

If no action is taken toward environmental conservation soon, nature will be irreversibly destroyed. Humans are out of sync with the natural world as a result of consumerist manipulation and widespread denial. We are quickly overpopulating the planet, over-exploiting its natural resources, and destroying ecosystems in order to progress our idea of civilization. There are numerous and undeniable examples of this everywhere, and direct evidence of our responsibility for global climate change. We are an invasive species competing against the entire natural world.

This installation focuses on environmentalism and was largely influenced by the fact that the president-elect, Donald Trump, does not even acknowledge global climate change as a real issue. What does it mean for the state of the environment if the leader of a major world power refuses to take action? My answer to this question is somewhat pessimistic, yet addresses a real idea. If we do not begin moving away from our destructive tendencies—deforestation, burning fossil fuels, over-fishing—we will forever lose the natural world.

This dome explores the idea of artificial reality, like an uncanny valley replacement for what we are rapidly destroying. In the future, will we be able to experience being in nature, and if not, what will take its place? My installation proposes a concerning possibility for a future society: it provides an at once disturbing substitution for nature that offers a skewed connection and further disconnect. Will we have to resort to artificial spaces, like this, to get our nature fix? And, after decades or centuries of destruction and loss, will we even truly know the appearance of nature?

Joanna

# **The importance and necessity of environmental law**

Joanna



*This paper addresses how public policy and environmental law intersect, then looks at the issues within that intersection. In order to truly protect the natural world, laws need to be created that restrict and regulate the over-exploitation of the environment. There are some laws in place already, but they aren't good enough. It concludes with a call to action and a means to act.*

I have always thought of global climate change as an undeniable scientific truth. According to a study done by NASA, over 97% of climate scientists agree that climate change is real and has been caused by human activity. I had understood that it is a great issue that our species needs to overcome, but for a long time I didn't see myself as a part of the solution. The issue seems too great for me, as something I have no ability to change. Someone had to do something, but that someone isn't going to be me – there is just no way. However, my attitude started to change during the summer of 2016.

My dad insisted that I apply for a summer program called COSMOS. At COSMOS, I would be doing a month of intensive college-level science classes. I figured that if I had to go to class during the summer I should choose a topic that I find somewhat interesting. So, I applied for the Marine Mammals and Global Climate Change group in Santa Cruz and was fortunate enough to get accepted. Some of my other options were Astrophysics, Nanochemistry, Number Theory and Discrete Math – but I found the climate change group the most enticing because what I would learn about would address a real and pressing issue. So, when summer came I packed my bags and headed to Santa Cruz for four weeks.

Classes started and I felt myself almost falling asleep in nearly every one. Yes, I cared the environment and I wanted change, but it was summer and I felt shouldn't have to use my brain in the summer. I questioned, why couldn't I hold off learning about this stuff until the school year? Nonetheless, I managed to stay awake for all of my classes and on the first Thursday my professor took my class whale-watching in Monterey Bay. So far, I had learned how whale populations have been suffering due to changing ecosystems as a result of climate change. To me, this was all very sad but it didn't really seem real yet – it felt more like a hypothetical issue than something that is occurring right now. My class got out on the ocean and after an hour of searching, we came across two humpback whales. The moment I saw the back of the whale graze the surface to breathe and then splash its tail up to dive down was breathtaking. It was like a surge of excitement and awe caught me and took hold of me for a few seconds. The whales were enormous and didn't seem to care about our boat at all. I would have been content to stay with those whales all day, just watching them rise for a moment to take a breath and then diving for food. However, we only had about an hour with them before we started to head back into land. Suddenly, I had an emotional connection to these animals – they had been so unbelievably graceful and beautiful, I didn't want them to go away completely. Seeing the whales, living so naturally, was a call to action for me. I needed to learn more about the issues the world is facing and some of the steps humanity is taking to resolve them – then maybe I could somehow help the whales.

While I found the experience of seeing those whales up close incredibly uplifting, the realities of climate change quickly began to crush my spirit. Earth is currently facing ocean acidification, increased and more intense tropical storms, animal population decreases, rising sea levels, animal population decreases, higher global temperatures and other serious problems that are a result of the immense amount of greenhouse gasses that humans emit into the atmosphere (Shaftel, 2016). Not only are there numerous aspects of climate change that need to be solved, but there needs to be a means for solving them in the first place. As the culture of the industrialized world functions now, we exploit natural resources in order to supply and aid our economy (Klein, 2011). How can we undo that system now that we rely so heavily upon it? I started to accept that the state of the environment could only worsen in the coming decades.

