, colleges, health-care institutions and spirituality centers, and through our legislative advocacy, we give special attention to women's education, health and spirituality.

Sisters of Mercy Hermanas de la Misericordia

Women

Women around the world have risen up to defend their homes, their lands and their ways of life against extractivism in its many capitalistic forms, including mining, hydroelectric dams and mono-cropping.

For example, in Central America, women land defenders are confronting and resisting the plunder of land and resources perpetrated by transnational corporations. And they are protesting the actions of local and national governments that support the intrusions of these transnational corporations. The land defenders meet with other women not only to share their experiences, their fears, their exhaustion and despair, but also to strategize together about how to defend their ways of life, the health of their land and water, and their right to live in their own territories. These Indigenous women resist the colonizing vision and language of transnational corporations and their host cultures. They reject the term "natural resources," saying land, water and minerals are not resources or assets to be extracted for private capital gain; instead, they are indispensable gifts. They refuse claims that land can be bought, hoarded and shaken down into huge monocrop factories, or destroyed in the process of ripping out minerals and metals.

Globally, women are harmed when powerful mono-cropping industries take over small farms.

Peasant farmers, seeking income to support their families, find themselves working for these industries. Without laws to protect the rights of laborers, these farmers live at the whim of the hiring and payment practices of the industries. Their families are affected by this unregulated and unreliable source of income. In addition to the loss of access to land and water for subsistence farming, the women and their families are exposed to the runoff of toxic pollution as fertilizers and weed suppressants seep into their water sources.

The trickle-down effect of labor abuses and loss of land, the contamination of healthy food and the ill effects of toxic exposure escalate the psychological and physiological stresses in families. When familial well-being deteriorates, women and their children become particularly susceptible to the substance abuse and domestic violence of male family members.

Women in the United States are not immune from the health hazards of extractive industries, as seen in multiple studies on the impacts ***of fracking, a process injecting water, sand and chemicals into shale rock at high pressures to release oil and gas.*** A compendium of scientific and public health studies compiled by Physicians for Social Responsibility and Concerned Health Professionals of New York in 2019 found that women who live near drilling and fracking operations are at higher risk for poor birth outcomes, including premature birth, certain kinds of birth defects and infants born small for the number of months of pregnancy. Living near fracking operations that frequently engage in flaring—the process of burning off excess natural gas—makes expectant parents 50 percent more likely to have a preterm birth, according to a July 2021 study. Black women and Latinas are more likely to live near fracking operations and flaring sites and thus more likely to experience these harms.

Women and girls also face unique harms when dense populations of male laborers are brought into an area to service corporate mines and fossil-fuel extraction processes. There is a reported corresponding rise in violent crime, sex trafficking and rape. Reports detail a link between the rise in "man camps" and the significant rise in murders and "missing" women, especially Indigenous women.

One Indigenous database tracked 529 cases of missing and murdered Indigenous women, covering the states of Montana, North Dakota, South Dakota and Nebraska—all states where "man camps" have exploded because of the booming Bakken oil fields and the planned construction of the Keystone XL pipeline. Eighty percent of the murder cases remain unsolved with some 30 percent of the missing-person cases still listed as active (Abaki Beck, *More Pipelines*).

After three years of study, a Canadian report detailed a particularly damning link between extractive zones and the rise in the number of missing and murdered Indigenous women. This report also cited several reasons for the increase in violence against women, including a transient workforce, economic insecurity and substance abuse (Abaki Beck, *More Pipelines*).

Racism

Policies and practices driven by history and systemic racism have fostered an environment where industries tend to locate their extractive processes in areas where the economically poor live and in areas in where communities are politically disenfranchised and lack consistent economic and political power. With rare exceptions, these areas are almost always populated with Indigenous, Black and African communities, Latino/a and Asian communities.

For example, in the name of development and progress, Honduran government officials and companies have cooperated in ***the seizure of the territory of the Indigenous and Afro-descendant Garifuna people, and they continue to pressure them to relinquish other land and water rights. The people have resisted forced evictions from their land and homes for palm oil companies and tourism projects and have sought to defend the environment and protested against human-rights violations.*** In 2020, nine women and several elders were murdered, and five young men were abducted and disappeared. Children have been traumatized and continue to experience trauma at the sight of police officers, who they understand have been linked to abductions and murders. Their leaders and community activists have been criminalized and arrested in a government effort to disenfranchise and silence their claims to land and water rights. (Jackie McVicar, *Indigenous Men in Honduras*).

