



The U.S. office of the Environmental Law Alliance Worldwide (ELAW) appreciates the Special Rapporteur's call for submissions addressing human rights and associated obligations related to water pollution, water scarcity, and floods. ELAW works with organizations around the world that are working to protect rights to a safe, clean, healthy and sustainable environment. We are well aware that many communities suffer from exposure to water pollution, lack of access to clean water, and flooding. These problems impact the environment, and peoples' health and livelihoods.

We focus our response on the first question raised. We provide examples of ways in which water pollution, water scarcity, and floods are having adverse impacts on human rights, highlighting a few examples of unsustainable development that exacerbate these problems. All of the information included here comes from public sources. These are just a few examples to highlight the global problems.

Use of fossil fuels, production and use of plastic, forest destruction, and industrial agriculture all pollute and reduce access to water. In addition, discarded products such as single-use plastic items are polluting waterways and clogging drainage areas, increasing flooding. The following are individual examples, although the same scenarios are playing out in many other places around the globe.

- **Oil and Gas Production**

Oil and gas production pollutes water sources across the globe and limits access to clean water. For example, water pollution from petroleum development in Uganda threatens human rights to health, water and sanitation, food, and livelihoods. The relationship between water pollution and human rights in Uganda is well-demonstrated by the risks associated with oil production near Lake Albert in Uganda, which threatens access to clean water and fisheries for communities in Uganda and the Democratic Republic of the Congo. In addition, the proposed East Africa Crude Oil Pipeline (EACOP) project and related infrastructure to carry crude oil from the region to the coast of Tanzania for export, threatens to pollute Lake Victoria and other critical water sources. A large section of the proposed pipeline would be within the Lake Victoria watershed, an active seismic area.¹ Lake Victoria is the chief reservoir of the Nile, and millions depend on it for food, water, and power. Additionally, feeder pipelines and the EACOP itself run through national parks, forests, forest reserves, and other protected wildlife habitats.

¹ Pearce, Fred, *A Major Oil Pipeline Project Strikes Deep at the Heart of Africa*, YaleEnvironment360 (Yale School of the Environment), 21 May 2020, <https://e360.yale.edu/features/a-major-oil-pipeline-project-strikes-deep-at-the-heart-of-africa>



Argentina also faces conflict between fossil fuel production and indigenous peoples' rights, human rights to health, water and sanitation, food, and livelihoods, and to a clean, healthy, sustainable environment. Vaca Muerta is a transnational megaproject expanding throughout Latin America's Southern Cone whose value chain encompasses more than ten waste dumps and oil landfills, three sand extraction mines, national and international pipelines, a 700 km train line for transportation of goods, and new roads and highways.² Toxic fracking waste containing high levels of hydrocarbons, heavy metals, and radioactive elements that pose reproductive and inhalation risks is being dumped into the Patagonian environment.³ One such waste pool is less than three miles from the town of Añelo, indigenous agricultural lands, and the region's principal river; it is stored directly on unprotected soil, without a drainage system, and without having been treated according to provincial or national environmental laws.⁴ Fracking blocks overlap substantially with Auca Mahuida, a biodiversity protection area with cultural importance to local indigenous communities.⁵ Wells are also situated close to a reservoir that provides the provincial capital Neuquén with drinking water.⁶ In 2018, there were on average two spills a day in the basin, with an estimated 934 total incidents at 95 wells.⁷ One such accident sent oil and gas spewing toward Añelo and the Neuquén river for more than 36 hours.⁸

- **Palm Oil Production and other Industrial Agriculture**

Palm oil production and other conversion of lands to industrial agriculture threaten water sources and impact human rights. For example, communities in the Democratic Republic of the Congo complain that rivers are polluted by palm oil mill effluents from Feronia's palm oil plantations impacting rights to health, water and sanitation, food, and to a clean, healthy, and sustainable environment.⁹ The company's waste flows into the Loeka stream, which is the only source of drinking water in Boloku, a community of several hundred people.¹⁰ The residents of Boloku have observed "oily waste" in the water. A community leader told Human Rights Watch he filed a complaint with Feronia last year alleging the company's untreated waste was contaminating drinking water. "My population uses water that has dirt from the factory," Azayo Elenga said. "They're using it. I discussed it with Feronia but nothing has been done about it yet."¹¹ This

