



The Trump administration constantly flaunts its team of business-savvy deal makers. Yet right now, they are pushing forward a dubious plan to drill for oil on the coastal plain of the Arctic National Wildlife Refuge, one of the last pristine and untouched wild landscapes on Earth.

COSTLY OIL

Why drilling in the Arctic Refuge is a bad deal for Americans.

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What administration and congressional advocates are ignoring is that drilling in the Arctic National Wildlife Refuge wouldn't just be terrible for the environment, but it also has serious financial shortcomings. In fact, no matter how you look at it, it's just a bad deal.

...one of the last pristine and untouched wild landscapes on Earth

When all factors are considered, revenue from drilling would likely bring in a mere fraction of what politicians have promised, and it's simply not worth the cost. We should not sacrifice the Arctic Refuge for negligible gain just to settle a decades-old political score.

Every step of the way, Arctic Refuge drilling costs more.

Alaska is considered one of the more capital-intensive settings for drilling in the United States.¹ There are nearly three months of consecutive darkness every winter in the northern Arctic. In the Arctic Refuge, the darkness is accompanied by freezing temperatures and weather conditions so harsh that companies need specially designed equipment. The Arctic Ocean pack ice can delay deliveries of materials, personnel and equipment for long periods, and flights carrying supplies can also experience prolonged delays due to freezing temperatures, fog and high winds. But exploration and other industrial activity is generally limited to winter because, in the summer, the ground turns to marshy tundra with the stability of a soggy pillow, making it hard to maneuver and stabilize equipment. These conditions are only getting worse with climate change.

On top of the extremely challenging environment, the isolation of the Arctic Refuge makes drilling even more costly. Unlike many other sites that are available for drilling, there is no pre-existing oil infrastructure in the Arctic Refuge. To produce oil there,

a company would need to build roads and pipelines, and transport drilling equipment, workers and supplies to one of the most remote regions in the world.

Drilling in the Arctic can be up to 10 times more expensive than drilling in the Lower 48.² Arctic drilling would require more upfront money than exploration prospects in other parts of the world. With harsh conditions and significant upfront costs, drilling in the Arctic Refuge would be a costly endeavor. Even after buying leases and searching for oil, companies could conclude that it's not a wise investment to commit the serious time, capital, and resources to drill in the Arctic Refuge.



The Wilderness Society
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¹ U.S. Energy Information Administration. Analysis of Projected Crude Oil Production in the Arctic National Wildlife Refuge. Washington, DC: U.S. Department of Energy, 2018. p. 3

² Perry, Anna, and Carolyn Alkire. Arctic National Wildlife Refuge: Economics of Potential Oil Development. Key-Log Economics, 2017. p. 33

Industry isn't using the land it already has.

Chasing high-risk and costly oil in the Arctic makes no sense when there are abundant, cheaper opportunities to produce oil in the Lower 48. Ninety percent of our public lands and minerals managed by the Bureau of Land Management are already open to oil and gas leasing.³

In the Lower 48, with current market conditions, industry isn't using even half of the lands it has already leased. Of the 25.7 million acres under lease in 2017, only 12.7 million acres were producing energy.⁴ A recent lease sale in

the Arctic suggests industry may be cool to drilling remote, frontier Arctic areas away from infrastructure.

In December of 2017, Interior offered 10.3 million acres of the National Petroleum Reserve-Alaska in the western Arctic for lease. Of this colossal area, 79,998 acres sold, less than one percent of the total area offered for bidding.⁵

The oil and gas industry is actually stuffed to the brim with leases and is facing an issue of

Of the 25.7 million acres leased in 2017, only 12.7 million acres were producing energy.

excess - not access. Arctic drilling is not only expensive and risky, it's also being considered in a flooded market. With so much land in the Lower 48 that is already leased but undeveloped, there is no need or compelling reason to prioritize drilling for oil in the country's premier wildlife refuge.

Trans-Alaska Pipeline: Fact vs. Fiction

There are some who argue that we need oil from the Arctic Refuge to feed the trans-Alaska oil pipeline system.⁶ This is simply false. Due to increased production from existing operations and recent discoveries on state and non-federally protected lands, the pipeline's throughput, or flow, has increased from more than 508,000 barrels per day in 2015 to more than 527,000 barrels per day in 2017,⁷ and more than 530,000 barrels per day in 2018.⁸ Clearly, oil from the Arctic Refuge is not needed to keep the pipeline operational.

Trans-Alaska Pipeline Barrels/Day

2015: **508,000+**

2017: **527,000+**

2018: **530,000+**

The numbers do not add up.

The Trump administration claims it can raise more than \$1 billion from lease sales in the Arctic Refuge alone.⁹ This projection is a pipedream that uses bogus numbers. The math is based on the assumption that there will be two lease sales of no less than 400,000 acres each in the Arctic Refuge, and that every acre would sell at an average of \$7,500.¹⁰ The truth is that many acres in Alaska have sold for less than \$100 per acre and, in today's market, the average acre sells for about \$41.¹¹ Moreover, it is very unlikely that each acre offered for sale would have a bidder.

