GAO Highlights

Highlights of GAO-20-73, a report to congressional requesters

October 2019

SUPERFUND

EPA Should Take Additional Actions to Manage Risks from Climate Change

Why GAO Did This Study

Administered by EPA, Superfund is the principal federal program for addressing sites containing hazardous substances. EPA lists some of the most seriously contaminated sites—most of which are nonfederal—on the NPL and has recorded over 500 contaminants, including arsenic and lead, at those sites. Climate change may make some natural disasters more frequent or more intense, which may damage NPL sites and potentially release contaminants, according to the Fourth National Climate Assessment.

GAO was asked to review issues related to the impact of climate change on nonfederal NPL sites. This report examines, among other objectives, (1) what available federal data suggest about the number of nonfederal NPL sites that are located in areas that may be impacted by selected climate change effects and (2) the extent to which EPA has managed risks to human health and the environment from the potential impacts of climate change effects at such sites. GAO analyzed available federal data; reviewed laws, regulations, and documents; interviewed federal officials and stakeholders; visited three nonfederal NPL sites that experienced natural disasters; and compared EPA actions to manage risk to GAO's six essential elements of enterprise risk management.

What GAO Recommends

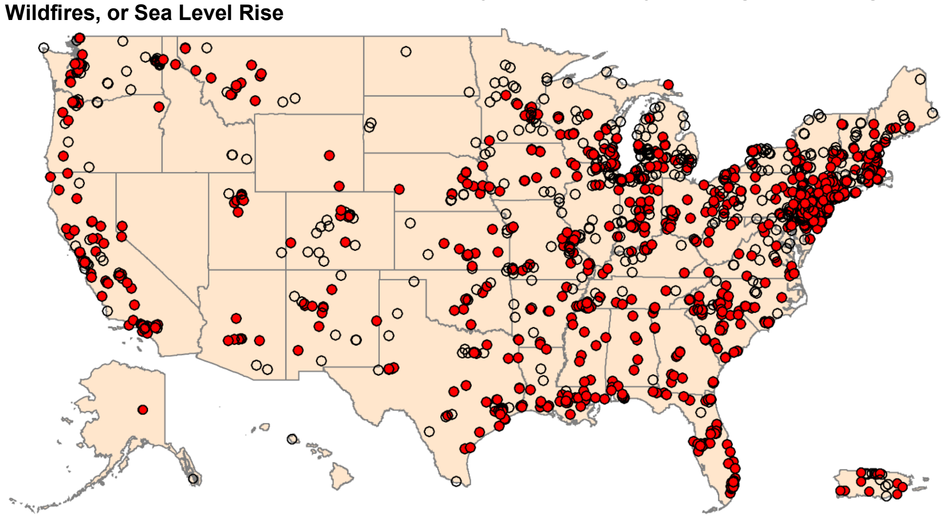
GAO is making four recommendations to EPA, including that it clarify how its actions to manage risks at nonfederal NPL sites from potential impacts of climate change align with current goals and objectives. EPA agreed with one recommendation and disagreed with the other three. GAO continues to believe that all four are warranted.

View GAO-20-73. For more information, contact Alfredo Gómez at (202) 512-3841 or gomezj@gao.gov.

What GAO Found

Available federal data—from the Environmental Protection Agency (EPA), Federal Emergency Management Agency, National Oceanic and Atmospheric Administration, and U.S. Forest Service—on flooding, storm surge, wildfires, and sea level rise suggest that about 60 percent of all nonfederal National Priorities List (NPL) sites are located in areas that may be impacted by these potential climate change effects. Additional information on these sites can be viewed in an interactive map and downloadable data file, available here (see figure).

Nonfederal NPL Sites Located in Areas that May Be Impacted by Flooding, Storm Surge, Wildfires, or Sea Level Rise



Number of National Priorities List (NPL) sites in potentially impacted areas
● Potentially impacted sites (945) ○ No impact identified (626)

Sources: GAO analysis of Environmental Protection Agency, Federal Emergency Management Agency, National Oceanic and Atmospheric Administration, and U.S. Forest Service data; MapInfo (map). | GAO-20-73

Notes: This map does not display all 1,571 active and deleted nonfederal NPL sites GAO analyzed, which also include six sites in American Samoa, the Federated States of Micronesia, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands, though they are included in the counts above. Additional information on all sites GAO analyzed can be viewed at https://www.gao.gov/products/GAO-20-73. Storm surge data are not available for Alaska and Pacific islands other than Hawaii, wildfire data are not available outside the contiguous United States, and sea level rise data are not available for Alaska.

EPA's actions to manage risks to human health and the environment from potential impacts of climate change effects at nonfederal NPL sites align with three of the six essential elements of enterprise risk management GAO previously identified, partially align with two essential elements, and do not align with one essential element. For example, EPA has not taken actions consistent with one essential element because it has not aligned its process for managing risks with agency-wide goals and objectives, which do not mention climate change. Without clarifying this alignment, EPA cannot ensure that senior officials will take an active role in strategic planning and accountability for managing these risks.