

Is the EPA Going To Protect the Environment?

We are now one year from what was, for most, an unexpected election result. When administrations change, there are usually new directions in policies and practices, but the dramatic shifts at the U.S. Environmental Protection Agency (EPA) have been truly shocking. Rarely does a week (or day) go by when disconcerting to appalling news comes out about decisions made at the EPA. In only the past few weeks, we have seen decisions not to regulate (or more lightly regulate) chemicals, removal of Web sites mentioning climate change, and refusal to let EPA scientists present their work at a conference. At this point, it is necessary to ask if environmental protection is still the mission of the EPA.

Preventing water and air pollution, tackling climate change, and limiting the resulting impacts on environmental and human health require a recognition of sound science, the willingness to develop regulations based on the conclusions supported by the data, the resolve to enforce the regulations, and the foresight and continued commitment to invest in the necessary infrastructure and technologies to ensure the regulations are met. Right now leadership at the EPA is lacking in such willingness, resolve, foresight, and commitment to the environment.

Fears regarding damages being done to our environment and the impacts on human health led to the founding of the EPA in 1970. Many of us, however, do not remember the smog-filled cities or the rivers that caught on fire. Millennials were born after the outbreak of *Cryptosporidium* in Milwaukee and publication of the seminal studies linking particulate air pollution to mortality rates. Because the EPA was founded before I was born, the EPA has always been present for me. I have never known a time without some form of the Clean Air Act, the Clean Water Act, or laws for disposal and treatment of hazardous waste. I have certainly benefited from the EPA and its enforcement of these laws and the resulting regulations during my lifetime. The phase-out of lead from gasoline occurred during my childhood, as did the establishment of air quality standards under the Clean Air Act that led to clearer skies and reductions in mortality. Similarly, the establishment of maximum contaminant levels for pollutants and disinfection byproducts in drinking water under the Safe Drinking Water Act helped to ensure the water I drank right out of the tap through most of my life has had minimal levels of chemical or microbiological contaminants. A local sledding hill near my childhood home (one of the certainly many former landfills turned into recreation sites around the country) was closed when toxic waste was detected, and the site was remediated because appropriate legislation was passed and enforced. These laws and regulations had, and continue to have, direct and positive impacts on human health and environmental quality.


Often we do not appreciate what we have unless it is, or there is a threat that it will be, taken away. The people of Flint, MI, likely never dreamed that the water that came into their homes for years would one day be deemed toxic, and that they would lose that source of drinking water. The people of Puerto Rico have, unfortunately, had to deal with how storm damage to infrastructure can also take away ready access to clean water.

We also face the threat that delay at a national level will lead to irrevocable changes in our planet's climate. The path we seem to be on is one where we may look back and appreciate what we had. Yes, there are costs in environmental protection, but there are greater costs of inaction due to increased disease and mortality and the frequency of environmental disasters.

Fortunately, it appears that the changes in federal positions on climate change, clean air, and clean water, and the media coverage of these dramatic shifts, are grabbing the attention of the public, and not just environmental engineers and scientists. The recent Chapman University Survey of American Fears revealed that four of the top 10 fears (for each of which at least 45% of people responded to being afraid or very afraid) are related to the environment: pollution of oceans, rivers, and lakes; pollution of drinking water; global warming and climate change; and air pollution. While it is worrisome that so many people have to again worry about what we thought was being properly addressed, it is heartening to discover that the public realizes the importance of the work environmental engineers and scientists do and desire our success. If people are concerned about their local air and water resources, it is easier to mobilize pressure for action (or reaction to policy changes that have the potential to negatively impact the environment).

This presents an opportunity for those of us with expertise in environmental issues, science, and technologies. As citizens, we have the opportunity to advocate with our local and state regulators and decision makers when our input would be valuable on issues that will affect the environment in our communities. As scientists, we need to speak out when decisions are made that are not based on (or misinterpret) science. Professional societies should raise the alarm when their members are silenced or unfairly pressured. We must also continue to press upon our elected and appointed leaders the value of quality scientific consultation and advice. The path the EPA is on is instilling fear about the quality of our environment. I want to be able to take it for granted again that the environment is well-protected. This only happens if we move back toward the path where clean water, clean air, and environmental protection are among our strongest priorities and not among our greatest fears.



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Notes

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