## A MILITARY RESPONSE TO A WARMING WORLD: FEDERALISM, MILITIAS, AND CATASTROPHIC DISASTERS

#### **SAMANTHA OLSON\***

"It's a question, once again, of being forward deployed, forward engaged, and be in a position to respond to the kinds of natural disasters that I think we see as a second or third order effect of climate change."

- Chairman of the Joint Chiefs of Staff Joseph Dunford<sup>1</sup>

#### INTRODUCTION

Climate change is a threat to national security, a threat that the United States Department of Defense has explicitly recognized. In addition to exacerbating conflicts overseas, climate change threatens American lives through violent storms, wildfires, floods, droughts, and other natural disasters. The United States Armed Forces and the National Guard are called upon to both defend American interests abroad and to protect Americans from disaster at home. Some states also call on their State Defense Forces—military forces controlled and funded by individual states—to respond to natural disasters. While Federal and state military forces both play a significant role in disaster response, Federal military forces and federalized National Guard are prohibited from functioning as law enforcement in these scenarios under the Posse Comitatus Act (PCA). State Defense Forces and state-controlled National Guard are not subject to the PCA.

This restriction generally does not impede the function of these military forces in disaster response, and Presidential invocation of the Insurrection Act may even override this restriction in extreme situations. However, federalism concerns and questions regarding the appropriate use of the Insurrection Act likely slowed the federal military response to Hurricane Katrina, adding further confusion to an

Copyright © 2019 Samantha Olson.

<sup>\*</sup> Duke University School of Law, J.D. expected 2020; University of Miami, B.A. 2016.

<sup>1.</sup> National Defense Authorization Act for Fiscal Year 2018, Pub. L. No. 115-91 § 335, 131 Stat. 1283, 1357 (2017), https://www.congress.gov/115/plaws/publ91/PLAW-115publ91.pdf [hereinafter National Defense Authorization Act 2018].

already chaotic situation. As a result of ongoing climate change and warming oceans, hurricanes are likely increasing in severity and threatening greater swaths of the coast. These changes could potentially result in more catastrophic natural disasters similar to Hurricane Katrina.

This note draws on earlier scholarship concerning the Insurrection Act and federalism in the wake of Hurricane Katrina and incorporates new information regarding the impacts of climate change on natural disasters in the United States. In light of intensifying hurricanes, flooding, and other extreme weather events, this note argues for clarifying when and how federal military forces and federalized National Guard may be used to respond to natural disasters. This note argues for an amended Insurrection Act that provides the President greater flexibility to respond quickly to catastrophic natural disasters and clarifies when it can be invoked. This note also argues for the expansion of state capabilities for disaster response through the use of State Defense Forces as a way for states to better prepare for increasingly severe weather events and avoid the need for Federal intervention through the Insurrection Act.

Part I of this note will discuss the threat of climate change and the Department of Defense's response. Parts II and III of this note will address the statutory background of disaster response and the use of the military domestically. Part IV will cover the relevant military forces responsible for disaster response. Part V will examine two hurricane scenarios and how they offer insight into effective preparedness and response to increasingly severe weather events. Finally, Part VI will offer potential statutory and policy changes to better address the growing threat of natural disasters.

#### I. CLIMATE CHANGE AS A NATIONAL SECURITY THREAT

Climate change poses a significant threat to the United States by exacerbating the impact of extreme weather events.<sup>2</sup> Because of these domestic impacts and climate change's effects on stability across the globe, the United States Department of Defense has explicitly recognized it as a threat to national security since 2010.<sup>3</sup> The United Nations Intergovernmental Panel on Climate Change (IPCC) has

<sup>2.</sup> INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014: SYNTHESIS REPORT 69 (Rajendra K. Pachauri et al. eds. 2014), http://www.ipcc.ch/pdf/assessme nt-report/ar5/syr/AR5\_SYR\_FINAL\_All\_Topics.pdf [hereinafter IPCC 2014 SYNTHESIS REPORT].

