In my prior two posts, I discussed how humans are <u>increasingly impairing natural systems</u> on a global scale, and how those impairments of natural systems will have major negative impacts on human societies.

How will these changes affect the legal system?

The first important point in answering that question is that many of the changes in our global natural systems are the result of millions and billions of individual human activities. For instance, greenhouse gas emissions are in part the result of decisions by individuals about whether and how much to drive their cars, heat their homes, or eat meat. They are also the result of decisions by millions of farmers and landowners to raise livestock, cultivate rice paddies, or cut timber in forests, all actions that will result in greenhouse gas emissions. Destruction of habitat for endangered species is also partially the result of decisions by landowners to develop their lands. Phosphorus and nitrogen deposition is partially the result of decisions by farmers to fertilize their fields.

This point is important because it means that there are limits to our ability to impose stringent regulations on large corporations, or taxes on easy to identify activities, to respond to the challenges of the Anthropocene. A carbon tax can certainly help create strong economic incentives to reduce greenhouse gas emissions in economic sectors that depend on the combustion of fossil fuels, since it can be applied at the wellhead or minehead when coal, oil, or gas is extracted from the ground. But a carbon tax will be much more difficult to apply to activities such as farming or forest management. Yet, about oneguarter of all global greenhouse gas emissions come from activities such as these.

The second important point is that responses will necessarily involve a public component involving state coercion (whether it is a tax, tradeable permits, property rights, or regulation). Conservative legal scholars have at times argued for a "free market environmentalist" philosophy that would rely on property rights and common law torts to address environmental harm, arguing that this approach is more effective, less coercive, and less susceptible to corruption and lobbying. While the first and the third may (or may not) be true, the second point certainly wouldn't be true in the context of addressing the global harms of the Anthropocene. Take climate change: Property rights solutions necessarily require giving every inhabitant of the planet the right to have "their" component of the climate undisturbed by greenhouse gas emissions without their consent. Setting aside the logistical and political infeasibility of this approach, if it could be implemented, it would require the state to enforce this property right against everyone on the planet who emitted greenhouse gases from any sort of activity. It is hard to imagine a more intrusive governmental system than that.

The necessity of some sort of public regulatory component may be obvious in the context of trying to prevent greenhouse gas emissions and reduce future climate change, given that the atmosphere is a global commons. But adaptation to future climate change will also often have a significant public and coercive component. For instance, Louisiana is having a public process to debate whether and how to retreat from the coastline given sea level rise the result may be thousands of people will have to move away from their communities. While it is unlikely Louisiana will force people to move, it may well start charging them more to live there through higher taxes, a form of state coercion.

Subsidies (such as tax credits or support for renewable energy) also have some form of public supervision and ultimately public coercion - if only because the government will have to monitor subsidy recipients to ensure they are complying with the subsidy program, and enforce against violators.

Voluntary efforts to address the threats of the Anthropocene have a role to play, but they are necessarily limited. Individual consumers, for instance, may choose to pay more for products that are produced in ways that are environmentally friendly, including lower greenhouse gas emissions. But given the global commons nature of the atmosphere (and the other global systems affected by the Anthropocene), many individuals will rationally choose to do nothing to address the problem, unless they are forced to do so (again through taxes, permits, subsidies, regulations, or other tools).

To summarize, there are two key lessons for understanding the impacts of the Anthropocene for the legal system: It will necessarily involve a significant expansion of state intervention and coercion, and that state intervention and coercion will increasingly be applied against millions of individuals (not large corporations or other large economic actors).

In my next two posts, I will spin out the implications of these two lessons for a variety of private and public law areas in the United States. (A link to my law review article that is the basis for these posts is here.)