



Climate Change, Slow-Onset Disasters, and the Federal Emergency Management Agency

Updated November 12, 2021

FEMA and Climate Change

The United States is already experiencing certain effects of climate change, including high temperature extremes and heavy precipitation events. The U.S. Global Change Research Program, among many other bodies, expects these trends to continue and intensify, likely resulting in more severe and frequent “slow-onset” events (e.g., drought; sea level rise), compound disasters (e.g., extreme rainfall combined with coastal flooding), and cascading events (e.g., landslides following wildfires). Such events may not have clearly defined start or end dates, and cumulative damage may not be immediately apparent.

Congress may consider how these events affect the Federal Emergency Management Agency (FEMA), which administers federal disaster relief authorized under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act, P.L. 93-288, as amended). Although FEMA does not have an explicit mission to address climate change, the agency is increasing its activities related to nationwide adaptation to some of its effects, including extreme weather events. This Insight highlights issues FEMA may face when activating the Stafford Act for slow-onset events endemic to a changing climate. Slow-onset disasters are not mentioned or defined in the Stafford Act, FEMA’s regulations, or guidance, nor are they included in existing emergency or major disaster definitions.

Stafford Act Declarations

The Stafford Act authorizes the President to declare an incident an emergency or a major disaster. A Stafford Act declaration serves as a means to provide federal assistance to states, territories, and tribes for incident response, recovery, and mitigation. FEMA may authorize several forms of assistance pursuant to a Stafford Act declaration, including Individual Assistance (IA), Public Assistance (PA), and Hazard Mitigation Assistance (HMA).

Under the Stafford Act, governors or tribal chief executives may request an emergency or major disaster declaration when an incident is “of such severity and magnitude” that state, local, tribal, or territorial governments (SLTTs) are unable to effectively respond without federal assistance.

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IN11696

The Stafford Act [defines](#) a major disaster by listing incidents or situations that exemplify major disasters:

...any natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this chapter to supplement the efforts and available resources of states, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby. 42 U.S.C. §5122(2)

Stafford Act declarations generally respond to rapid-onset events that cause a measurable amount of damage in a particular geographic area over a defined period of time. FEMA refers to the time interval during which the event occurs as the [incident period](#). Per FEMA regulations, Stafford Act assistance shall only alleviate “the damage or hardship ... which took place during the incident period or was in anticipation of that incident.”

The Stafford Act and Slow-Onset Events

Current authorities may limit FEMA’s ability to provide assistance for slow-onset events like [on-going inland high water levels](#), “[sunny-day](#)” flooding, sea level rise, erosion, and drought. Damages accrued during slow-onset events may not be easily attributed to a discrete incident or limited to a specific incident period. Further, an individual small event in a series (e.g., a single flood as part of recurring flooding), may not individually appear to overwhelm a state or locality, or meet [damage thresholds](#) to receive certain forms of Stafford Act assistance. However, some may argue that these incidents—taken together—warrant federal assistance that the Stafford Act is not currently designed to provide.

FEMA’s process for assessing losses may limit the availability of assistance for slow-onset events. The [factors](#) FEMA uses to evaluate whether to recommend the President authorize PA and/or IA for a major disaster (**Figure 1**) only consider the effects of the disaster-causing incident during the incident period. Further, some of these factors (e.g., [insurance coverage](#) or [severe local impacts](#)) may defy measurement for ongoing incidents.

[Regulations](#) also require declaration requests be submitted according to deadlines (e.g., major disaster declarations should be requested [within 30 days](#) of the incident). A governor or tribal chief executive may struggle to identify the appropriate time to request a Stafford Act declaration for a slow-onset incident.

Finally, the Stafford Act generally authorizes response and recovery assistance to redress losses attributed to a single event (e.g., repairs following a tornado). This approach may not comport with slow-onset, compound, or cascading incidents, where damages may not be easily attributable to a single event (e.g., when an area prone to regular sunny-day flooding is hit by a hurricane). Slow-onset events may also reduce SLTT capacity to withstand rapid-onset events; FEMA does not currently specify how such strain may be measured or remedied.

