**NC\_SurviveTheRodeo**

We negate.

## Contention 1 is Drilling the Arctic.

In the status quo, drilling in the Arctic is becoming more and more profitable. **Joling in 2015** finds that U.S Arctic oil reserves have 26 billion barrels of oil and 130 trillion cubic feet of natural gas.

However, drilling won’t occur until the U.S ratifies UNCLOS. **Conathan in 2012** writes that because we have refused to ratify the treaty, the international community is not recognizing U.S leases to the Arctic. Big Oil companies have made it crystal clear: If the U.S doesn’t ratify the treaty, they won’t operate in the Arctic.

This is very good news to environmentalists, since Arctic Drilling has 2 major consequences to our world.

### First is Damage to Indigenous Communities.

**The Arctic Council** in 2015 details that over 4 million indigenous people live in the Arctic.

Unfortunately, oil spills are an inevitable, as the **BOEM in 2014** estimates that in a 77 year period, around 800 small spills and 2 massive spills will occur in the Arctic if the U.S started drilling.

The **WWW in 2016** finds that Arctic environments would not be able to recover from oil spills, due to shorter periods of production and less solar exposure.

This is devastating, as **Larkin in 2010** writes that even a single small spill in the Arctic would destroy Arctic ecosystems, which is problematic to indigenous communities, because spills will deplete the populations of animals that indigenous people rely on for food.

### Second is Black Carbon Emissions

Oil drilling in the Arctic emits high amounts of black carbon. In fact, **Stohl in 2013** finds that oil drilling accounts for over 42% of black carbon emissions, contributing to the fast rate of melting in the region.

Black Carbon is damning to the Arctic, as **Walsh in 2012** writes that as black carbon settles on the ice, it darkens the snow, meaning that more solar rays are absorbed, melting the icecaps. This causes sea levels to rise, and damages coastal communities and economies worldwide. And emissions are extremely deadly as **Caiazzo in 2013** finds that total emissions in the U.S. account for about 200,000 premature deaths every year.

## Contention 2 is Mining the Seabed

In the status quo, U.S companies are interested in deep seabed mining but can’t, because UNCLOS is not ratified. **Rogers in 2012** writes that although U.S companies are getting more and more willing to invest in mining, they are hesitant to because they lack legal certainty.

Additionally, accession to UNCLOS will give the U.S a greater area to mine in. **Cardin in 2011** writes that if the U.S joins UNCLOS, they will gain access to an extra area estimated to be one and a half times the size of Texas.

There are two impacts resulting in the U.S mining the seabed.

### First is Damage to Coral Reefs

Seabed mining causes massive destruction to coral reefs around the world. **Bingeding in 2012** writes that it is impossible to excavate the ocean floor without emitting harmful toxins, which change the pH of water and acidify the ocean. Acidification causes mass bleaching of coral reefs and kills millions of fish.

This will devastate communities worldwide, because **Carlilli in 2013** finds that 1 billion people rely on coral reefs for food.

### Second is Toxic Waste from REM Processing

#### If the U.S ratifies UNCLOS, companies will mine for Rare Earth Minerals, or REMs. This is important because companies will have to process REMs to turn it into usable technology after they finish mining. This is detrimental because the processing of REMs leads to toxic waste.

Look to China as an example. **Kaiman in 2014** finds that in China, who produce over 85% of the world’s REM supply, processing 1 ton of REMs produces 2,000 tons of toxic waste. In fact, China’s largest REM-processing city produces 10 million tons of toxic waste yearly. That’s why Bleiberg in 2016 writes that 60% of Chinese urban water is polluted.

The U.S is even more susceptible to water pollution that China, because the **U.S Government in 2017** finds that China has a larger and faster growing market for green technology and has better environmental regulations.

Water pollution is extremely deadly, as **Denchak in 2018** writes that water pollution kills 1.8 million people a year and sickens 1 billion.

Thus, Zain and I negate.