² Di Risio, Diego. "Vaca Muerta Megaproject." Enlace Por La Justicia Energética y Socioambiental, 2017, <https://www.boell.de/sites/default/files/megaproject.pdf>

³ Raine, Jordan. "Argentina: Toxic Waste from Fracking in Patagonia." *Latin American Bureau*, 11 Mar. 2019, <https://lab.org.uk/argentina-toxic-waste-from-fracking-in-patagonia/>

⁴ Id.

⁵ Id.

⁶ Di Risio.

⁷ Id; Goñi, Uki. "Indigenous Mapuche Pay High Price for Argentina's Fracking Dream." *The Guardian*, Guardian News and Media, 14 Oct. 2019, <https://www.theguardian.com/environment/2019/oct/14/indigenous-mapuche-argentina-fracking-communities>

⁸ Raine.

⁹ Téllez Chávez, Luciana. "A Dirty Investment." Edited by Timo Müller et al., *Human Rights Watch*, 25 Nov. 2019, <https://www.hrw.org/news/2019/11/25/interview-toxic-mix-abuses-congos-oil-palm-plantations#>.

¹⁰ Id.

¹¹ McVeigh, Karen. "UK Development Bank Accused of Failure to Safeguard Congolese Workers." *The Guardian*, Guardian News and Media, 25 Nov. 2019, <https://www.theguardian.com/global-development/2019/nov/25/uk-development-bank-accused-of-failure-to-safeguard-congolese-workers>



waste can suffocate and kill fish, and cause large growths of algae that can negatively impact the health of those who consume tainted fish or otherwise come into contact with the polluted water.¹²

In Ecuador, communities living near palm oil plantations complain of water coming not only from mill effluents, but also from pesticides used on the plantations. Rivers polluted by palm oil mill effluents and toxic pesticides from Palma de los Esteros EMA SA and Palmera de los Andes' palm oil plantations in San Lorenzo have impacted health and access to water and sanitation. After palm oil companies settled in San Lorenzo in the 1990s and 2000s, local children began to develop stomach diseases. Community residents noticed oil and pesticide residue in the river that was their primary water source and when they investigated, discovered a palm oil mill dumping liquid waste into the river.¹³ A 2005 water quality study found pesticides which can cause severe illness and death in humans in the tributaries that provide water to the towns of La Chiquita and Guadalito.¹⁴ This has left residents reliant on bi-weekly municipal water deliveries. If this water is used up before a new truck arrives, residents either have to walk great distances to other rivers or pay for water in canisters in San Lorenzo, which is often too expensive for community members.¹⁵

- **Industrial Pollution**

In Mexico, pollution from industry threatens the health of many communities. Studies have proven the presence of heavy metals in children around the Santiago River. The studies show blood of minors had high levels of lead, arsenic, mercury and cadmium, as well as other elements.¹⁶ The direct causes of contamination of the Santiago River are unsustainable growth, industrial pollution, leachate from landfills, urban wastewater, pig farms, and crops with agrochemicals.

- **Extractive Industries**

In Colombia, the coal mining company Cerrejón has threatened the rights of Wayuu indigenous communities to water, food, and health by seeking to divert a 3-kilometer section of the Arroyo Bruno in order to expand coal-mining operations in the arid La Guajira Department. Fortunately, the Constitutional Court of Colombia suspended activities related to Cerrejón's stream-diversion project.¹⁷ This case exemplifies how water scarcity combined with extractive industries can

¹² Téllez Chávez.

¹³ Pérez, Alejandro. "Communities in Ecuador Fight Back against Palm Oil." *Mongabay Environmental News*, Mongabay, 13 Jan. 2020, <https://news.mongabay.com/2020/01/communities-in-ecuador-fight-back-against-palm-oil/>

¹⁴ Id.

¹⁵ Id.