<sup>3.</sup> See infra Part I.B.

stated that "[w]arming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen." The 2014 report also concluded with "very high confidence" that "[i]n urban areas, climate change is projected to increase risks . . . from heat stress, storms and extreme precipitation, inland and coastal flooding, landslides, air pollution, drought, water scarcity, sea level rise and storm surges." Although the IPCC report could not determine hurricane trends because of "observational limitations," the IPCC concluded that "it is virtually certain that intense tropical cyclone activity has increased in the North Atlantic since 1970."

Climate change worsens many weather events, but hurricanes and their associated events, such as storm surges, pose particularly significant threats to the United States. Hurricanes strike some of the most populous regions in the country and threaten critical infrastructure, such as power plants, ports, and military bases. Unlike other extreme weather events, they also frequently require a significant military response to assist with disaster relief. The following sections will review the impacts of climate change on security, both abroad and at home, focusing on the unique threat of natural disasters in the United States, followed by a discussion on the military's affirmation of climate change and recognition of it as a threat to national security.

<sup>4.</sup> INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014: SUMMARY FOR POLICYMAKERS 2 (2014), https://archive.ipcc.ch/pdf/assessmentreport/ar5/syr/AR5\_SYR\_FINAL\_SPM.pdf [hereinafter IPCC 2014 SUMMARY].

<sup>5.</sup> IPCC 2014 SYNTHESIS REPORT, supra note 2.

<sup>6.</sup> Id. at 53.

<sup>7.</sup> See infra Part I.A.

<sup>8.</sup> See infra Part I.A.

<sup>9.</sup> See CTR. FOR LAW & MILITARY OPERATIONS (CLAMO), DOMESTIC DISASTER RESPONSE 2017 HURRICANES HARVEY, IRMA, AND MARIA: LESSONS LEARNED FOR JUDGE ADVOCATES 8 (2018), https://www.loc.gov/rr/frd/Military\_Law/pdf/Domestic-Disaster-Response\_%202017.pdf [hereinafter CLAMO DOMESTIC DISASTER RESPONSE] (noting that the 2017 hurricane season saw the activation of more than 50,000 members of the National Guard). While other extreme weather events, such as floods and wildfires, also require activating the National Guard for support, the response is usually not as extensive as that of hurricanes. See Jim Garamone, DEP'T OF DEF., Guardsmen Bring Combat Skills to Fighting Western Fires, (Aug. 16, 2018) https://dod.defense.gov/News/Article/Article/1604180/guardsmen-bring-combat-skills-to-fighting-western-fires/ (noting that "1,000 California National Guardsmen have been called up to assist in the firefighting effort").

### A. Climate Change: A Threat at Home and Abroad

Climate change affects the entire globe and is likely to impact food and water security, severely damage infrastructure, and even submerge some sovereign nations under rising seas. The IPCC noted that "[c]limate change can indirectly increase risks of violent conflict by amplifying well-documented drivers of these conflicts, such as poverty and economic shocks. To Former Chief of Staff of the U.S. Army Gordon Sullivan echoed this concern stating, "[C]limate change is a national security issue . . . climate instability will lead to instability in geopolitics and impact American military operations around the world."

While climate impacts are likely to exacerbate conflicts around the world, climate change also poses increased threats to Americans. According to the IPCC, the United States is threatened by three key risks:

- 1) "[w]ildfire-induced loss of ecosystem integrity, property loss, human morbidity, and mortality as a result of increased drying trend and temperature trend;"<sup>13</sup>
- 2) "heat-related human mortality;" 14 and
- 3) "[u]rban floods in riverine and coastal areas, inducing property and infrastructure damage; supply chain, ecosystem, and social system disruption; public health impacts; and water quality impairment, due to sea level rise, extreme precipitation, and cyclones." <sup>15</sup>

In November 2018 alone, two fires devastated California and claimed 89 lives.<sup>16</sup> Two major hurricanes also wrought havoc on the

<sup>10.</sup> See Nathanial Gronewold, Island Nations May Keep Some Sovereignty if Rising Seas Make Them Uninhabitable, N.Y. TIMES (May 25, 2011), https://archive.nytimes.com/www.nytimes.com/cwire/2011/05/25/25climatewire-island-nations-may-keep-some-sovereignty-if-63590.html?pagewanted=all.