During my last week at the summer program, two of my professors got our class in touch with one of the leading climate change experts – Richard Alley, a Penn State professor. Our conversation with him was just as terrifying to me as what I had been learning in class. He explained the vast amount of issues that are going to need to be solved in order to affect change. However, he left the class with a powerful message that has resonated with me ever since. He said, “your generation is going to find a solution and clean up the mess that we have made. The technology to do so is out there, it just doesn’t exist yet. You have to keep fighting, learning, and talking about the environment, then change can be made. Some of you will have to be the engineers or the teachers, or even the lawmakers, but it will be done.” In the midst of his inspiring words, something became unequivocal. The majority of change that will be made will be based on the decisions of our political leaders.

As we function now humans could exploit nature to its limit, until we have clear cut all of the forests, mined every mineral, and allowed all sea and land ice to melt. More intensive laws and regulations need to be implemented in order to protect the environment, otherwise nature will have no inherent rights to continue to exist and could potentially be irreparably destroyed. It won’t be easy to execute the creation of these new laws and it will take a revolution of new thinking and new ways of living to start to heal, but the laws have to be created in order to preserve the environment.

Environmental conservation is in the best interest of the human race in terms of survival and quality of life. Some may argue that they only fight for their love of animals or nature and that it has no connection towards their own self-preservation. It’s hard to admit that the environmental movement is somewhat selfish. Stuart Oskamp, a social scientist, wrote in the *Journal of Social Issues*, “we should view the achievement of sustainable living patterns as a superordinate goal – a war against the common enemy of an inhabitable world.” Why do we need to care about any issues if they do not directly affect us? Well, environmental conservation actually does, and now that we know that, we can act. The effects of climate change will undoubtedly be negative for the human race. One result of climate change is rising sea-levels, which will displace around a billion people from coasts all over the world (National Geographic, 2016). For these reasons environmentalists advocate for the transition to renewable energy (Friedman, 2008). There is likely intentions of love for the natural world amongst environmentalists, but even they must first consider our own survival. The extinction of species of animals disrupts ecosystems and therefore, disrupts humans’ supply of natural resources and food (Oskamp, 2000). This means that we can’t over-fish or over-hunt species. Stephen Hawking, a theoretical physicist, cosmologist, author, has stated that humans will most likely not “survive another 1000 years without escaping beyond our fragile planet” (Erickson, 2016). At its core, environmentalism is about the preservation of the human species rather than the conservation of the planet. So, what does environmental conservation really mean? It means that we have to work to ensure that we can sustain our lifestyles limitlessly, so the human race can continue to flourish (Friedman, 2008). We can’t over-exploit or destroy because nothing will be left for future generations. We have already caused damage that will be arduous to reverse, but for humans who wish to survive and thrive on this planet, environmentalism is key.

There are already some environmental protections that exist within public policy. Some of these include the Clean Water Act, the Clean Air Act, and the Endangered Species Act. Though it has been beneficial for these regulations to exist, they have not always been successful in their fundamental goals. The Clean Water Act was created to control the health of water within the U.S. and also targets wastewater treatment and the health of the wetlands (*Clean*

*Water Act*, EPA, 1972). Even recently there have been major conflicts with this act regarding the development of the Dakota access pipeline. The pipeline threatens the supply of water that the people living in those areas will be receiving. The oil that the pipeline would hold could potentially contaminate all of the water supply – this could be detrimental to the health of the people, the agriculture, and the natural ecosystems of the area. This has been a problem that many pipelines are causing (Sidder, 2016). The Clean Water Act must be further developed to protect the life surrounding the area. Currently, it speaks more to how water is necessary for commerce than it does for the regulation of its health (Margil, 2014). This idea needs to be reversed. Before water is used for industry, it should be healthy and accessible to everyone.

The Clean Air Act of the United States was established in 1970 and is meant to manage the amount of air pollution emitted into the atmosphere (*Clean Air Act*, EPA, 2007). This act has been nearly ignored as we have delved deeper into investing in fossil fuels. Pollution in the air has become one of the leading causes of cancer in humans globally over the last ten years (Kelland, 2013). The interests of fossil fuel corporations are being prioritized over the physical safety of humans. This has largely been due to the fact that we “have raised atmospheric carbon dioxide levels from 280 parts per million to 400 parts per million in the last 150 years” (Shaftel, 2016). The Clean Air Act simply isn’t being enforced strictly enough and that must change.