According to a report from the UN Special Rapporteur and other research, ***the increase of extractive workers that comes with pipeline building, oil field production and mining results in a sharp rise in the occurrence of rape, sex trafficking and murder of women.*** The companies behind the projects are owned and operated primarily by Caucasian men, but Indigenous women are most affected.

In addition to the perpetuation of the crimes, racist structures in the broader society impede the processes in how information is disseminated and investigations are carried out. As an example, in 2012, two males arrived in Sidney, Montana, seeking employment in the ***Bakken oil fields and abducted, raped and murdered*** Sherry Arnold, a white teacher who was out for a jog. Although the crime against Sherry Arnold was horrendous, of critical note was how disproportionate the national attention was in comparison to the hideous murders of Indigenous women. The tribal communities raised concerns that the rape and murder of Indigenous women did not receive similar investigative resources. The Indigenous women remained invisible in national media. They specifically referenced the murder of Olivia Lone Bear, who remained missing for nine months before her body was found and whose case remains unsolved (Abaki Beck, *More Pipelines*).

Fossil fuel, coal, natural gas and mono-cropping industries also impact local communities where these products are further processed into consumer goods. For example, petroleum extracted on Indigenous lands in the Dakotas (U.S.) is further processed down the line in ***St. James Parish (Louisiana, U.S.) where chemical processes produce plastic pellets. These pellets are then shipped to manufacturers, who produce a host of consumer items such as plastic bags and piping. The communities harmed throughout the extractive cycle are economically poor communities of color.***

In an area dubbed ***Cancer Alley, some 150 petrochemical plants operate along the east bank of the Mississippi River in Louisiana.*** For the past 40 years, predominantly African American communities in Cancer Alley have been subjected to high rates of respiratory problems and rare forms of cancer (Andrew Yawn, *St. James Is Full*). In 2015, the EPA's *National Air Toxics Assessment* reported that people living in St. John the Baptist Parish, a parish adjacent to St. James and sharing a border on the Mississippi River, are 800 times more likely to develop cancer. Rates of exposure to toxic chemicals such as chloroprene have soared as high as 300 times the safety level (David Hammer, *This Parish*). The Black communities living in the stench of the petrochemical plants have suffered the loss of multiple family members, friends and neighbors to cancer. They point to the systemic and environmental racism at work as sugar-cane fields continue to give way to massive petrochemical plants and poverty levels rise above 16 percent (*U.S. Census Bureau Report*, 2019).

Earth

The extraction and burning of fossil fuels have been clearly and causally linked to the climate crisis, with 42 percent more carbon dioxide in the atmosphere today than before the Industrial Revolution. To limit the effects of climate warming, scientists argue that we must cut global emissions in half by 2030 and reach net-zero by 2050. Otherwise, we can expect to experience more extreme weather events, the devastating rise of sea levels, and massive food insecurity *(David Suzuki Foundation)*, to mention a few effects. We already are seeing massive wildfires around the globe exacerbated by the climate emergency, including in the Amazon rainforest in south America, which serves as the critical "lungs of the planet."

THERE ARE MYRIAD WAYS THAT EXTRACTIVISM IS HARMING MOTHER EARTH:

- **GLOBALLY, HYDROELECTRIC DAMS** have displaced 40 million to 80 million people, disrupted two-thirds of the world's river systems, devastated entire ecosystems once supported by river systems, and contributed to the release of billions of tons of greenhouse gases *(Global Sisters Report)*. These dams, such as the one in the Ngäbe-Buglé Comarca (Chiriquí, Panama), not only displaced the Ngäbe people, but also deteriorated the life and health of the river that they depended upon for their livelihood. The river flow has been disrupted by the dam, and downriver, the waters dry up while water within the dam grows green with algae from the excessive heat of the sun. The whole lush and vibrant ecosystem of the river has been altered. Eleven hydroelectric dams have fragmented the largest river in the comarca, the Rio Chiriquí Viejo, and damaged the ecosystems that depend on the free flow of the river *(Global Sisters Report)*.