# NC\_SurviveTheRodeo CUT CARDS

## Contention 1 is Drilling the Arctic.

In the status quo, artic drilling is becoming increasingly profitable.

Joling in 2015 finds that (Dan Joling, 7-25-2015, Seattle Times, Q&amp;A: A look at Shell Oil and Arctic offshore drilling, https://www.seattletimes.com/seattle-news/environment/qa-a-look-at-shell-oil-and-arctic-offshore-drilling/, 8-29-2018) ED

WHAT’S AT STAKE? Royal Dutch Shell and other companies want to tap into U.S. Arctic offshore reserves that the U.S. Geological Survey estimates at 26 billion barrels of recoverable oil and 130 trillion cubic feet of natural gas. Shell has invested upward of $7 billion in Arctic offshore investment. During the 2015 summer open water season, it hopes to drill two wells to begin determining whether there are commercial quantities of oil at its Burger Prospect about 70 miles off the coast in the Chukchi Sea.

However, companies won’t mine unless the U.S ratifies UNCLOS.

Conathan in 2012 writes that

 <https://thinkprogress.org/conservatives-disregard-traditional-allies-to-oppose-the-law-of-the-sea-2a814f04a717/>, July 8, 2018) ED

Until we ratify the treaty, no U.S. companies will operate on the extended continental shelf. Aside from a [small pocket of territory](http://www.boemre.gov/ooc/press/2000/061300.htm) in the western Gulf of Mexico where we have bilaterally negotiated a boundary with Mexico, companies cannot be granted the certainty that leases of these regions would not be challenged in international courts. Without becoming party to the treaty and gaining a seat at the negotiating table where decisions are made about how to partition out extended-shelf claims, we will be unable to assure industries that the international community will recognize a U.S. lease. Businesses, even those with extremely deep pockets such as [Big Oil](http://ratifythetreatynow.org/sites/default/files/pdf/API%20Letter%20to%20SFRC.pdf) and [Lockheed Martin](http://ratifythetreatynow.org/sites/default/files/pdf/Lockheed%20Letter%20to%20SFRC.pdf), have been very clear: If we don’t ratify, they won’t operate. Companies want to create those jobs, generate revenue, and increase domestic production. But no certainty means no investment. No treaty means no security, no jobs, no dollars, no resources. It’s that simple.

Arctic Drilling leads to 2 devastating consequences.

### First, Damage to Indigenous Peoples.

Arctic Council in 2015 (Arctic Council, 5-13-2015, Arctic Council, “Arctic Peoples,” https://arctic-council.org/index.php/en/our-work/arctic-peoples, 7-15-2018)

(TOP) Almost four million people live in the Arctic today, with the precise number depending on where the boundary is drawn. They include indigenous people and recent arrivals, hunters and herders living on the land, and city dwellers. Many distinct indigenous groups are found only in the Arctic, where they continue traditional activities and adapt to the modern world at the same time. Humans have long been a part of the arctic system, shaping and being shaped by the local and regional environment. In the past few centuries, the influx of new arrivals has increased pressure on the arctic environment through rising fish and wildlife harvests and industrial development.

Because of arctic drilling, The BOEM in 2014, estimates:

The United States Bureau of Energy Management, a department of the Department of Interior, 2014 Study, <https://www.boem.gov/uploadedFiles/BOEM/About_BOEM/BOEM_Regions/Alaska_Region/Leasing_and_Plans/Leasing/Lease_Sales/Sale_193/2015_0127_LS193_Final_2nd_SEIS_Vol1.pdf>