Lastly, the Endangered Species Act “provides for the conservation of species that are endangered or threatened throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend” (NOAA, 2016). However, the process of adding an animal to the endangered species list is intensive, time-consuming, and strict (Stokstad, 2005). Animals at risk aren’t being recognized as endangered because of the difficulty of this process. Many of the scientists who are attempting to raise awareness for a species but are unable to find the funding needed to do so. Others who have been able to do their research aren’t having their arguments get accepted by the government because there seemingly isn’t enough evidence, but it can be extremely difficult to study dying populations of animals. Unfortunately, some aren’t willing to dedicate the time to doing the research and then proposing it to government officials (Stokstad, 2005). So, animals are suffering because something along the process of potentially saving them has made it extremely difficult to move forward and thus the original goal of the act is being subdued. We have a good start with these laws: they show that people care and are ready to act – but there is more to be done to strengthen them. Policies have to continue evolving until the interest of the health of the environment is priority.

Corporations are now being made to create environmental impact statements, which has created a positive change for environmentalism. Environmental Impact statements force corporations to develop a plan that will mitigate their environmental damage. In an interview with Jay Eidsness, a federal lawyer with a background in environmental law, he explained that often, corporations will become so frustrated by repeatedly proposing ideas in order to meet the requirements, they will abandon the projects all together. Thus, no environmental damage is had. However, some argue that the regulations we have in place now such as this do not work to protect the environment, but simply slow its rate of destruction.

According to Mari Margil, an environmental lawyer, the laws state that nature is property and only regulate the way that nature is used – it is only protected as commerce. Corporations have been able to find loopholes within laws because they have certain legal protections that allow them to do so. Corporations hold the same status as people under the law and it allows them rights that they are able to take advantage of – like having no carbon taxes (Klein, 2011) Large companies are also the number one cause of climate change (Levy, 1998). So, if the ones

who are causing the most harm are able to get away with it, then how is there any hope for the environment? Nothing will change if we don't make them stop – laws need to change. It can be done. Ecuador has become the “first country to recognize the rights of ecosystems to exist, persist, regenerate, and evolve” (Margil, 2014). This means that the natural land of Ecuador can be protected legally just because it exists, and therefore cannot be destroyed by industry. Like the Acts that have been implemented, environmental impact statements do a lot of good on their own – but they aren't enough. Without furthering the effectiveness of the statements, corporations will continue to over-exploit.

Recently in Paris, over 200 countries met to discuss climate change and their decisions required no call to action, but instead simply set a goal. The Paris Agreement –that lasted from November to December of 2015 –was one of the first time that nations from all over the world met to acknowledge and discuss climate change (Milman, 2015). This is actually a big step for the environmental movement because there has been a lot of denial about this subject, so international acknowledgement has been a good outcome. Yet, the conclusion about how countries would move forward regarding the issue of global climate change only really set forth guidelines. The major idea was that the overall global temperature should not increase by 2°C, so by 2020 greenhouse gas emissions should be reduced (UNTC, 2015). Not only is there no concrete action plan, but it also disregards the urgency of the issue of global climate change. People living in developing countries like India and China are experiencing the first hand effects of climate change such as the air pollution from the factories (Durin, 2015). Also, as mentioned before, those living on coastlines of all of the continents will have to relocate further inland in coming years – but that is happening right now as well. The Biloxi-Chitimacha-Choctaw Indians have lived about 100 miles south of New Orleans for the last 200 years; they are now receiving federal funds to move inland because their homes are being destroyed (Stone, 2016). Sea level rise isn't *going* to happen, it *is* happening and people do not have time for countries to finish deliberating on first whether or not it is real and then second if they should act. Political leaders need to start acting and making decisions on behalf of the environment and the Paris Agreement didn't quite do the job. If anything, there need to be more Paris Agreements so that real regulations can be set into place that will help mitigate the situation.