<sup>11.</sup> IPCC 2014 SYNTHESIS REPORT, supra note 2, at 73.

<sup>12.</sup> National Defense Authorization Act 2018, *supra* note 1.

<sup>13.</sup> Patricia Romero-Lankao et al., Intergovernmental Panel on Climate Change, Climate Change 2014: Impacts, Adaptation, and Vulnerability 1477 (2014), https://www.ipcc.ch/report/ar5/wg2/.

<sup>14.</sup> Id.

<sup>15.</sup> Id.

<sup>16.</sup> Ashley McBride, Camp Fire: Death Toll Rises to 86 After Hospitalized Man Dies from Burn Injuries, S.F. CHRONICLE (Dec. 11, 2018), https://www.sfchronicle.com/california-wildfires/article/Camp-Fire-Death-toll-rises-to-86-after-13458956.php; Gabby Ferreira, Woolsey Fire Death Toll Rises to 3 After Body is Found in Burned-Out Home, SAN LUIS OBISPO TRIBUNE (Nov. 14, 2018), https://www.sanluisobispo.com/news/state/california/fires/article 221654060.html.

southeastern United States in the fall of 2018, resulting in over 90 deaths and billions of dollars in damage.<sup>17</sup> In addition to wildfires and hurricanes, other extreme weather events are also increasing in frequency or severity. The number of tornadoes occurring in southeastern states is increasing;<sup>18</sup> severe floods are likely to increase in frequency; and western states are more likely to experience longer periods of drought.<sup>19</sup>

Although it is impossible to directly link any single natural disaster to climate change, general trends in extreme weather events in recent years can be attributed to rising global surface temperatures.<sup>20</sup> Recent studies have found that climate change intensified the rainfall of Hurricanes Katrina, Irma, and Maria by between four and nine percent<sup>21</sup> and that climate change "likely resulted in a ~20% increase" in Hurricane Harvey's accumulated precipitation.<sup>22</sup> Other research has linked climate change to an overall decrease in tropical storms and

<sup>17.</sup> Doyle Rice, Monsters Florence and Michael Powered the Deadly, Destructive Atlantic Hurricane Season that Ends Friday, USA TODAY (Nov. 29, 2018, 1:25PM), https://www.usatoday.com/story/news/nation/2018/11/29/hurricane-season-ends-florence-and-michael-left-death-destruction/2148341002/; Leslie Scism & Erin Ailworth, Moody's Pegs Florence's Economic Cost at \$38 Billion to \$50 Billion, WALL ST. J. (Sept. 21, 2018, 7:22PM), https://www.wsj.com/articles/moodys-pegs-florences-economic-cost-at-38-billion-to-50-billion-1537572161.

<sup>18.</sup> Vittorio A. Gensini & Harold E. Brooks, *Spatial Trends in United States Tornado frequency*, 38 CLIMATE & ATMOSPHERIC SCI. 1, 1 (2018).

<sup>19.</sup> See THOMAS JOHNSON ET AL., IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES: FOURTH NATIONAL CLIMATE ASSESSMENT 150 (D.R. Reidmiller et al. eds. 2018) (summarizing how various regions of the United States will be impacted by floods or droughts); see also Patrick Gonzalez et al., Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment 1112 (D.R. Reidmiller et al. eds. 2018) ("With continued greenhouse gas emissions, higher temperatures would cause more frequent and severe droughts in the Southwest.").

<sup>20. &</sup>quot;Climate" is the average weather conditions over a long period of time, usually 30 years or more. "Climate change" generally refers to changes in the average weather conditions, such as average high and low temperatures and precipitation. For example, Hurricane Irma was a singular weather event. Climate change did not cause Hurricane Irma, but climate change—particularly increases in the average temperature of the ocean—could increase the intensity and frequency of hurricanes in general. Thus, climate change enhances the conditions that can lead to natural disasters, like hurricanes and wildfires. See Christina M. Patricola & Michael F. Wehner, Anthropogenic Influences on Major Tropical Cyclone Events, 563 NATURE 339, 339 (2018) ("Seasurface temperature (SST) warming has been observed and is expected to continue, which would intensify tropical cyclones.").

<sup>21.</sup> Id. at 345.