¹⁶ "Río Santiago: the hidden study for 10 years that warned about polluting metals to populations of Jalisco." *Animal Político*, 5 Feb. 2020, <https://www.animalpolitico.com/2020/02/rio-santiago-jalisco-estudio-contaminantes/>

¹⁷ *Sentence SU698/17 (Arroyo Bruno case)* [2017] (Constitutional Court of Colombia), https://elaw.org/Cerrejon_ArroyoBruno



adversely affect communities' rights to water, food, and health. The Arroyo Bruno is a stream in the Río Ranchería watershed that provides potable water for local communities, as well as riparian forest resources and edible plants. Furthermore, the stream regulates and maintains environmental conditions such as humidity and the composition of the atmosphere and soil, which make possible the agriculture and husbandry necessary for food security. The diversion of the stream therefore threatened the indigenous communities' access to water, food, and health. In addition to concerns about diversion of water sources, extractive industries often use scarce available local sources, and contaminate water near the site.

- **Unsustainable Coastal Development**

In many countries, water quality in coastal regions has been impacted negatively as a result of inadequate legislation, planning and governance. Mexico as an example, contains an important region of karst in the Yucatan Peninsula, an area dependent on tourism. Coastal tourism facilities have grown without laws protecting the karstic ecosystems and coastal areas. Unsustainable growth, lack of drainage, and insufficient wastewater treatment go hand-in-hand with lack of law enforcement. This has allowed the discharge of polluted water to be a constant practice without any repercussions. As a result, the groundwater has been impacted with chloride and high nutrient concentrations, affecting the health of the communities and the coral reef.¹⁸

- **Plastic Production and Waste**

Globally, water pollution from plastic production and waste threatens the right to a clean, healthy, sustainable environment. Water pollution from nurdles, the microscopic pre-production building blocks for plastic products, pose a global threat to the right to a clean, healthy, sustainable environment. Nurdles can be found in 80% of countries where “nurdle hunts” occur and some 230,000 tonnes of these plastic pellets enter the environment each year, making it the second largest form of microplastic pollution.¹⁹

Plastic waste contributes to urban floods by clogging drains, adversely impacting human health and the right to a clean, healthy environment.²⁰ V.K. Sharma, Senior Professor of Disaster Management at the Indian Institute of Public Administration claims that poor draining is “the real cause of urban flooding,” and advocated for strict penalties on people throwing garbage in

¹⁸ Renaud Saint-Loup, Théo Felix, Axaycatl Maqueda, Arnulf Schiller, Philippe, Renard “A survey of groundwater quality in Tulum region, Yucatan Peninsula.” *Environmental Earth Science*. 15 September 2018, https://www.researchgate.net/publication/327697764_A_survey_of_groundwater_quality_in_Tulum_region_Yucatan_Peninsula_Mexico

¹⁹ “The Great Global Nurdle Hunt.” *Fidra*, July 2020, <https://www.nurdlehunt.org.uk/take-part/the-great-global-nurdle-hunt.html>

²⁰ Kaza, Silpa, et al. “What a Waste 2.0.” *Urban Development Series*, World Bank, 20 Sept. 2018; Kushwaha, Amiya Kumar. “Urban Flooding Caused by Plastic Clogging, Poor Drainage.” *Business Standard*, IANS, 10 Sept. 2017, <https://www.worldbank.org/en/news/infographic/2018/09/20/what-a-waste-20-a-global-snapshot-of-solid-waste-management-to-2050>



the open, and strict enforcement of plastic bans. India has experienced major disruption due to flooding in almost all its metro cities, with at least six deaths in Mumbai attributable to flooding in a single month in 2017.²¹ Further back, floods in Mumbai in 2005 killed over 500.²² Former Liberian Public Works Minister W. Gyude Moore also raised this issue in 2015.²³

Thank you for reviewing these examples of ways in which water pollution, water scarcity and floods are having adverse impacts on human rights. Each of these examples illustrate problems replicated across the globe. It is critical that governments and businesses address these problems and protect the rights of people around the world.

²¹ Kushwaha.

²² Id.

²³ “Water Plastic Clogs Drains, Promotes Flooding.” *Liberian Observer*, 16 July 2015, <https://www.liberianobserver.com/news/water-plastic-clogs-drains-promotes-flooding/>