BOEM bases the analysis of effects from small oil spills for Alternatives I, III, and IV on the assumptions in Table 4-1. BOEM estimates about 800 small spills would occur over the course of the 77-year Scenario. These estimated small spills are totaled and rounded to the nearest hundred. Details are further discussed below. Small refined oil spills may occur during Exploration. The estimated total and annual number and volume of small refined oil spills during Exploration activities is displayed in Table 4-2. BOEM estimates about 35 spills occur during exploration ranging in size from <1 bbl up to 50 bbl per spill. Exploration is divided into Geological and Geophysical activities (marine, geohazard, and geotechnical surveys) and exploration and delineation drilling activities. Spills during Exploration are expected to be small and consist of refined oils because crude and condensate oils would not be produced during exploration. Refined oil is used in the drilling activity for the equipment and refueling. Crude, condensate, or refined small oil spills may occur during Development and Production. About 750 small crude and refined spills could occur during Development and Production. Of those, about 220 are small crude or condensate oil spills ranging from >1 bbl up to 50 bbl which could occur during the 44-year crude or condensate oil-production period, which is an average of about 5 spills per year. In addition to the 220 small crude or condensate spills just discussed, an estimated two small crude or condensate oil spills ≥500 bbl and <1,000 bbl could occur during the 44-year oil-production period. Of those two small crude oil spills ≥500 bbl and <1,000 bbl, one is assumed to occur offshore (from platforms or pipeline), and one is assumed to occur onshore (from the 300 mi onshore pipeline). An estimated 260 refined-oil spills >1 bbl could occur during the 44-year oil-production period for Alternatives I, III, and IV, an average of about 6 spills per year. Likewise, BOEM estimates 260 refined spills could occur over the 44-year gas-sales production period. Overall, estimates of crude, condensate and refined oil spills >1 and <1,000 bbl assumed to occur during each year of Development and Production are 11 for Years 10-30, 17 for Years 31-53 and 6 for Years 54 to 77. Large spills, although accidental, are estimated to occur from Development and Production activities and therefore are reasonably foreseeable. Two large spills of crude, condensate, or refined oil are assumed to occur during the Development and Production phases. This assumption is based on considerable historical data that indicates large OCS spills ≥1,000 bbl may occur during this phase (Anderson, Mayes, and Labelle, 2012). This assumption is also based on statistical estimates of the mean number of large spills from platforms, wells, and pipelines, the number and size of large spills on the OCS, and project-specific information in the Scenario. The mean number of large spills is calculated by multiplying the spill rate from the Fault Tree model by the estimated resources produced (4.3 Bbbl). By adding the mean number of large spills from platforms and wells (0.5) and from pipelines (0.9), a mean total of 1.4 large spills was calculated for the Scenario. Based on the mean spill number, a Poisson distribution indicates there is a 75% chance of one or more large spills occurring over the 77 years of the Scenario, and a 25% chance of no spills occurring.

A single spill will devastate the Arctic ecosystem -- Larkin 10 (Larkin, John E.D, John Larkin is a graduate of Oberlin College, and the Villanova University School of Law. At Villanova he was the recipient of the Dean’s Merit Scholarship, and the Philadelphia Trial Lawyers Association’s James J. Manderino Award for Trial Practice. He is currently a law clerk in the Appeals Division of the Montgomery County District Attorney’s Office. © 2010, John E.D. Larkin, Winter 2010, Georgetown International Environmental Law Review, “UNCLOS AND THE BALANCE OF ENVIRONMENTAL AND ECONOMIC RESOURCES IN THE ARCTIC,” [gawthrop.com/wp-content/uploads/2015/08/arctic.pdf](http://gawthrop.com/wp-content/uploads/2015/08/arctic.pdf).) //KV