<sup>22.</sup> S-Y Simon Wang et al., Quantitative Attribution of Climate Effects on Hurricane Harvey's Extreme Rainfall in Texas, 13 ENVTL. RES. LETTERS 1, 8 (2018).

hurricanes but an increase in the intensity of hurricanes.<sup>23</sup> Alternatively, recent models have also predicted an increase in the frequency, intensity, and intensification distribution of hurricanes over the next century.<sup>24</sup>

While scientists continue to study and debate the impact of climate change on hurricanes, one thing is certain: people continue moving to and developing hurricane-prone areas along the Atlantic and Gulf Coasts. In 2016, approximately 94 million people lived directly adjacent to the coast.<sup>25</sup> Of that 94 million, approximately 59.6 million lived in the Atlantic and Gulf Coast regions, up from 51.9 million in 2000.<sup>26</sup> Major coastal cities at risk of hurricanes, flooding, and sea level rise include Miami, Tampa, Jacksonville, Houston, Washington, D.C., and even New York City.<sup>27</sup>

While climate change threatens ever greater numbers of Americans as they move to vulnerable coastal cities, it also poses a serious threat to infrastructure. Hurricanes threaten nuclear power plants, military installations, and major ports with inundation, in addition to hundreds of billions of dollars in commercial and residential real estate.<sup>28</sup> Over time the impacts of rising sea levels, combined with storm surges from hurricanes, will threaten greater and greater swaths of the coastal United States.<sup>29</sup>

## B. The U.S. Military as a Climate Change Affirmer

The Department of Defense (DoD) recognizes climate change as a national security threat and is actively addressing climate-related vulnerabilities to military infrastructure across the globe.<sup>30</sup> The military

<sup>23.</sup> Thomas R. Knutson et al., *Dynamical Downscaling Projections of Twenty-First-Century Atlantic Hurricane Activity: CMIP3 and CMIP5 Model-Based Scenarios*, 26 J. CLIMATE 6591, 6616 (2013).

<sup>24.</sup> Kieran Bhatia et al., *Projected Response of Tropical Cyclone Intensity and Intensification in a Global Climate Model*, 31 J. CLIMATE 8281, 8295, 8297 (2018).

<sup>25.</sup> Darryl T. Cohen, 60 Million Live in the Path of Hurricanes, U.S. CENSUS BUREAU (Aug. 6, 2018), https://www.census.gov/library/stories/2018/08/coastal-county-population-rises.html.

<sup>26.</sup> Id.

<sup>27.</sup> See, e.g., Romero-Lankao et al., supra note 13, at 1474 (discussing climate responses in New York City).

<sup>28.</sup> See Krishna Rao, Climate Change and Housing: Will a Rising Tide Sink All Homes?, ZILLOW RESEARCH (June 2, 2017), https://www.zillow.com/research/climate-change-underwater-homes-12890/ ("Nationwide, almost 1.9 million homes (or roughly 2 percent of all U.S. homes)—worth a combined \$882 billion—are at risk of being underwater by 2100.").

<sup>29.</sup> See generally Romero-Lankao et al., supra note 13.

<sup>30.</sup> See DEP'T OF DEF., REPORT ON EFFECTS OF A CHANGING CLIMATE TO THE DEPARTMENT OF DEFENSE (2019), https://media.defense.gov/2019/Jan/29/2002084200/-1/-1/1/CLIMATE-CHANGE-REPORT-2019.PDF [hereinafter 2019 DOD CLIMATE CHANGE

has been aware of the threat posed by climate change since at least 1990;<sup>31</sup> however, DoD did not seriously consider climate change until the CNA Corporation and 11 retired military officers released a report in 2007 addressing climate change as a national security threat.<sup>32</sup> The report found that climate change posed a threat to national security by affecting extreme weather events and increasing tensions in both unstable and stable portions of the world.<sup>33</sup> It also noted that climate change has the "potential to create sustained natural and humanitarian disasters on a scale far beyond those we see today" and provided recommendations to address these risks, such as incorporating climate change into national security strategies and working with developing countries to increase resiliency and capacity to respond to climate impacts.<sup>34</sup>

