At night, you can hear the hooting of owls in the vineyard. The owners have deployed owls and falcons to control the pests that threaten the Kendall Jackson vineyards due to milder winters. But birds of prey aren't the only things flying above the vineyard. There are also drones, which are used to observe small differences in the color of the vines that are clues to water needs and other issues. The goal is to help the vineyard flourish despite a drier, warmer climate.

Kendall Jackson certainly has reasons to be concerned. As the <u>NY Times</u> reports, one study suggests that "by 2050, many regions in Europe, including much of Italy and swaths of Southern France, could become unsuitable for wine grapes" and "California production could fall by 70 percent by the century's midpoint." Given the economic importance of this multi-billion dollar industry, that's a big deal in California.

But not everyone is as vigilant as those vineyard owls, and many Americans have closed their eyes to the risks posed by climate change. Like everything else these days, that brings us to the subject of the Trump Administration.

Given Trump's skepticism about climate change, and that of many key advisors, it's hard to imagine the Administration taking a proactive attitude toward adaptation. (The military may turn out to be an exception; the <u>Navy</u> is understandably worried about the effect of rising seas on its bases.) And of course, in many parts of the U.S., state governments are in the hands of those with similar views. Blue States can continue with their own adaptation efforts, but in the rest of the country, the federal and state governments aren't likely to do much. Even in Blue States, federal projects may ignore climate risks.

This should concern all of us, because trouble in any part of the country is likely to have repercussions elsewhere. This is true if only because disaster relief in Red States is likely to be funded by taxes paid in Blue States, given the way the tax system redistributes funds nationally. And federal projects, of course can be located anywhere. What's to be done?

In terms of the federal government, one available lever is provided by NEPA. NEPA requires environmental impact statements (EISs) for large projects and shorter environmental assessments (EAs) for smaller ones. There's a good argument that the EISs and EAs must consider how climate-related risks could impact the project. There isn't any judicial precedent on this yet, but many agencies have been <u>doing so</u> on their own, which at least shows that it's feasible.

In terms of the private sector, a 2010 <u>SEC guidance document</u> requires disclosure of material risks relating to climate change. Enforcement seems spotty, but this requirement

may at least put some pressure on companies to think about climate adaptation. The fact that this is a guidance rather than a formal rule may make it easier for Trump appointees to withdraw the rule — though there may be an argument that withdrawing the guidance would be an action significantly impacting the environment, requiring an environmental impact statement.

Beyond the legal requirements, the ultimate tools are education and persuasion. But there may be some other pressure points. Institutional investors should pay serious attention to whether companies are protecting themselves against climate impacts like sea level rise. CalPERS, the giant California pension fund, already has a <u>written policy</u> concerning risks, but may need to be more aggressive in pressuring corporations. Interesting, Kendall-Jackson provides <u>third-party certification</u> by independent assessors of its sustainability efforts — maybe there also should an organization specifically certifying a company's effort to adapt to climate risks.

Insurance companies in Europe are already quite worried about how climate change impacts their risks; U.S. companies need to start taking a similar interest and so do their regulators. The companies need to push their business customers to take climate change into account as a matter of risk mitigation. This isn't a matter of politics — there is real money on the table. If there was some certification for companies that are taking precautions against climate-related risks, insurance companies could reward them with lower rates.

Climate change adaptation may be a bit less polarizing than cutting emissions. The ancient Greeks associated the owl with wisdom and the goddess Athena. (The scientific name for an owl species actually begins with "athene"). Even today we talk about the "wise old owl." Maybe those vineyard owls can become an emblem for a wiser approach to climate resilience nationally.