- **PETROCHEMICAL PLANTS SPEW TOXIC POLLUTANTS** into the air, including the carcinogenic ethylene oxide. Although there are documented harms to people living in nearby communities, the long-term effects of ethylene oxide on plants, amphibians, birds and other wildlife, and domesticated animals are relatively unknown because of insufficient studies or inability to conduct tests. Studies that focus on acute exposure to ethylene oxide point to a 50 percent reduction in the reproductive health of microorganisms and insects. In its hydrolyzed form (disposal in water), it is lethal to invertebrate animals, including brine shrimp, and fish (NEDO, *Ethylene Oxide Hazard Assessment Report*).

- **OPEN-PIT MINING OF ZINC AND SILVER IN THE ANDES** has resulted in heavy metal poisoning of some 25,000 Peruvian children in the town of Cerro de Pasco. High levels of arsenic and lead have caused developmental disabilities, chronic epistaxis (nosebleeds), and cancer in a whole generation of children. The smelting and metal processing plants have adversely affected air and water quality in Cerro de Pasco. The water is undrinkable because of its high toxicity, but it is still used for cooking. As of 2017, unsafe levels of four heavy metals have impacted 80 percent of the 80,000 people in the area, prompting the need for a detox clinic and a toxicology lab (slated to be built in 2020). In 2016, the company, *Volcan Compania Minera,* which operates the zinc mine in Cerro de Pasco, sold $399.6 million of its extracted metal to the U.S. (Ricardo Martinez, *Centuries of Mining*).

Conflicts between local rural populations and mining companies continue to escalate as in the case of the Las Bambas project in the watershed regions of Cajamarca and Cusco (Peru). With good reason,

locals feared that the mining of metals would destroy, deplete and pollute their water sources. Mining projects were the source of major contamination of the watersheds. Heavy metals in the water negatively impacted the health of the human population as well as cattle herds and the land itself. By October 2016, over a period of 13 months, protests against the mining projects had resulted in the deaths of five local residents. Industrial mining had already adversely polluted 21 rivers in Peru. Fifteen of these rivers were among the most polluted rivers in Peru (Carlos Monge, *Water Management, Environmental Impacts*). Mining not only introduces metals into water sources, but also leads to deforestation and destroys sensitive ecosystems. It leaves behind landscapes vulnerable to erosion and devoid of flora and fauna. In the case of gold mining, it leaves a desolate land contaminated by mercury and other chemicals. Without a healthy wildlife habitat, the cycle of soil and plant re-fertilization is disrupted. Between the contamination of soil and water, this loss of biodiversity effectively leads to an increase in emission of carbon.

- **PLASTICS** derived from the extraction of oil are choking the planet. Recent studies demonstrate that birds, fish and mammals suffer and die from ingesting microplastics; humans "ingest the equivalent of a plastic credit card every week." Human consumption of sweetened beverages such as sodas, which hold no nutritional value, also contributes to massive amounts of plastic waste *(David Suzuki Foundation)*. Plastic pellets have been spilled out of railcars, shipping containers and trucks. Large spills have been discovered on the coasts of Louisiana and South Carolina. In California, heavy rainstorms washed tons of pellets out of 10 pellet-handling facilities. Studies estimate that some 230,000 tons of pellets make their way into the oceans, sickening birds, fish and other wildlife. (Laura Sullivan, *Big Oil and Plastic Pellets*)

- **WATER CONTAMINATION FROM MINING AND OIL AND GAS OPERATIONS IS A MAJOR CONCERN AROUND THE WORLD. IN FRACKING,** for instance, water injected to shatter the shale underground returns above ground contaminated by the chemicals used in the process and also the heavy metals, arsenic, uranium and other toxics found in the rock itself. Disposing of this wastewater poses yet more problems. Re-injecting it into the ground raises the risk of contaminating drinking water aquifers and even of triggering earthquakes because of the lubrication of fault lines with the technique.