Using more realistic estimates of lease sale revenues and given that only 50 percent of lease sale revenue would go to the federal coffers, the U.S. government would come out far below the \$1 billion goal. A study by the Center for American

Progress estimates that leasing in the Arctic Refuge would produce only \$37.5 million over 10 years.¹²

Why would we degrade the crown jewel of the American refuge system for false projections of revenue that won't come to fruition? What's worse, given potentially low interest, the government could sell off the Arctic Refuge for less than \$2 an acre.¹³ Selling an area as wild as the Arctic Refuge for pocket change cheats the American taxpayer.

US government could sell off the Arctic Refuge



for the price of a cup of coffee.

³ The Wilderness Society. No Exit: Fixing the BLM's Indiscriminate Energy Leasing. 2016.

⁴ "Oil and Gas Statistics | BUREAU OF LAND MANAGEMENT." BUREAU OF LAND MANAGEMENT | U.S. DEPARTMENT OF THE INTERIOR.

⁵ "Interior Lease Sales a 'colossal Dud'." Wilderness.org. Last modified December 6, 2017.

⁶ Pack, Will, and John Dahlberg. Untapped Potential: Why Developing ANWR Still Makes Sense. Washington, DC: Energy Policy Research Foundation, n.d.

⁷ "Alyeska - 2011." Alyeska Pipeline - Home. Accessed July 20, 2018.

⁸ <http://www.alyeska-pipe.com> (as of June 30, 2018).

⁹ Perry, Anna, and Carolyn Alkire. Arctic National Wildlife Refuge: Economics of Potential Oil Development. Key-Log Economics, 2017. p. 24

¹⁰ Perry, Anna, and Carolyn Alkire. Arctic National Wildlife Refuge: Economics of Potential Oil Development. Key-Log Economics, 2017. p. 29

¹¹ Perry, Anna, and Carolyn Alkire. Arctic National Wildlife Refuge: Economics of Potential Oil Development. Key-Log Economics, 2017. p. 29

¹² "Arctic National Wildlife Refuge 101." Center for American Progress. Last modified October 19, 2017. <https://www.americanprogress.org/issues/green/news/2017/10/10/440559/arctic-national-wildlife-refuge-101>.

¹³ "General Leasing | BUREAU OF LAND MANAGEMENT." BUREAU OF LAND MANAGEMENT | U.S. DEPARTMENT OF THE INTERIOR. Last modified April 2, 2018. <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/general-leasing>.

Economically Recoverable Oil Projections

Because of the lack of geologic data, there is debate over how much oil lies within the Arctic Refuge. Collecting seismic and coring data would result in permanent, harmful impacts to the refuge.

When considering projected revenues of Arctic Refuge oil, an often-neglected question is, how much of the oil can be produced for less than the price the oil would bring in the market, or how much

is economically recoverable? Economically recoverable oil is often a fraction of the full reserve and depends heavily on the price of oil.

Drilling in the Arctic can cost up to 10 times more than drilling in the lower 48.

The U.S. Geological Survey estimates there is a 50 percent chance that 7.7 billion barrels of technically recoverable oil exist in the federal region of the Arctic Refuge.¹⁴ Many revenue projections are based on data from periods of great fluctuation for crude oil prices.¹⁵ This may unrealistically skew estimates of economically recoverable oil during the time of production.¹⁶ The volatility of oil prices presents a large financial risk for companies that might consider developing in the Arctic Refuge.



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Little to gain, everything to lose.

More than 200,000 animals from the Porcupine Caribou Herd migrate to the Arctic Refuge every year, while countless musk oxen, wolves, polar bears and hundreds of species of migratory birds stand to lose vital habitat. We own our public lands, which means every American would lose a piece of our shared heritage as well.

According to the Energy Information Administration, oil from the Arctic Refuge would likely amount to the equivalent of what the United States uses in one year.¹⁷ The impact of oil from the Arctic Refuge would be less than 2 cents per gallon at the pump.¹⁸ Drilling in the Arctic Refuge is a temporary endeavor

with consequences that would last forever. What we stand to gain is nothing compared with what we stand to lose. The Arctic Refuge landscape has existed for many thousands of years before us. We must not allow ourselves to sell it off for a short-term profit from a shortsighted plan.

