

## Considering US Environmental Policy

The United States of America is often looked to as an exemplary democracy where freedom reigns and everyone can work hard to achieve the dreams of upper-middle-class life. While this is relatively true and we are extremely fortunate, the US government has grown to become a giant bureaucratic machine that often runs around chasing its tail rather than moving forward. Government isn't even expected to be efficient anymore. Every day on the news we hear about gridlocks in congress because of topics from healthcare to gun control to the national debt and everything in-between. The Environmental Protection Agency was created in 1970 as a regulatory agency to work towards a cleaner and healthier environment for the US. While still protecting the health of the public and our natural resources, the EPA is also subject to the bureaucratic machine. This project isn't trying to solve any specific issue or make specific suggestions for improvement – it's simply a chance to expose some of the processes that the EPA and congress follow on a regular basis when making and enforcing the rules that govern how we can treat our environment. The US government has been chugging along since 1776 in a wildly successful manner, but I hope to surprise you with what can be found inside this well-oiled machine.

Infographics have always inspired me – they're a playful medium for conveying information to a less serious audience. They can catch a person's attention without even conveying a topic, which can be a very useful tactic when the creator might feel the information is important but not the most interesting. Sometimes infographics are created at the expense of relevant context – just a smattering of statistics and implied relationships, often with bias. Other graphics are sparse and might lack connection to the big picture ideas. My largest struggle on this project was finding the right balance of plainly conveying impactful claims and including enough context to support the claims without cluttering the graphic. I learned a lot from iteration to iteration, but I believe I would need much more practice to find a good balance that fits my style.

I was especially inspired to create infographics based on the various instances of the webcomic XKCD wandering into this domain. Randall Munroe does a great job of showing that not all graphics are created equal and that graphics don't need to be packed with content to be effective. Originally, I had hoped to work in a similar format to "Lakes and Oceans" (<http://xkcd.com/1040/>) which uses the medium to create an awesome play on physical perspective. Alas, after some experimentation, I decided it would be a stretch to force environmental policy into this framework. Munroe uses an entirely different framework in "Money" (<http://xkcd.com/980/>), filling the page edge to edge with information. This was not the direction I wanted to go – I didn't feel that this met my goals of appealing to a wide, general audience. My final graphics don't pull directly from Munroe's work, which tend to be more in the space of ingenious visualizations of physical and electronic realities rather than highlighting processes.

On the Environmental Policy side, my work is inspired by and draws predominantly from the work of David Schoenbrod, a prominent figure in US environmental law. Schoenbrod led the Natural Resources

Defense Council (NRDC) in fighting against lead in gasoline, and currently teaches at New York Law School and is a Visiting Scholar at the American Enterprise Institute. His 2005 book, *Saving the Environment from Washington*, served as the cornerstone for this project. For me, this work was a great example of a time when a text is informative and the right medium for making connections and all the necessary support, but becomes a barrier to entry for a work that seems to hope for readership by more than environmental scholars. For this reason, it was a great fit for my project.

To me, understanding the system is the first step in being able to affect real change. For environmental policy, that's a complicated but important task. Schoenbrod's thesis is essentially that the relationship (or really, lack thereof) between congress and environmental policy creates a situation where the EPA is doomed to fail. The most common situation is that as representatives are asked for environmental regulation, the response is "sure, the EPA will take care of it," at which point representatives have both satisfied their constituents and entirely wiped their hands of the responsibility for getting the work done. The EPA loses its ability to prioritize work to protect human health when anyone can very easily bring the Agency to court (and win) when the EPA doesn't complete everything congress asks it to do, no matter how complicated or irrelevant.

Inherent in addressing environmental protection is the fact that while the US can be a leader in many regards, long term environmental protection plans need participation from countries around the world. While I chose not to address on the successes and failures environmental regulation in other countries, I did find it interesting to read about different agencies and how each struggles to work within the political tradition of each country. Michael Howes' book *Politics and the Environment: Risk and the role of government and industry* was a great resource to put the EPA in perspective with the UK Environmental Agency and various structures in Australia. I felt that this book lacked a perspective from developing countries that hopefully have learned something from the way that the US and UK have both created environmental messes during expansion and then cleaned up, rather than being more proactive about environmental protection. Developing nations face very real and very different environmental issues and also must work with less established (and less stable or free) political traditions. I will be very interested to see how environmental protection is valued in developing countries over the next decade.

The population is growing, and today's interconnected society relies on an increasing amount of resources just for daily life. I would love for future generations to be able to enjoy the same alpine lakes and snow-covered peaks and not entirely smog-covered skylines that I've experienced. This will only happen if we're conscious about our environment and are good stewards of the resources that our planet provides. Without the raw materials, food, and fuel that the Earth provides, none of us would be here today. This fact makes it all the more important that the environment to be near the top of every individual's list.

I hope my graphics inspire you to take a more critical look at policymaking in all areas, as well as think about the things you do every day that might help or hurt the resources our planet provides.