Immigration

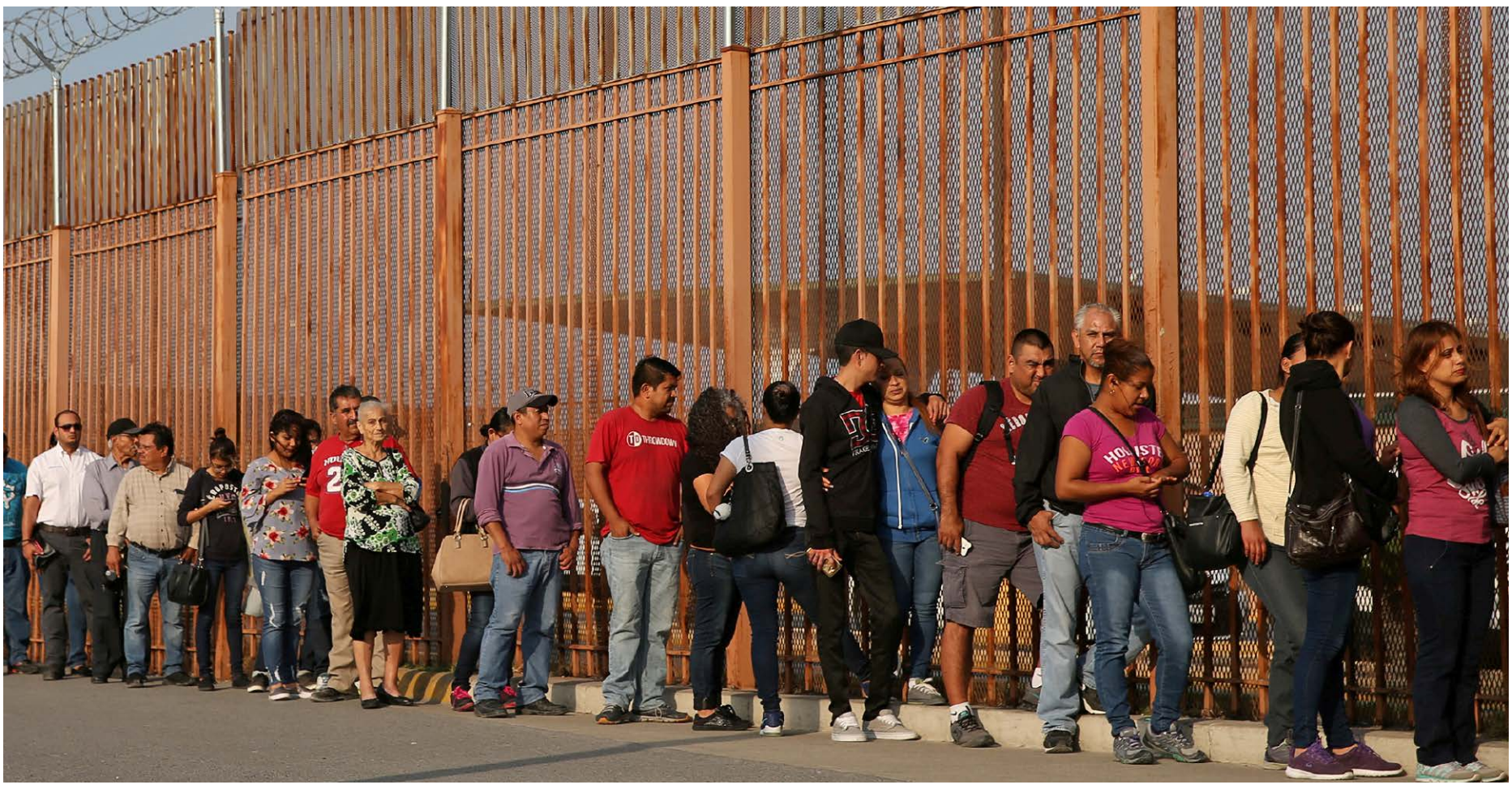
Too many people are displaced from their communities, both within their home countries or through migration, by the destruction caused by extractive industries. The climate crisis, accelerated by the extraction and burning of fossil fuels, is also compelling many families to flee their homes.

