The release of the <u>Fourth National Climate Assessment</u> got some attention from the press. The press mostly focused on the forthright endorsement of climate science by the NCA4 report — something of a surprise in the anti-science Trump Administration. That was indeed notable, but there are other features of the report that will make it harder for the Administration to get away legally with ignoring or downplaying climate change.

The endorsement of climate science was striking enough. Here's what NCA4 says:

'This assessment concludes, based on extensive evidence, that it is extremely likely that human activities, especially emissions of greenhouse gases, are the dominant cause of the observed warming since the mid-20th century. For the warming over the last century, there is no convincing alternative explanation supported by the extent of the observational evidence.'

But NCA4 also has some significant things to say about the effects of climate change. On sea level rise:

"For example, global average sea level has risen by about 7-8 inches since 1900, with almost half (about 3 inches) of that rise occurring since 1993. Humancaused climate change has made a substantial contribution to this rise since 1900, contributing to a rate of rise that is greater than during any preceding century in at least 2,800 years. Global sea level rise has already affected the United States; the incidence of daily tidal flooding is accelerating in more than 25 Atlantic and Gulf Coast cities. Global average sea levels are expected to continue to rise—by at least several inches in the next 15 years and by 1-4 feet by 2100. A rise of as much as 8 feet by 2100 cannot be ruled out. Sea level rise will be higher than the global average on the East and Gulf Coasts of the United States."

Temperature increases and heatwaves are also discussed:

"Heatwaves have become more frequent in the United States since the 1960s, while extreme cold temperatures and cold waves are less frequent. Recent record-setting hot years are projected to become common in the near future for the United States, as annual average temperatures continue to rise. Annual

average temperature over the contiguous United States has increased by 1.8°F (1.0°C) for the period 1901-2016; over the next few decades (2021-2050), annual average temperatures are expected to rise by about 2.5°F for the United States. relative to the recent past (average from 1976-2005), under all plausible future climate scenarios."

The report also devotes attention to fires, floods and droughts, but I've probably already burdened you with enough quotations.

Here's why this matters. Consistency doesn't make much difference politically, it would seem. But it does matter legally. Whenever the Trump Administration tries to justify any administrative action by saying climate change is uncertain or won't have serious effects on the United States, it will have to explain away this report issued by top scientists on Trump's watch. That's not going to be easy to do, and as a result the Administration will face a heightened risk of having its actions overturned as arbitrary and capricious. Even EPA's science advisory boards, which Pruitt recently packed with industry and ideological hacks, will have a hard time explaining this report away.