Through the 2016 presidential election, it has become clear that United States will most likely not act – or at least not willingly. President-elect Donald Trump is a firm disbeliever, tweeting “the concept of global warming was created by and for the Chinese to make U.S. manufacturing non-competitive.” If he doesn't believe in climate change then what does it mean for the state of the environment if the leader of the number one superpower and second greatest emitter of greenhouse gasses isn't willing to act? The environmental movement will have to shift from taking action back to convincing people that there is a problem in the first place (Fang, 2016). This will be an extremely negative backtrack for the movement because it will slow the rate of progress by having to re-educate people and re-establish the urgency of the issue. Potential solutions will be brought to a halt until awareness is brought up again. The future has become somewhat unclear and seemingly hopeless. It's uncertain if we have the ability to allow four years to go by before any real action can taken – we may be too late if we wait that long (Fang, 2016). Unless the people of the United States speak up and fight for both acknowledgement and an action plan, the state of the environment could potentially be ignored during the next presidency and we don't have that luxury. Now, more important than ever, is the time for the people of the U.S. to demonstrate and protests to make our voices heard about this issue, or people like Trump will get away with ignoring the problem,

Denial of climate change is motivated by the economics of the fossil fuel industry. The annual gross of the exploitation of nonrenewable energy is upwards of \$5.3 trillion (Geiling, 2015). Major corporations like Valero, Shell, Exxon Mobil, BP, Chevron, and Koch Industries are more invested in continuously making a profit than trying to switch to renewables in order to restore health to the planet (Stevens, 2016). Changing our main energy source will be expensive in the beginning and it will take a lot of work – but as we use the renewables for longer, the economy will benefit (Kauffman, 2016). These major companies aren't willing to wait long enough for an adjusting period to end and fossil fuels are cheap right now, so they fund political leaders to deny any ownership of climate change (Stevens, 2016). James Inhofe, the chair of the Senate Environment and Public Works Committee, is one of the most prominent climate deniers within the government and is also “one of the largest recipients of fossil fuel money in the U.S. senate.” From fossil fuels funds alone he makes \$1,837,427 (Stevens, 2016). Other political leaders that are both being funded and denying the issue are Ted Cruz, Marco Rubio, Paul Ryan, etc. Companies are lobbying politicians in order to protect their interests. “There are 131 deniers in Congress and 38 climate deniers in the Senate”– therefore no climate change bills can be passed (Stevens, 2016). Before anything can happen on a national scale, this must change or else nothing will be done. Politicians have enough influence to cause disbelief of major issues that are supported heavily by science. This is an issue within other issues of environmentalism as well. The same corporations that are the main causes of climate change are also clear-cutting, over-mining, creating large amounts of waste, and causing other damages (Stevens, 2016). So the politicians that are protecting the interests of corporate greed are allowing them to completely over-exploit and damage areas for profit. This must stop. We are valuing the corporations more than both the environment and the people who are being affected by the damage – which will eventually be all of us. Either new candidates need to be elected to raise awareness of these issues, or the current politicians need to be confronted about the nature of their actions so they can realize the consequences. Denialism isn't an option anymore; the state of the environment is too fragile. It is vital that new laws are passed to protect the environment.

The responsibility of communities to speak up on behalf of the issues they are facing with the environment will have to become more prominent; this is completely feasible. Our roles as individuals with our own values and beliefs is becoming more important, because if we don't have a government that will speak for us, we must do it ourselves. This idea is somewhat terrifying. How can I make a difference? I'm just one person. Somehow, it's been done before though. Communities have fought for the rights of the environment around them and won. Mari Margil has experience with working with an individual to fight for the rights of the environment surrounding their homes. She tells the story, “in 2006 our phone rang with a call from Michael Vaca... He lives in the tiny, rural township of Blaine in Western Pennsylvania – deep in the heart of coal country. Over the past two decades, communities across Western Pennsylvania have been devastated by something called ‘long-wall coal mining.’ Mining Corporations drive their longwall machines underground, ripping out massive panels of coal over two miles long. When the coal is gone, the land above is unsupported and caves in; houses, roads, schools, farmland all fall into the mine... Michael wanted to stop the mining, but had seen other communities fight and lose their battle to stop it. Nature is considered rightless and as such the people of Blaine township in trying to protect nature, found they could not defend the rights of the ecosystems in Blaine because there were no rights to defend.” The idea that nature is rightless means that there is no inherent protection for the environment. There is no argument that nature has the right to healthily exist that can be used in environmental law cases because there aren't any laws yet.