In Guatemala, a history of U.S. intervention and exploitation by mining companies contributes to the flow of migrants through Mexico to the U.S. border. In many instances, families sell their land to a mine, and once their money runs out, they no longer have the means to grow their own crops to survive. Promises by the mining company to build local services often don't materialize, and the community is left with polluted land and water.

Mining, mega dams and export crops such as sugar cane and palm oil sometimes create conditions for multiple displacements of the same Indigenous people. ***In Guatemala, for instance, the expansion of agro-industry has pushed some small-scale farmers deeper into protected forest.*** Some of those communities then get displaced again, sometimes across the border into Mexico, through evictions in the name of environmental protection and tourism.

Meanwhile, in Africa, migrant flows to small-scale gold-mining sites in Mali and Burkino Faso have been documented. Traditionally a seasonal activity, the precarious work of panning for gold has become a main source of income for many, fueled in part by social and agricultural crises dating back to the 1970s and '80s that continue to compel people to leave farm work.

The relationship between Canada and Latin America follows a similar pattern. Major portions of the Canadian economy are bound up in foreign resource extraction and mining, which are supported and driven by Canadian diplomacy. Canadian-based mining firms are complicit in major social, ecological and political ills associated with resource extraction, with evidence suggesting they drive internal and international displacement.



Nonviolence

Demand for tantalum, tungsten, tin and gold has sparked a roaring trade in "conflict minerals" (so-named for the violence associated with their extraction) in the Democratic Republic of Congo. As many as 40,000 children work in the mines of the copper belt.

But violence isn't limited to the extraction of precious metals and minerals used in the production of electronics. Communities throughout the world resisting the takeover of their land for mining operations, massive hydroelectric dams and corporate palm oil plantations, to name just a few examples, are often met with violence and oppression.

Mercy sisters participating in delegations to Honduras have visited communities threatened for defending their land and ***the Guapinol and San Pedro rivers from mining contamination. Some of these Guapinol water defenders*** have been imprisoned for two years while awaiting trial. Others have been the subject of defamation campaigns and other intimidation tactics by the government and the company behind the mine.

Honduras is one of the most dangerous countries in which to engage in environmental activism, according to the NGO Global Witness, which has documented violence each year since 2012 against people defending their homes and surrounding environment from business and governmental interests. The organization's July 2020 report revealed the highest number of murders of environmental defenders globally to date: 212. Resistance to mining was the deadliest form of activism, with 50 activists killed in 2019. Resistance to agribusiness was particularly dangerous in Asia, where 80 percent of agribusiness-related attacks took place. About half of the killings occurred in just two countries: Colombia (64) and the Philippines (43).

And we know violence against environmental defenders hasn't stopped with the pandemic. Among the most recent example was the murder of 67-year-old Joannah Stutchbury on July 15, 2021, in Kenya. She had been opposing efforts by powerful local businessmen to develop on wetlands in a national park.

The pandemic has presented particular challenges to environmental defenders around the world. They have lamented that mining and other extractive industries have continued to receive new permits and maintain ongoing operations while government offices are closed to respond to community members' needs. Meanwhile, activists face increased penalties for resisting these projects, in the name of COVID-19 precautions.

Yet throughout the world, we see examples of people peacefully defending their lands and ways of life despite threats of violence and criminalization of protests.

One successful and inspiring group of Guatemalan land defenders calls themselves ***"La Puya Peaceful Resistance." These women literally used their bodies to block access to mining equipment. They share important strategies with other land defenders, such as:***

- **including everyone, no matter their gender, age or religion;**
- **insisting that public institutions enforce the laws;**
- **not engaging in direct dialogue with the company;**
- **developing collective processes with no single leader,**
- **fighting in the courts and protesting in the streets; and**
- **strengthening community unity, identity, culture and resistance.**

Other women land defenders urge the building of networks, especially with universities, NGOs and groups from countries where the companies are based. They educate groups to expose the violence of transnational companies. The women train themselves in leadership and organizing skills. They measure the impact of extractivism in their communities and demonstrate the interconnectedness of everything. And they observe the impacts. If a toxic spill occurs upriver, its effects will be felt downstream, among all that depends on the river—plant, animal and human. For the women land defenders, "it is all one issue—the defense of life." (Lauren Carlsen, *In Central America*)

SOURCES

Material for the "Critical Concerns and Extractivism" webpages were adapted from the following sources. To learn MORE about the effects of extractivism, please see the resources listed below. For resources listed by topic, see section titled FURTHER RESOURCES.