A real increase in interest in the Arctic as an energy source has occurred in the last few years, following the release of the United States Geological Survey’s Circum-Arctic Resource Appraisal Report.102 The report relied on “a probabilistic methodology of geological analysis and analog modeling.”103 The report concluded that the Arctic has 90 billion undiscovered, but technically recoverable, barrels of oil; 1,670 trillion cubic feet of undiscovered, but technically recoverable, natural gas; and 44 billion barrels of undiscovered, but technically recoverable, natural gas liquids.104 Of those energy resources, almost a third of the oil was located in the Alaskan Arctic,105 and over a third of the natural gas was located in the West Siberian Basin.106 Retreating sea ice facilitates the recovery of this and other as yet undiscovered Arctic energy reserves. Off-shore mining poses serious environmental hazards that are not always visible to the naked eye. For instance, drilling can cause ocean currents to change, altering the marine environment, and affecting temperatures worldwide.107 It can also destroy marine habitats and their biological communities in the vicinity of hydrothermal vents.108 More obviously, oil exploration, especially in the harsh conditions of the Arctic, risks oil spills into the Arctic waters. BP Exploration (Alaska), for instance, is on average responsible for an oil spill every day in its Prudhoe Bay operation.109 These spills have the effect of depleting the populations of Arctic wildlife, including game animals hunted for food by indigenous Arctic peoples.110 The Arctic hosts populations of salmon, cod, saithe, haddock, redfish, herring, capelin, halibut, northern shrimp, blue whiting, pollock, flatfish, and snow crab.111 It is, in addition, either the home of or a key habitat for a wide variety of commercially exploited marine mammals including the minke, fin, and sei whales, and hooded, harp, grey, and harbor seals.112 The fishing industry plays a key role in the economies of several of the Arctic states.113

The Arctic would be unable to recover from a spill -- WWW 16 (Evan, December 6, 20j16, University of Massachusetts Amherst, The Effects of Arctic Offshore Drilling on Marine Ecosystems and Wildlife – Debating Science, https://blogs.umass.edu/natsci397a-eross/the-effects-of-arctic-offshore-drilling-on-marine-ecosystems-and-wildlife/, 7-16-2018) ED

Another factor to be considered is the danger of drilling in such a volatile environment (EIA, n.d.). The Arctic is considered a dangerous area to search for oil due to the difficulties posed by the landscape, which is covered in ice for much of the year. This additional risk means that the drilling set-up process would take longer than the preparations for drilling in other parts of the world (EIA, n.d.). The process involves the development of offshore drilling platforms, rigs, and the transportation of people and materials via shipping routes. The presence of ice floes “can damage offshore facilities, while also hindering the shipment of personnel, materials, equipment, and oil for long time periods” (EIA, n.d., para. 25). The remoteness of this locale also means that if an oil spill were to occur, any response would be delayed by several weeks, even during a period of minimal ice-cover (WWF, n.d.). Risks of major oil spills are increasing in the Russian Arctic, and Reeves et al. (2014) projected that by between 2020 and 2030, over 700 transit ships laden with oil are expected to pass between the Pechora Basin and Murmansk, Russia every year (p. 382). According to Reeves et al. (2014), “it is undeniable that risks of major accidents are increasing in the Russian Arctic” (p. 382). Similarly, a government report released by the United States claims that over a projected seventy-seven year period of drilling, there is a 75% chance of a large oil spill (Koch, 2015, para. 24). In addition to the expense and risk associated with responding to a large oil spill, the environment itself would not be able to bounce back from such an incident the way temperate areas would. According to the World Wildlife Fund (n.d.), the Arctic region would take longer than other regions to recover from a spill due to the shorter periods of productivity and minimal solar exposure. Contrary to the results found by Hylland et al. (2008) and Trefry et al. (2013), Reeves et al. (2014) found that drilling results in negative impacts on organisms due to oil contamination, seismic noises and other factors. Although offshore development has the potential to provide Arctic communities with income, ecotourism is emerging as a more viable source of income. The increases in tourism and the revenue it generates can be seen in many countries in the Arctic Circle. In the past ten years, Reeves et al. (2014) cites the increase in the presence of cruise ships and private vessels passing through the Northwest Passage. Since 1999 Norwegian cruises have become an increasingly popular form of tourism, and the number of passengers more than doubled over this time period (Reeves et al., 2014, p. 381). According to the Resource Development Council (n.d.), “tourism is the second-largest private sector employer, and accounts for one in eight Alaskan jobs” (para. 8). As of 2013, Alaskan tourism brought in $2.42 billion annually, including income from those employed by tourist services (Resource Development Council, n.d., para. 7).