Margil continues, “Passed unanimously by the supervisors in 2006, the ordinances [we created] do three things: first, they ban corporations from mining, second, they recognize the rights of ecosystems, and third, they strip corporations of their power to override those ecosystems and those ordinances” (Bioneers, 2011). Everything changed because one man who cared enough to want to do something made a phone call. There are people like Mari Margil out there who are prepared to help regular citizens win the battles against corporate greed and put an end to the destruction. The idea of being the first one to step up and say something can seem like a heavy of a burden, but it’s not that difficult. The work of an individual if well argued and supported will be backed by others, yet taking the first step of making one’s voice heard can be intimidating. Thoughts of no one listening or caring arise as well as the idea that people will react negatively to new ways of thinking (Machan, 1993). Michael Vaca proves that if one shows that he, she, they really cares about something, others will come to his, hers, or their aid. All Vaca did was make a call. We can’t rely on our officials to make decisions that will help protect the environment because they are being paid not to and nature has no inherent rights to be conserved, so the only ones left to fight for it are civilians and communities. If corporations are receiving too much backlash from the public, they won’t be able to continue with their actions – the fight is too painstaking and time-consuming. The power of communities is more important than ever now, with Trump as president and the current state of corporate power. People need to unite in order to take a stand.

In order to achieve a world that functions in harmony with environmental conservation, a revolution of green living will have to occur. While changing laws will be a vital part of the process even that won’t be enough – parts of our daily life will have to change. These changes will be apparent in public infrastructure, economic planning, corporate regulation, international trade, consumption, and taxation (Klein, 2011). Transportation will be also be a key aspect of this in the daily lives of everyday citizens. Cars play a major role in greenhouse gas emissions and there are greener ways to get around. Walking and biking are ideal because they have no environmental consequences but it is not realistic that those will be the only forms. Transit systems that are convenient, accessible, and eco-friendly will need to be implemented (Friedman, 2008). The process of creating these may take time, but with investments from the government, it is doable. The transportation of things other than humans will need to shift as well. Production and Manufacturing will have to be localized in order to eliminate the additional environmental cost of shipping the items (Klein, 2011). This will bring jobs and better the economy (Friedman, 2008). Environmentalism will in turn have a very positive effect on society and quality of life within the United States and other countries. We will have to start to move away from capitalism and the ideals from it will either have to be dissolved or cut down. Capitalism relies on the idea of continuously exploiting, which would mean that nature is limitless; we know that it is not (Klein, 2011). Corporations will have to be more regulated in order to minimize their carbon footprint and other harmful activities (Klein, 2011). We have been calling for a transformation of our economy for a long time and environmentalism doesn’t conflict with that (Friedman, 2008). Achieving the goal of protecting the environment will require a change in the way we live, our policies, the way we deal with things, and many other aspects of our society and it will be good. Changing and developing laws may be the beginning of the revolution.

The Puget Sound in Washington state is infamous for its abundant salmon – however, that population has been decreasing for the last 20 to 30 years. Salmon are a key part of the food chain within the Puget Sound for animals such as bald eagles and grizzly bears, as well as a food source for many humans in and out of Washington. During their life cycle, salmon help nutrients

transfer between the Pacific Ocean and freshwater and their carcasses provide food and nutrients for the ecosystems they live in (*Chinook Salmon*, EPA, 2014). Losing salmon would be extremely negative for both the ecosystems and humans. Not only do we fish for salmon by the tens of thousands of metric tons every year for consumption, but we also rely heavily on their habitats (Salmon Report, 2005). So, if salmon are so important, why are they going away? One major cause is that the habitats around the salmon are changing dramatically. Urbanization has occurred, meaning more motor boats are in the water and more structures are being built within it as well (*Chinook Salmon*, EPA, 2014). This is not preferable for the fish because they are not able to adapt fast enough with the changes. Also, timber harvest and agriculture within the Puget Sound have become more prominent in recent years. This has made the ecosystems start to change and evolve, but in ways that are not positive for the fish (*Chinook Salmon*, EPA, 2014). The salmon simply can't keep up with all of the changes humans are causing in the Sound. However, it is important that people of the area (like me) to begin to fight for protections to be put into place for them in order to save the dying populations. The valuable effects of salmon should not be lost and can be saved.

I propose that the people of Washington, including myself, work together to help salmon populations prosper again. This can begin with contacting public officials such as Jay Inslee, the governor of Washington, to see what is already being done and learn if they are willing to aid the cause. If there is no government work in place and the official is not invested in trying to help, then citizens can get in contact with organizations with a similar goal. After that public outreach can be done – handing out fliers, fundraisers, workshops, and holding community meetings. Research should be done, to find people like Mari Margil who have the education background to help the cause. A core idea or arguments needs to become the focus of where the movement is going so that evidence for it can be found to support it. Then the fight begins. Propositions for new protection laws can take to the courts. With a clear plan like this, change can effectively be made. This formula will work for people of Washington to save the salmon as well as for people with other important causes. Everything should be organized and well thought out so that the movement will be taken seriously.