Abaki Beck, "More Pipelines Mean More Threats of Sexual Violence for Indignous Women." Accessed online February 13, 2021, at https://intercontinentalcry.org/more-pipelines-mean-more-threats-of-sexual-violence-for-indigenous-women/.

Andrew J. Yawn, "St. James in Full: New Cancer Alley Plant May Double Toxic Pollutants, EPA Data Shows," The American South (May 19, 2020). Accessed online February 14, 2021, at https://www.tennessean.com/in-depth/news/american-south/2020/03/19/st-james-parish-louisiana-cancer-alley-formosa-plant-pollution/4809422002/.

David Hammer, "This Parish Has the Highest Cancer Risk in the U.S." (February 21, 2018), WWL-TV documentary report.

Jackie McVicar, "Indigenous Men in Honduras Are Being Abducted. Are the Police to Blame?" America Magazine (August 5, 2020). Accessed online February 14, 2021, at https://www.americamagazine.org/politics-society/2020/08/05/indigenous-men-honduras-are-being-abducted-are-police-blame.

David Suzuki and Rachel Plotkin, "What Do We Lose When the Caribou Disappear?" David Sukuzi Foundation. Accessed online February 15, 2021, at https://davidsuzuki.org/story/what-do-we-lose-when-the-caribou-disappear/.

Laura Sullivan, "Big Oil Evaded Regulation and Plastic Pellets Kept Spilling," All Things Considered, National Public Radio (December 22, 2020). Accessed online February 17, 2021, at https://www.npr.org/2020/12/22/946716058/big-oil-evaded-regulation-and-plastic-pellets-kept-spilling.

Rebecca Miller, Katharine Mach, Chris Field, "Climate Change Is Central to California's Wildfires," Scientific American (October 29, 2020). Accessed online February 15, 2021, at https://www.scientificamerican.com/article/climate-change-is-central-to-californias-wildfires/#

California Air Resources Board, "Wildfires and Climate Change." Accessed online February 15, 2021, at https://ww2.arb.ca.gov/wildfires-climate-change.

"Wildfires, Forest Fires Around World in 2020," Anadolu Agency (Turkey). Accessed online February 15, 2021, at https://www.aa.com.tr/en/environment/wildfires-forest-fires-around-world-in-2020/2088198.

Bob Berwyn, "How Wildfires Can Affect Climate Change (and Vice Versa)" Inside Climate News (August 23, 2018). Accessed online February 15, 2021, at https://insideclimatenews.org/news/23082018/extreme-wildfires-climate-change-global-warming-air-pollution-fire-management-black-carbon-co2/#

"Wildfire Numbers in Scotland Quadruple in a Year," BBC Report (June 28, 2019). Accessed online February 15, 2021, at https://www.bbc.com/news/uk-scotland-48798789.

Tracy L. Barnett, "Panama's Hydroelectric Boom Destroys Ecosystems, Threatens Rural Way of Life," The Global Sisters Report (March 30, 2017). Accessed February 15, 2021, at https://www.globalsistersreport.org/news/environment/panamas-hydroelectric-boom-destroys-ecosystems-threatens-rural-way-life-45816.

"Ethylene Oxide," Environmental Protection Agency study. Accessed online February 15, 2021, at https://www.epa.gov/sites/production/files/2016-09/documents/ethylene-oxide.pdf.

Hazard Assessment Report on Ethylene Oxide (Ver 1.0; No. 36). New Energy and Industrial Technology Development Organization (NEDO). Accessed online February 15, 2021, at http://www.pic.int/Portals/5/AIII-Info/Ethylene%20oxide/Japan-212_english_pdf.pdf.

