

*In Week 11 we learned about the history of nuclear weapons testing in the Pacific. In Weeks 15 (urban sprawl) and 8 (Minamata disease), we learned about other ways that humans have impacted the natural environment. Using only course materials, give and explain three different examples in which the destruction of the natural environment has directly impacted humans. What caused the destruction of these environments (including plant and animal life) and what were the effects on humans? You must cite throughout your essay.*

Total Word Count: 675

Following the nuclear attacks on Hiroshima and Nagasaki, the United States decided to continue testing the country's atomic range within the areas of the Marshall Islands. One devastating incident in 1954, referred to as "The Bravo Test" or "Lucky Dragon Incident," occurred after the United States delivered a hydrogen bomb to the Bikini Atoll. This nuclear weapon's fallout cloud was so large that it caused radiation illness in nearby fishermen, radiated the fish that they had been catching to put on market, and "contaminate[d] entire atolls with high levels of radiation displacing residents most of whom have never been able to return to their homes" (Jacobs *"The Bravo Test and the Death and Life of the Global Ecosystem in the Early Anthropocene"*). The United States failed to broadcast the nuclear test worldwide, which resulted in many of the fishermen from that day returning to port and selling off their fish as usual to be sold throughout Japan (Lecture 4/6/21). Tuna was very abundant in Japan, and inexpensive at that, so the news about the possible consummation of radiated fish affected a majority of Japanese citizens. Additionally, the irradiated pieces of land and coral from the test site go up into the atmosphere as ash and subsequently come down as toxic rain (Lecture 4/6/21). Many people affected by the falling of irradiated ash and rain suffered burns and radiation poisoning among other complications.

Similarly, in the Marshall Islands there lies the Runit Dome that was built to cover up nuclear waste rather than clean it up. In recent times, rising sea levels threaten to not only cover the Enewetak Atoll where the dome is located, but also spill all of that covered nuclear waste into the ocean. According to an article on The Guardian "This dome in the Pacific houses tons of radioactive waste- and it's leaking" asserts that claim by reporting, "Now locals, scientists and environmental activists fear that a storm surge, typhoon or other cataclysmic event brought on by climate change could tear the concrete mantel wide open, releasing its contents into the Pacific Ocean" (Wall). A short documentary on the dome and how it affects the people of the Enewetak Atoll explains all of the consequences the people have to take on for something they did not want in the first place. First, the American soldiers who were ordered to build the dome suffer from irradiation. Compensation for these veterans is scarce, and the hospital bills for radiation treatment are not acknowledged by the government. The citizens of the atoll

are constantly fighting for acknowledgement and support of climate change, and how the destruction of the dome can result in not only a problem for the Marshall Islands but also for the rest of the world. Some of the families of the Enewetak Atoll are also from a different area of the Marshall Islands which had previously been irradiated by nuclear tests. These people were evacuated only to have their home destroyed and a place they could never return to in their lifetimes (“This Concrete Dome Holds A Leaking Toxic Timebomb | Foreign Correspondent”).

One final example of the destruction of environments and the effects on humans stems directly from the 2011 disasters. VICE News’s documentary “The Toxic Pigs of Fukushima ” shows many instances of how nature is impacted by a sudden lack of human activity. Due to the mass evacuations and fear of radiation surrounding the Fukushima Daiichi Nuclear Power Plant, the landscape surrounding Fukushima began to change, allowing for nature to thrive. However, despite the return of native plants and animals, the issue remains that these beings are radiated and pose a threat to the return of civilization to the area. With the Japanese government pushing for people to come back into Fukushima, local hunters take it upon themselves to kill these radiated boars, efforts are put into removing the irradiated tops of the soil, and more.

The effects of nuclear testing and environmental damage are not only a subject of emotions, but also a subject of ethics. People's homes become lost, incomes and the economy are threatened, and innocent people suffer for means of selfish destruction.

Comment from Dr. Wright: Excellent work, Alyssa. Clearly written and well-organized.