The environmental issues that the world is now facing are numerous and somewhat horrifying. We are dealing with Global Climate Change, deforestation, over-mining, and an uncountable list of more. Some laws are in place to supposedly help mitigate environmental damage, but they haven't been working. The worst part is that many of our politicians aren't willing to pass more laws regarding environmental protection because they aren't being paid by major corporations that are the number one contributors of these issues not to. We even have a president who doesn't believe that Climate Change is real. The environment is seemingly doomed. Yet we, as communities and individuals, have the power to affect environmental change. We can fight and work to make legal protections exist for the natural world that we live in. If we want to continue to survive as a species on Earth, environmental conservation must be a priority. It's going to be a long process, but in order to truly conserve the environment it must be done. The majority of this process will need to take place within law, because then restrictions can be enforced without question. Environmental law will determine the future state of the planet, so we must now develop the right legislations to ensure that it is enforced strictly and effectively.

## Works Cited

- Aitken, Doug. *Start Swimming*. 2015. Aluminum lightbox, LED lights, UV-cured pigment ink on acrylic. SFMOMA, San Francisco.
- Before the Flood*. Dir. Fisher Stevens. Perf. Leonardo DiCaprio. National Geographic Society, 2016. Film.
- Berliner, L. Mark. "Uncertainty and Climate Change." *JSTOR [JSTOR]*. ITHAKA, Nov. 2003. Web. 5 Nov. 2016.
- Bregman, Jacob I. "Purpose of the Environmental Impact Statement." *Environmental Impact Statements*. Boca Raton, FL: Lewis, 1999. 1-5. Print.
- Bryant, Bunyan I. *Environmental Justice: Issues, Policies, and Solutions*. Washington, D.C.: Island, 1995. Print.
- "Car Emissions and Global Warming." *Union of Concerned Scientists*. Union of Concerned Scientists, n.d. Web. 13 Nov. 2016. <<http://www.ucsusa.org/clean-vehicles/car-emissions-and-global-warming#.WCjQtxIrJAY>>.
- "Chinook Salmon." *EPA*. Environmental Protection Agency, 21 May 2014. Web. 05 Dec. 2016. <<https://www.epa.gov/salish-sea/chinook-salmon>>.
- Chiras, Daniel D. *Beyond the Fray: Reshaping America's Environmental Response*. Boulder, CO: Johnson, 1990. Print.
- "Climate Change: Vital Signs of the Planet." *NASA*. Ed. Holly Shaftel. NASA, 2016. Web. 13 Nov. 2016. <<http://climate.nasa.gov/effects/>>.
- Eidsness, Jay. "Interview with an Environmental Lawyer." Interview by Joanna Greenberg. 17 Nov. 2016: n. pag. Print.
- "Endangered Species Act (ESA) :: NOAA Fisheries." *NOAA Fisheries*. NOAA, 11 Feb. 2016. Web. 28 Nov. 2016. <<http://www.nmfs.noaa.gov/pr/laws/esa/>>.
- Erickson, Alexa. "Stephen Hawking Warns We Only Have 1,000 Years Left On Earth." *Collective Evolution*. Collective Evolution, 24 Nov. 2016. Web. 28 Nov. 2016. <<http://www.collective-evolution.com/2016/11/24/stephen-hawking-warns-we-only-have-1000-years-left-on-earth/>>.
- Fang, Marina. "Donald Trump Still Thinks Climate Change Is 'A Bunch Of Bunk'." *The Huffington Post*. TheHuffingtonPost.com, Inc., 27 Nov. 2016. Web. 28 Nov. 2016. <[http://www.huffingtonpost.com/entry/donald-trump-climate-change\\_us\\_583b16e3e4b000af95ee85dd](http://www.huffingtonpost.com/entry/donald-trump-climate-change_us_583b16e3e4b000af95ee85dd)>.
- Friedman, Thomas L. *Hot, Flat, and Crowded: Why We Need a Green Revolution-- and How It Can Renew America*. New York: Farrar, Straus and Giroux, 2008. Print.
- Geiling, Natasha. "Here's How Much The World's Biggest Economies Spend On Fossil Fuel Subsidies." *ThinkProgress*. ThinkProgress, 12 Nov. 2015. Web. 29 Nov. 2016. <<https://thinkprogress.org/heres-how-much-the-world-s-biggest-economies-spend-on-fossil-fuel-subsidies-5fc58562ef86#.2uojrsz8m>>.