¹⁴ Murphy, David J. Oil Production in the Arctic National Wildlife Refuge: Impacts on Deficit National Energy Security. St. Lawrence University, Canton, NY, 2017. p. 8

¹⁵ Perry, Anna, and Carolyn Alkire. Arctic National Wildlife Refuge: Economics of Potential Oil Development. Key-Log Economics, 2017. p. 9-10

¹⁶ Perry, Anna, and Carolyn Alkire. Arctic National Wildlife Refuge: Economics of Potential Oil Development. Key-Log Economics, 2017. p. 9-10

¹⁷ Murphy, David J. Oil Production in the Arctic National Wildlife Refuge: Impacts on Deficit National Energy Security. St. Lawrence University, Canton, NY, 2017. p. 8

¹⁸ Murphy, David J. Oil Production in the Arctic National Wildlife Refuge: Impacts on Deficit National Energy Security. St. Lawrence University, Canton, NY, 2017. p. 12

Invisible Costs

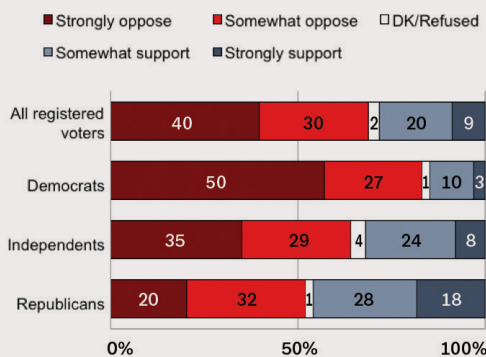
In addition to every expense of drilling in the Arctic Refuge explained so far, there are many costs that aren't even being considered. Factors such as climate change, loss of wildlife habitat and subsistence resources for Alaska Native communities, human health effects of pollution released during the production and consumption of oil, and disaster preparedness are not considered in the current cost projections.

Climate change, wildlife habitat, resources for local communities, and health effects of waste pollution are not currently considered.

When these negative effects inevitably occur, it will be the American taxpayer who pays the price. Companies rarely pay for sufficient preventative or standby resources.¹⁹ If a spill were to occur in an area as remote and pristine as the Arctic Refuge, it is us who would pay the price of the total impact to our land, our heritage and our pristine landscape. We cannot allow that to happen.

Registered Voters Oppose Drilling In The Arctic National Wildlife Refuge

- Including a Majority of Republicans -



Money Talks

The path to development in the Arctic Refuge is becoming increasingly cloudy as activists and socially responsible investors wake up to the risks involved. Recently, a group of socially conscious investors that manage more than \$2.5 trillion in assets published a letter to banks and oil and gas companies urging them to stay out of the Arctic Refuge for the sake of their companies, their legacies, and to prevent the wake of destruction they would leave behind.²⁰ Citing that 70 percent of American voters oppose drilling in the Arctic Refuge, these investors emphasized the “enormous reputational risk and public backlash” that companies would face should they choose to enter the Arctic Refuge drilling debate.²¹

As corporations, governments, and investors develop business plans that include climate-risk scenarios, companies operating in the Arctic Refuge could risk stranding their assets should climate change regulations be enacted.²²

As one energy consultant put it, “The May 14 letter from the activist investor groups is an effort to convince these companies that the risk to their reputations is larger than they may be currently anticipating, and that they will likely incur significant proxy fights in addition to the more conventional activism efforts if they go down the [Arctic Refuge] road. It’s a real threat for a company to factor into its thinking.”²³

As citizens all over this nation speak up loud and clear, companies have been put on notice that now is the time to do the right thing: Keep drilling out of the Arctic Refuge.

The Arctic National Wildlife Refuge is too wild to drill and too financially risky to be worth the lasting damage that would result from drilling. Fortunately, there’s still time to get us out of this terrible deal. Congress must reverse this egregious provision to open the Arctic Refuge to drilling and restore protections before it is sold off to the highest bidders.

There are enough sensible alternatives for U.S. energy production to keep us from drilling in the crown jewel of the National Wildlife Refuge System. We must hold industry accountable to develop the lands that they have already leased before pursuing reckless drilling in the Arctic. We cannot be the generation that loses the Arctic National Wildlife Refuge when simpler solutions to our energy demands were knocking at the door the entire time.



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¹⁹ Perry, Anna, and Carolyn Alkire. Arctic National Wildlife Refuge: Economics of Potential Oil Development. Key-Log Economics, 2017. p. 30

²⁰ Investor Arctic National Wildlife Refuge Letter. 2018. <https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/Investor%20Arctic%20National%20Wildlife%20Refuge%20Letter%205.11.pdf>.

²¹ Investor Arctic National Wildlife Refuge Letter. 2018. <https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/Investor%20Arctic%20National%20Wildlife%20Refuge%20Letter%205.11.pdf>.

²² Investor Arctic National Wildlife Refuge Letter. 2018. <https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/Investor%20Arctic%20National%20Wildlife%20Refuge%20Letter%205.11.pdf>.

²³ Blackmon, D. (2018, May 23). ESG Investors Rumble Into The Fight Over ANWR. Retrieved from <https://www.forbes.com/sites/davidblackmon/2018/05/23/esg-investors-rumble-into-the-fight-over-an-wr/#33d5b33255bf>