Following the CNA Military Advisory Report, DoD recognized the need to address climate change as a security threat in its 2008 National Defense Strategy.<sup>35</sup> However, DoD did not explicitly draw the link between climate change and national security until the 2010 Quadrennial Defense Review Report (QDR Report), a legislatively-mandated review of DoD's national security strategies.<sup>36</sup> The QDR Report stated, "Climate change will affect DoD in two broad ways. First, climate change will shape the operating environment, roles, and

REPORT]; see generally U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-18-206, CLIMATE CHANGE ADAPTATION: DOD NEEDS TO BETTER INCORPORATE ADAPTATION INTO PLANNING AND COLLABORATION AT OVERSEAS INSTALLATIONS (2017); CURT D. STORLAZZI ET AL., RC-2334, THE IMPACT OF SEA-LEVEL RISE AND CLIMATE CHANGE ON DEPARTMENT OF DEFENSE INSTALLATIONS ON ATOLLS IN THE PACIFIC OCEAN (2017).

- 31. See generally Terry P. Kelley, Global Climate Change Implications for the United States Navy (unpublished research, Naval War College) (available via FOIA request at http://documents.theblackvault.com/documents/weather/climatechange/globalclimatechange-navy.pdf) ("Global climate change poses a multifaceted challenge to the Navy over the next half-century. This challenge will impact naval operations, facilities, and systems, and affect resource allocations.").
- 32. CNA CORP., NATIONAL SECURITY AND THE THREAT OF CLIMATE CHANGE 3 (2007), https://www.cna.org/cna\_files/pdf/national%20security%20and%20the%20threat%20of%20climate%20change.pdf.
  - 33. Id. at 6-7.
  - 34. Id. at 6; id. at 7-8.
- 35. See DEP'T OF DEF., NATIONAL DEFENSE STRATEGY 4 (2008), http://archive.defense.gov/pubs/2008NationalDefenseStrategy.pdf ("Over the next twenty years physical pressures—population, resource, energy, climatic and environmental—could combine with rapid social, cultural, technological and geopolitical change to create greater uncertainty.").
- 36. See 10 U.S.C. § 118(a) (2012) (repealed by National Defense Authorization Act for Fiscal Year 2017, Pub. L. 97-295, § 941(b)(1), 130 Stat. 2000, 2367) ("The Secretary of Defense shall every four years... conduct a comprehensive examination... of the national defense strategy, force structure, force modernization plans, infrastructure, budget plan, and other elements of the defense program and policies of the United States.").

missions that we undertake. . . . Second, DoD will need to adjust to the impacts of climate change on our facilities and military capabilities."<sup>37</sup>

DoD continues to recognize the need for the military in disaster response, noting "extreme weather events may lead to increased demands for defense support to civil authorities for humanitarian assistance or disaster response both within the United States and Overseas." The DoD 2014 Climate Change Adaptation Roadmap took an even more aggressive stance on climate change:

A changing climate will have real impacts on our military and the way it executes its missions. The military could be called upon more often to support civil authorities, and provide humanitarian assistance and disaster relief in the face of more frequent and more intense natural disasters. Our coastal installations are vulnerable to rising sea levels and increased flooding, while droughts, wildfires, and more extreme temperatures could threaten many of our training activities. Our supply chains could be impacted, and we will need to ensure our critical equipment works under more extreme weather conditions. Weather has always affected military operations, and as the climate changes, the way we execute operations may be altered or constrained.<sup>39</sup>

Despite the Trump Administration dropping climate change from the National Security Strategy issued in 2017,<sup>40</sup> DoD continues to treat it as a national security risk and has published several reports on the U.S. military's vulnerabilities since recognizing climate change as a security threat in 2008.<sup>41</sup> The latest report from January 2019 studied

Climate change is an urgent and growing threat to our national security, contributing to increased natural disasters, refugee flows, and conflicts over basic resources like food and water. The present day effects of climate change are being felt from the Arctic to the Midwest. Increased sea levels and storm surges threaten coastal regions, infrastructure, and property. In turn, the global economy suffers, compounding the growing costs of preparing and restoring infrastructure.

WHITE HOUSE, NATIONAL SECURITY STRATEGY 12 (2015).