- "How Laws Are Made and How to Research Them." *How Laws Are Made*. USA Government, n.d. Web. 13 Nov. 2016. <<https://www.usa.gov/how-laws-are-made>>.
- Jones, Van, Ariane Conrad, and Robert Francis Kennedy. *The Green-collar Economy: How One Solution Can Fix Our Two Biggest Problems*. New York: HarperOne, 2008. Print.
- Kauffman, Richard L. "Obstacles to Renewable Energy and Energy Efficiency." *Yale School of Forestry & Environmental Studies* (n.d.): 21-24. Yale. Yale University. Web. 28 Nov. 2016. <<http://www.yale.edu/>>.
- Kelland, Kate, and Stephanie Nebehay. "Air Pollution Is a Leading Cause of Cancer." *Scientific American*. SCIENTIFIC AMERICAN, A DIVISION OF NATURE AMERICA, INC., 11 Nov. 2013. Web. 28 Nov. 2016. <<https://www.scientificamerican.com/article/air-pollution-a-leading-cause-of-ca/>>.
- Klein, Naomi. "Capitalism vs. the Climate." *The Nation*. The Nation Company LLC, 9 Nov. 2011. Web. 13 Nov. 2016. <<https://www.thenation.com/article/capitalism-vs-climate/>>.
- Lee, JeeYoung. *Flu*. 2008. Seoul, Korea. *Opiom Gallery*. Opiom Gallery, 2016. Web. 29 Nov. 2016. <<http://www.opiomgallery.com/en/artistes/oeuvresphotographe/17/jeeyoung-lee>>.
- Levy. "Capital Contests: National and Transnational Channels of Corporate Influence on the Climate Change Negotiations." *Research Gate*. Research Gate, Sept. 1998. Web. 28 Nov. 2016. <[https://www.researchgate.net/profile/David\\_Levy16/publication/249674467\\_Capital\\_Contests\\_National\\_and\\_Transnational\\_Channels\\_of\\_Corporate\\_Influence\\_on\\_the\\_Climate\\_Change\\_Negotiations/links/54ce3b2e0cf29ca810fa7b74.pdf](https://www.researchgate.net/profile/David_Levy16/publication/249674467_Capital_Contests_National_and_Transnational_Channels_of_Corporate_Influence_on_the_Climate_Change_Negotiations/links/54ce3b2e0cf29ca810fa7b74.pdf)>.
- Lewis, Martin W. *Green Delusions: An Environmentalist Critique of Radical Environmentalism*. Durham: Duke UP, 1992. Print.
- Luzininterruptus. *Labyrinth of Plastic Waste*. 2014. 6000 illuminated bottles. Katowice Street Art Festival, Poland.
- Machan, Tibor R. "The Fear of Individualism." *FEE Freeman Article*. FEE, 01 July 1993. Web. 05 Dec. 2016. <<https://fee.org/articles/the-fear-of-individualism/>>.
- Milman, Oliver. "James Hansen, Father of Climate Change Awareness, Calls Paris Talks 'a Fraud'" *The Guardian*. Guardian News and Media, 12 Dec. 2015. Web. 13 Nov. 2016. <<https://www.theguardian.com/environment/2015/dec/12/james-hansen-climate-change-paris-talks-fraud>>.
- Oskamp, Stuart. "Psychology of Promoting Environmentalism: Psychological Contributions To Achieving an Ecologically Sustainable Future for Humanity." *Wiley Online Library*. John Wiley & Sons, Inc., 2000. Web. 28 Nov. 2016. <<http://onlinelibrary.wiley.com/doi/10.1111/0022-4537.00173/full>>.
- "An Overview of Energy Consumption in India." *The Great Salmon Run: Competition Between Wild and Farmed Salmon* (n.d.): 13-38. *Salmon Report*. Traffic North America, 2005. Web. 4 Dec. 2016. <[http://www.iser.uaa.alaska.edu/people/knapp/personal/pubs/TRAFFIC/SalmonReport\\_Ch\\_8-Overview%20of%20US%20Salmon%20Consumption.pdf](http://www.iser.uaa.alaska.edu/people/knapp/personal/pubs/TRAFFIC/SalmonReport_Ch_8-Overview%20of%20US%20Salmon%20Consumption.pdf)>.

