The Environmental Impacts of the U.S. Military

“When we declare war on a nation, we now also declare war on the earth, on the soil and plants and animals, the water and wind and people, in the most far-reaching and deeply-infecting ways. War insinuates itself, like an aberrant gene, and, left unchecked, will eventually destroy the earth’s entire system.” ~Barry Sanders

“We had virtually no economic options with Iraq because the country floats on a sea of oil.” ~Paul Wolfowitz

In assessing the costs of war and militarism, the environment is rarely—if ever—identified as a noteworthy casualty. Most of us fail to realize that in both times of war and peace, the environment suffers grievously at the hands of the U.S. military. According to H. Patricia Hynes, retired professor of environmental health from the Boston University School of Public Health, “Few whole countries use more oil than the Pentagon.”1 Consuming nearly half a million barrels of oil per day, the Pentagon is the single largest user of petroleum in the world, culpable for 5% of all current climate change emissions. These figures, while appalling, are easy to believe in light of the fact that, in less than one hour, a lone F-16 consumes almost twice as much gas as the average driver does during one year, and a single B-52 Stratocruiser, with its eight jet engines, guzzles an astounding fifty-five gallons of fuel per minute. Globally, military activity is likely the cause of up to 15% of climate change pollution.

Yet, even these shocking numbers fail to convey the detrimental impact which the ravaging militarism of the modern world has on our earth’s climate. Not only is the particular type of fuel used for aviation more polluting, but the Air Force is also far and away the largest consumer of oil within the U.S. military. Hynes writes that “Carbon dioxide (CO2) emissions from jet fuel are larger—possibly triple—per gallon than those from diesel and oil,” and that “aircraft exhaust has unique polluting effects that result in greater warming effect per unit of fuel used. Radiative effects from jet exhaust, including nitrous oxide, sulphur dioxide, soot, and water vapor exacerbate the warming effect of the CO2 exhaust emissions.”2

In a self-defeating, counterintuitive, and immensely destructive cycle, the U.S. military takes every measure to preserve its strategic access to oil3 while in the process consuming more oil than do entire nations. Following World War II, the United States “replaced the former colonial powers” as hegemon of the Middle East, repeatedly using the threat of nuclear attack “to guarantee its continued control over and privileged

2 Ibid.
access to the ‘prize’ of the region’s oil.” Throughout the second half of the twentieth century, the central focus of the United States was to ensure that no other country—particularly the Soviet Union—gained independent access to Middle East oil resources. To this end, though “in the name of freedom and anti-communism,” the Truman, Eisenhower, and Carter Doctrines were enacted, setting the stage for numerous U.S. military interventions and persistent domination of the Middle East. During the 1967 Israeli-Arab Six Day War, 1970 Jordanian civil war, and 1973 October War, for instance, the U.S. issued nuclear threats in order to maintain its iron grip on the region—and its oil.

Consider the case of the more recent Iraq War, waged on the same basis: between 2003 and 2007, the war produced more greenhouse gas emissions each year than 139 of the world’s countries release annually. Barry Sanders, author of the seminal book The Green Zone: The Environmental Costs of U.S. Militarism writes that, “For just the first three weeks of combat in Iraq, the Army calculated that its branch alone would require more than 40 million gallons of fuel, an amount equivalent to the total gasoline used by all Allied Forces combined during the four years of World War I.”

What is more, scientists posit that the total cost of the Iraq War, which has soared close to $3 trillion, if invested in renewable energy, would have been enough to begin to reverse global warming trends by 2030. In addition to the immediate climate change pollution produced by military activity, the radically unequal allocation of funds and resources between the military and environment, understood in the context of the familiar “guns and butter” paradigm, further sets back efforts to preserve our planet and create a sustainable future. While the federal government recently committed $1 trillion to creating a new generation of nuclear weapons and their delivery system by 2030, a comparatively paltry $56 billion was invested in clean energy between 2010 and 2015. This disproportionate investment of money and manpower into the military—over 20% of all the world’s scientists and engineers work in the military sector—greatly detracts from the country’s innovative capacity and shortchanges sectors devoted to environmental protection, alternative energy sources, and energy efficiency.

Despite its status as the single largest contributor to global warming in the world, the Department of Defense is nonetheless exempt from all international climate

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4 Joseph Gerson, *Empire and the Bomb*.  
5 Ibid.  
6 Hynes.  
8 Hynes.  
9 Ibid.  
10 Kristen Osling, [http://peacemagazine.org/archive/v08n3p08.htm](http://peacemagazine.org/archive/v08n3p08.htm).
agreements in “reducing—or even reporting—its pollution.” While President Barack Obama’s ratification of the Paris Climate Accord in December 2015 may have redeemed Bush’s refusal to ratify the Kyoto Protocol a decade earlier, he nonetheless chose to exempt the Pentagon from an executive order requiring other federal agencies to reduce greenhouse gas emissions by 2020. This, despite the Pentagon being responsible for 80% of the fuel usage of the entire federal government.

Furthermore, the environmental havoc wreaked by the Pentagon far exceeds the 400,000 barrels of oil which it uses per day. An analysis of the U.S. military’s environmental impact would not be complete without taking into consideration the severe ecological damage and health risks posed by chemical and nuclear weapons waste pollution. In total, the United States controls thousands of military bases, manufacturing and testing sites, and other facilities in more than 140 countries worldwide. These sites, many of which are used for explosives and nuclear weapons testing, are hubs of radiation and toxic residue production. They spawn lingering contaminants like perchlorate, a rocket fuel component, which corrupt ground and drinking water and lead to numerous health catastrophes. Perchlorate, for instance, critically inhibits the neurological development of infants. Exposure to nuclear radiation is known to cause various types of cancer and disease and may also lead to birth defects or hinder child development. Often the consequences are fatal.

It is estimated that cleanup of military sites globally could cost the United States hundreds of billions of dollars. Boston Globe journalist David Armstrong writes that, “Virtually no part of the world is untouched by environmental hazards generated by the US military.” Many countries, even U.S. allies such as Germany and Bermuda, have demanded that the United States help pay for the environmental disasters it has caused, but, in most cases, Washington has dismissed these complaints and refused to provide any form of monetary assistance. Indefensibly, the U.S. condemns unknowing local populations to suffer. Those who fare the worst frequently belong to impoverished and marginalized communities, as they often reside in closest proximity to U.S. bases. This is true even within the United States, where Native Americans are most affected by chemical and nuclear weapons waste pollution.

With global militarization on the rise and newly-inaugurated President Trump in office threatening to pull the U.S. out of the Paris Agreement, appointing a slew of generals to cabinet positions traditionally held by civilians, and calling for a twenty-first century nuclear arms race, the earth—and its inhabitants—are in as great a danger as they have ever been. Just recently, a Pentagon panel urged the Trump administration to

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14 Hynes.
make the U.S. arsenal more capable of “limited” atomic war. Critics of such an expansion say, however, “that even these less explosive nuclear weapons, which pack only a fraction of the punch of the bombs America dropped on Japan in 1945, can still kill scores of thousands of people and lead to lasting environmental damage. Expanding the inventory of lower-yield warheads — and the means for delivering them—” could, in fact, make nuclear war more feasible and likely.\textsuperscript{15} In light of these many threats, and the gravity of them, the times require that everyone of us step up and take action. Only a collaborative effort stemming from the grassroots—from the people—has the power to oppose the militarism of the modern day and to halt the fast deterioration of our planet.

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