Ricardo Martinez, "Centuries of Mining Take a Toll on Health in Peruvian Communities," GlobalPost (December 26, 2017). Accessed online February 15, 2021, at https://www.pri.org/stories/2017-12-26/centuries-mining-take-toll-health-peruvian-communities.

Carlos Monge "Water Management, Environmental Impacts and Peru's Mining Conflicts," Natural Resource Governance Institute (NRGI) (October 14, 2016). Accessed online February 15, 2021, at https://resourcegovernance.org/blog/peru%E2%80%99s-troubled-mining-sector-civil-unrest-copper-conflict-and-watersheds.

"Accompanier Perspectives: Extraction, Destruction, and Immigration – In Honor of Claudia Patricia Gómez González," Network in Solidarity with the People of Guatemala (July 2, 2018). Accessed online [date?] at https://nisgua.org/accompanier-perspectives-extraction-destruction-immigration-honor-claudia-patricia-gomez-gonzalez/.

"Understanding Migration to West African Artisanal Mines," Migration Data Portal (October 14, 2020), Accessed online [date?] at https://migrationdataportal.org/blog/understanding-migration-west-african-artisanal-mines.

"Internal Displacement, Extractive Transnational Corporations and the Protection of Rights of Affected Communities," International Organization for Migration. Accessed online February 16, 2021, at https://rosanjose.iom.int/SITE/en/blog/internal-displacement-extractive-transnational-corporations-and-protection-rights-affected.

Andy Warner and Matthew Green, "Why So Many Central Americans Are Seeking Asylum in the U.S.," KQED (Public Broadcasting Service), August 31, 2018. Accessed online [date?] at https://www.kqed.org/lowdown/31036/why-so-many-people-in-he-northern-triangle-are-seeking-u-s-asylum.

See also the following PBS documentary series:
Patrice Taddonio, "How the U.S. Fueled the Rise of MS-13" (Frontline, February 13, 2018). Accessed online February 16, 2021, at https://www.pbs.org/wgbh/frontline/article/how-the-u-s-fueled-the-rise-of-ms-13/.
Marcela Gaviria, producer, "The Gang Crackdown" (Frontline, February 13, 2018). Accessed online February 16, 2021, at https://www.pbs.org/wgbh/frontline/film/the-gang-crackdown/.

"America's Story: An Immigrant Story," Carnegie Corporation (2020). Accessed February 16, 2021, at https://www.carnegie.org/interactives/immigration-reform/#!/.

"Faces of Migration," Justice for Immigrants, U.S. Conference of Catholic Bishops. Accessed online February 16, 2021, at https://justiceforimmigrants.org/faces-of-migration/stories-of-migration.

Salil Shetty, "Most Dangerous Journey: What Central American Migrants Face When They Try to Cross the Border," Amnesty International (February 20, 2014). Accessed online February 16, 2021, at https://www.amnestyusa.org/most-dangerous-journey-what-central-american-migrants-face-when-they-try-to-cross-the-border/.

Jessica Villagomez, "What Happens When Migrants Die in the Arizona Desert?" PBS News Hour (October 22, 2018). Accessed online February 16, 2021, at https://www.pbs.org/newshour/nation/what-happens-when-migrants-die-in-the-arizona-desert.

Lauren Carlsen, "In Central America, Women Are Fighting the Extraction Industry—And Winning," Common Dreams (September 25, 2018). Accessed online February 16, 2021, at https://intercontinentalcry.org/in-central-america-women-are-fighting-the-extraction-industry-and-winning/.

"How Extractivism and Neoliberal Environmentalism Cause Migration and Land Conflicts in Guatemala," Toward Freedom (June 16, 2017). Accessed online [date?] at https://towardfreedom.org/story/archives/americas/extractivism-neoliberal-environmentalism-cause-migration-land-conflicts-guatemala/

"Babies born near natural gas flaring are 50 percent more likely to be premature: Study," Environmental Health News (July 16, 2020). Accessed online [date?] at https://www.ehn.org/fracking-preterm-births--2646411428/particle-5.

"Fracking causes environmental damage and birth defects, new study shows," The World (July 31, 2019). Accessed online [date?] at https://www.pri.org/stories/2019-07-31/fracking-causes-environmental-damage-and-birth-defects-new-study-shows.