### Second is Black Carbon

#### Drilling in the Arctic produces high amounts of black carbon. Stohl 13:

Researchers found that **the flaring of the gas produced by** oil **extraction in the Arctic accounts for 42% of** the **black carbon**, or soot, that is **contributing to the** relatively **fast rate of warming on the region.**

#### Black carbon causes climate change and melts the ice caps. Walsh 12:

Black carbon can have [a double warming effect](http://ecocentric.blogs.time.com/2012/02/16/climate-action-stopping-global-warming-through-the-back-door/). As its name suggests, it warms the atmosphere directly by intensifying the greenhouse effect, just as carbon dioxide does. But **as black carbon settles on the** snow and **ice of the Arctic, it darkens the ground**—**and** that in turn causes the surface to **absorbs solar energy it would have** otherwise **reflected** back into space. (It’s the [albedo effect](http://ecocentric.blogs.time.com/2010/10/14/climate-why-co2-is-the-control-knob-for-global-climate-change/), which you’ll hopefully remember from 7th grade science class, or at the very least, from the last time you wore a black T-shirt during a hot day.) The albedo of the Arctic is already shifting as sea ice melts, opening up [new stretches of dark water to sunlight](http://ecocentric.blogs.time.com/2011/12/01/an-arctic-wildcard-could-make-the-climate-go-bust/)—the same water in which oil companies will be drilling in the years to come**. Black carbon produced by** those **rigs will** only **make climate change in the Arctic**—where temperatures have [increased by 2 to 3 C](http://ecocentric.blogs.time.com/2012/06/25/surfs-up-sea-levels-are-rising-faster-on-the-u-s-east-coast/)over the past 50 years—**even worse.**

#### Emissions are extremely deadly. Caiazzo 13:

**Total** combustion **emissions in the U.S. account for about 200,000** (90% CI: 90,000–362,000) **premature deaths per year** in the U.S. due to changes in PM2.5 concentrations, and about 10,000 (90% CI: −1000 to 21,000) deaths due to changes in ozone concentrations.

## Contention 2 is Mining the Seabed

####  In the status quo, the U.S is interested in seabed mining, but can’t because UNCLOS is not ratified. Rogers 12:

Seabed mining, in the Arctic and elsewhere, is also becoming an important strategic interest for the United States. **U.S. companies increasingly seek to engage in seabed** **mining for** minerals such as **rare earth elements** and cobalt that are critical to the broad U.S. economy and used in producing defense assets. **However, as long as the United States remains outside [UNCLOS,]** the international legal protections afforded by LOSC, **the private sector remains hesitant to invest in** seabed **mining.**

#### Additionally, the US ratification of UNCLOS will lead to a larger area to potentially mine in. Cardin 11:

We shaped the treaty to be very favorable to **the United States**: we **reserved the only permanent seat on the international council that will oversee deep seabed mining**, including potentially rich sources of untapped energy resources, minerals, and precious metals. That permanent seat remains embarrassingly vacant, and decisions are being made about seabed mining in international waters without U.S. participation. Moreover, the estimated additional area **the U**nited **S**tates **could claim** sovereignty under the continental shelf expansion provisions of the treaty is **an area** across the Atlantic and Pacific seaboards estimated at roughly **one and a half times the size of Texas.**