- "Paris Agreement." *United Nations: Treaty Center*. United Nations, 12 Dec. 2015. Web. 13 Nov. 2016.  
<[https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXVII-7-d&chapter=27&clang=\\_en](https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&clang=_en)>.
- Paris Talks Overlooking Immediate Threats, Say Climate Change Activists*. Perf. Guillaume Durin. *The Guardian*. Guardian News and Media Limited, 12 Dec. 2015. Web. 28 Nov. 2016. <<https://www.theguardian.com/environment/video/2015/dec/12/paris-talks-overlooking-immediate-threats-say-climate-change-activists-video>>.
- The Plain English Guide to the Clean Air Act*. Research Triangle Park, NC: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, 2007. EPA. United States Environmental Protection Agency, Apr. 2007. Web. 28 Nov. 2016. <<https://www.epa.gov/sites/production/files/2015-08/documents/peg.pdf>>.
- "Renewable Energy." *Encyclopaedia Britannica Online Academic Edition [Encyclopaedia Britannica]*. Encyclopaedia Britannica, 12 Apr. 2011. Web. 5 Nov. 2016. <<http://academic.eb.com/uprep.idm.oclc.org/levels/collegiate/article/443101>>.
- "Richard Alley." *Department of Geosciences, Penn State* |. Penn State Department of Geosciences, n.d. Web. 13 Nov. 2016. <<http://www.geosc.psu.edu/academic-faculty/alley-richard>>.
- Russell, James C. "Do Invasive Species Cause Damage? Yes." *JSTOR [JSTOR]*. ITHAKA, Mar. 2012. Web. 5 Nov. 2016. <<http://www.jstor.org/uprep.idm.oclc.org/stable/10.1525/bio.2012.62.3.20?Search=yes&resultItemClick=true&searchText=invasive&searchText=species&searchUri=%2Faction%2FdoBasicSearch%3FQuery%3Dinvasive%2Bspecies%26amp%3Bprq%3Denvironment%26amp%3Bhp%3D25%26amp%3Bso%3Drel%26amp%3Bfc%3Doff%26amp%3Bwc%3Don%26amp%3Bacc%3Don>>.
- "Sea Level Rise." *National Geographic*. National Geographic Partners, LLC., 2016. Web. 28 Nov. 2016. <<http://ocean.nationalgeographic.com/ocean/critical-issues-sea-level-rise/>>.
- Sidder, Aaron. "Understanding the Controversy Behind the Dakota Access Pipeline." *Smithsonian Magazine*. Smithsonian, 14 Sept. 2016. Web. 28 Nov. 2016. <<http://www.smithsonianmag.com/smart-news/understanding-controversy-behind-dakota-access-pipeline-180960450/>>.
- Stokstad, E. "ENVIRONMENTAL POLICY: What's Wrong With the Endangered Species Act?" *Science* 309.5744 (2005): 2150-152. *National Center for Policy Analysis*. NCPA, 2005. Web. 28 Nov. 2016. <<http://www.ncpa.org/pdfs/st303.pdf>>.
- Stone, Maddie. "An Entire American Community Is Being Relocated Because of Sea Level Rise." *Gizmodo*. Gizmodo, 16 Mar. 2016. Web. 04 Dec. 2016. <<http://gizmodo.com/an-entire-native-american-tribe-is-being-relocated-beca-1765216997>>.
- "Summary of the Clean Water Act." EPA. Environmental Protection Agency, 1972. Web. 28 Nov. 2016. <<https://www.epa.gov/laws-regulations/summary-clean-water-act>>.
- Trump, Donald J. "DONALD J. TRUMP Issues." *Donald J Trump for President*. Donald J. Trump for President, Inc., 2016. Web. 28 Nov. 2016. <<https://www.donaldjtrump.com/issues>>.

Vladimirov Javacheff, Christo, and Jeane-Claude Marie Denat. *Surrounded Islands*. 1980-83.  
Pink woven polypropylene fabric. Biscayne Bay, Greater Miami.

*Waste Land*. Dir. Lucy Walker and João Jardim. Perf. Vik Muniz. Midas Filmes, 2010. Film.

*Who Speaks For The Trees?* Perf. Mari Margil. *Youtube*. Bioneers, 11 Feb. 2014. Web. 28 Nov.  
2016. <<https://www.youtube.com/watch?v=qxUHoo6bJvk>>.