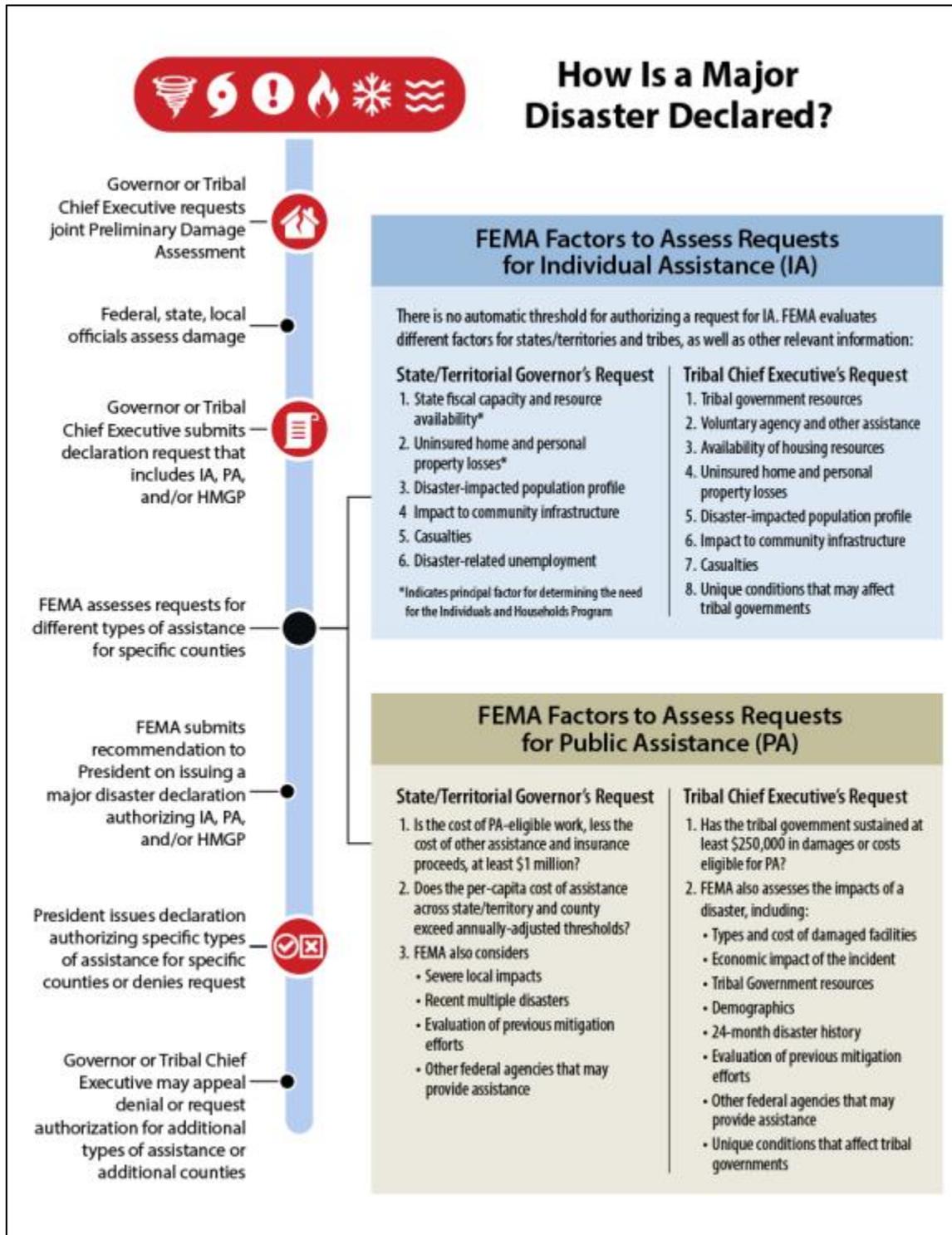
Considerations for Congress

Catastrophic events pose a financial threat both to society as [a whole](#) and to the [federal government](#), as it [allocates increasing resources](#) to disaster relief. The Congressional Budget Office [projects](#) hazard-related losses, including those attributed to slow-onset events, [will likely increase](#) in the United States, especially as hazard-prone areas undergo [rapid development](#) and observe [rising property values](#). [Experts](#) anticipate that resulting damages [will mount](#), straining [federal, state, and local governments](#), as well as [businesses](#) and [individuals](#), particularly the [socially vulnerable](#).

Given these issues, Congress could consider amending the Stafford Act to support disaster response, recovery, and mitigation associated with slow-onset, compound, or cascading disasters, such as:

- specifying FEMA's [roles](#) and authorities in the federal response to climate change;
 - amending the major disaster declaration definition to include [slow-onset](#) or [other comparable terms](#);
 - establishing a [new type of declaration](#) and corresponding [disaster assistance](#) authorities for slow-onset and ongoing incidents;
 - requiring FEMA to develop a means to assign damage that is not limited to a discrete incident or incident period, or requiring FEMA to modify or extend the incident period under certain conditions;
 - increasing funding for [pre-disaster mitigation](#) and introducing [new approaches](#) to mitigation funding to reduce risk before disasters occur;
 - providing enhanced assistance for [vulnerable communities](#) already observing the effects of climate change; for example, reducing [nonfederal cost shares](#), expediting and simplifying delivery of assistance, and [providing technical assistance](#) to bolster local capacity; and
 - adding to FEMA's authority to [restrict rebuilding assistance](#) in disaster-prone communities, provide pre-disaster [mitigation assistance](#) to reduce future losses to extreme weather events (including those projected under [future conditions](#)), and/or [shift spending](#) from response and recovery to mitigation.
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Figure I. Major Disaster Assistance Evaluation and Approval



Source: CRS interpretation of 44 C.F.R. §206.48 and FEMA, Tribal Declarations Pilot Guidance, January 2017.

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