There are 2 impacts resulting from increased seabed mining,

### The first impact is Damage to Coral Reefs

#### Seabed mining can cause mass destruction to coral reefs. Bingeding 12:

**Excavation of the ocean floor will result in a change in the pH of the water** column at the excavation site.Chemical elements buried beneath sediments and within rocks will be exposed to the seawater due to the damage that will be done. As a result chemical reactions will take place between the seawater and the stirred sediments and broken surfaces of the excavated rocks, thus the ocean’s pH will be altered. From basic science one understands that a diffusion gradient is created when particles move from a high concentration area to a low concentration area. Thus if the excavation on the ocean floor turns the seafloor water column acidic due to the chemical reactions that will take place, a diffusion gradient will be created horizontally, laterally or vertical through the water column. Consequently **the** Bismarck **Sea could turn acidic and endanger** our populations of **coral reefs.** This combined with **the looming threats posed by climate change** through warming of the ocean surface **and the acidification of the oceans** through uptake of excessive made-made greenhouse gases from the atmosphere **can cause massive bleaching of** our **coral reefs.** Thus this threatens the survival of all other species (including man) that inhabits the Bismarck Sea and beyond.

#### Coral reefs are extremely important, providing food to many. Carlilli 13:

**Corals**, like trees, provide three-dimensional structure and substrate to **house and feed fish and other marine animals that humans eat.** Some estimates say that **over 1 billion people depend on food from coral reefs**, and **reefs** as a whole **might be worth around $172 billion** for **every year** they continue to provide essential services to humans, like food.

### The second impact is Rare Earth Minerals’ Toxic Waste

#### If the U.S ratifies UNCLOS, companies, will mine for Rare Earth Minerals, or REMs. This is important because companies will have to process REMs to turn it into usable technology after they finish mining. This is detrimental because the processing of REMs leads to toxic waste.

#### ]ook to China as an example. Kaiman 14:

**China produces more than 85% of the world's supply of rare earth minerals**, **about half of which comes from [the city of] Baotou**, a city of 2.5 million in China's Inner Mongolia Autonomous Region, 650km northwest of Beijing. Processing rare earths is a dirty business. **Their ore is often laced with radioactive materials,** such as thorium, **and separating the wheat from the chaff requires huge amounts of carcinogenic toxins** – sulphates, ammonia and hydrochloric acid. **Processing one ton of rare earths produces 2,000 tons of toxic waste; Baotou's rare earths enterprises produce 10 million tons of wastewater per year.** They're pumped into tailings dams, like the one by Wang's village, 12km west of the city centre.

#### Leave the REM mining and toxic waste to China. China has a massive toxic waste issue. Bleiberg 16:

In 2013, just under **60 percent of the groundwater in China's urban areas [is]** was classified as "very **polluted**," or "relatively polluted," according to a Ministry of Land and Resources study. Both of these statuses mean that water is unfit to drink without treatment, and Turner warned that the reality may be grimmer than official estimates suggest.

#### The US is susceptible to water pollution, because China has superior environmental technology and still has a major water issue. US Government 17:

#### China is the largest and fastest growing emerging market for environmental technologies. The overall environmental technologies market in China (including goods and services) is valued at USD 60.7 billion (EBI Data Pack, December 2016). China’s 13th Five Year Plan promotes a cleaner and greener economy, with strong commitments to environmental management and protection, clean energy, emissions controls, ecological protection and security, and the development of green industries. With the introduction of the amended Environmental Protection Law on January 1, 2015, China fundamentally restructured its approach to environmental regulatory enforcement.

#### Water pollution is extremely dangerous. Denchak 18:

####  To put it bluntly: Water pollution kills. In fact, it caused 1.8 million deaths in 2015, according to a study published in [*The Lancet*](http://www.thelancet.com/commissions/pollution-and-health). Contaminated water can also make you ill. Every year, unsafe water sickens [and sickened] about 1 billion people. And low-income communities are disproportionatelry at risk because their homes are often closest to the most polluting industries. Waterborne pathogens, in the form of disease-causing bacteria and viruses from human and animal waste, are a [major cause of illness from contaminated drinking water](https://www.theguardian.com/environment/2016/aug/31/cleaning-the-worlds-water-we-are-now-more-polluted-than-we-have-ever-been). Diseases spread by unsafe water include cholera, giardia, and typhoid. Even in wealthy nations, accidental or illegal releases from sewage treatment facilities, as well as runoff from farms and urban areas, contribute harmful pathogens to waterways.

Thus we negate.