Hello, my name is Chlöe Fandel, and I’m here to testify in support of the new EPA clean air regulations.

My background is in geology, and I’m about to start graduate school in hydrogeology - focusing on groundwater resources in Arizona. Over the past few years I’ve spent time studying groundwater systems in the Cascades and in the south of France, and working for the Audubon Society as an environmental educator, as well as doing a brief stint with a small oil and gas company here in Colorado, to learn more about exactly what the oil industry is up to. The things that I’ve seen and learned in the process have me genuinely scared.

As a result of human-caused global warming, we are already seeing dramatic shifts in the way our planet works, shifts that are extremely harmful.

When I worked for Audubon in Rhode Island, we saw harmful species like poison ivy and deer ticks spreading rapidly, because they do well in the warmer, more disrupted environments we are creating. Children were afraid to play outside for fear of Lyme disease. We saw hurricane Sandy last year, destroying communities along the coast. I helped pull pieces of people’s homes out of the marshes they’d been swept into. We found chunks of wall, of staircase, chairs, keepsakes. Not only were these homes destroyed, the salt marshes, which, if healthy, can be a buffer against hurricanes, were damaged as well by all the debris.

When I studied groundwater in the Cascades, I learned that already, higher temperatures are decreasing the quantity and the quality of the water we rely on to sustain life. The snowpack is not regenerating fully during the winter and is melting more each summer, decreasing the amount of water recharging our precious underground aquifers. Springs are going dry. The water that does still flow through streams and rivers is warmer, and therefore less able to hold dissolved oxygen, which supports fish and invertebrate populations. Warmer water can become clogged with algae blooms, some of them toxic. In areas where the water carries dissolved minerals, warmer temperatures mean that calcium carbonate precipitates out more easily, clogging pipes more quickly and requiring more frequent, expensive cleanings.

Here in Colorado, the Mountain pine beetle is thriving under warmer temperatures, decimating our forests, killing the trees that would otherwise pull CO2 from the atmosphere. I drove through Rocky Mountain National Park last week and was stunned at the extent of the damage. There are whole mountainsides of dead trees, gray instead of green.

This is happening right now. The ravages scientists have been predicting for years are no longer the next generation’s problem. They’re ours.

This is why the EPA’s proposed regulations are so important. I hear people worried the regulations will harm the economy, reduce jobs, and so on. That’s not how it works. Economists, like Paul Krugman, have said again and again that the regulations will have minimal economic impact. The NRDC actually found that job creation was likely to go up, and electricity bills would go down. Any negative impacts the regulations might have are far, far outweighed by the staggering cost of inaction.

We can keep pouring money into the black hole of emergency relief for climate disasters - hurricanes, fires, lost crops, drought - or we can be proactive and try to head off further destruction.

These regulations are a step in the right direction. The science is unambiguous, and there is no need for debate about whether or not to enact them. The real debate is about what we do next, because this will not be enough.

Thank you for listening.