<sup>37.</sup> DEP'T OF DEF., QUADRENNIAL DEFENSE REVIEW REPORT 84–85 (2010), http://archive.defense.gov/qdr/QDR%20as%20of%2029JAN10%201600.pdf.

<sup>38.</sup> Id. at 85.

<sup>39.</sup> Chuck Hagel, *Foreword* to DEP'T OF DEF., 2014 CLIMATE CHANGE ADAPTATION ROADMAP (2014), https://www.acq.osd.mil/eie/downloads/CCARprint\_wForward\_e.pdf.

<sup>40.</sup> Compare WHITE HOUSE, NATIONAL SECURITY STRATEGY (2017), https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf (only referring to "climate policies" in regards to energy dominance), with WHITE HOUSE, NATIONAL SECURITY STRATEGY 12 (2015), http://nssarchive.us/wp-content/uploads/2015/02/2015.pdf (listing climate change as one of the major threats to national security). The Obama Administration's National Security Strategy goes on to state that:

<sup>41.</sup> See, e.g., 2019 DOD CLIMATE CHANGE REPORT, supra note 30; see, e.g., OFFICE OF THE UNDER SECRETARY OF DEF. FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS, DEP'T OF DEF., CLIMATE-RELATED RISK TO DOD INFRASTRUCTURE INITIAL VULNERABILITY ASSESSMENT

the impacts of five "climate-related events"—recurrent flooding, drought, desertification, wildfires, and thawing permafrost—on seventy-nine military installations.<sup>42</sup> The report found that "[a]bout two-thirds of the 79 installations addressed... are vulnerable to current or future recurrent flooding" and provided recommendations for improving DoD's research and resiliency.<sup>43</sup> Over the last ten years, climate change has become a serious consideration for the U.S. military as a national security threat and will likely continue to be treated as such in the future.<sup>44</sup>

Some scholars have expressed concerns over DoD's inclusion of nontraditional risks, like climate change, within the national security framework. After the end of the Cold War, DoD adopted a broader view of national security threats incorporating "anything that presented a potential harm to the United States." Historically, national security was concerned with protecting the Union and American sovereignty from hostile foreign nations or organizations. Perhaps, some argue, the military should withdraw from its involvement in climate change and disaster relief and leave such tasks to specialized agencies. In the words of Justice Black, "It is the primary business of armies and navies to fight or be ready to fight wars should the occasion arise."

On the other hand, the military is uniquely positioned to legitimize climate change concerns. Americans consistently give the military the highest confidence rating of any American institution.<sup>49</sup> While more Republicans have acknowledged climate change in recent years, there

SURVEY REPORT (2018), https://climateandsecurity.files.wordpress.com/2018/01/tab-b-slvas-report-1-24-2018.pdf; DEP'T OF THE NAVY, U.S. NAVY CLIMATE CHANGE ROADMAP (2010), https://www.navy.mil/navydata/documents/ccr.pdf; STORLAZZI ET AL., *supra* note 30.

- 42. 2019 DOD CLIMATE CHANGE REPORT, supra note 30, at 4.
- 43. Id. at 16.
- 44. See, e.g. id. at 2 ("DoD must be able to adapt current and future operations to address the impacts of a variety of threats and conditions, including those from weather and natural events.") (emphasis added).
- 45. See Laura K. Donohue, The Limits of National Security, 48 AM. CRIM. L. REV. 1573, 1715 (noting that categorizing climate change as a national security threat allows the military to acquire more resources and may remove the dialogue around climate change solutions from open, public discourse).
  - 46. Id. at 1708 (emphasis in original).
  - 47. Id. at 1576.
  - 48. United States ex rel. Toth v. Quarles, 350 U.S. 11, 17 (1955).
- 49. Frank Newport, *U.S. Confidence in Military Reflects Perceived Competency*, GALLUP (July 27, 2017), https://news.gallup.com/poll/214511/high-confidence-military-reflects-perceived-competency.aspx.

is still a wide gap between Democrats' and Republicans' views.<sup>50</sup> Given Republicans tend to view the military more positively than Democrats, the military's position may shift Republican's perceptions of climate change.<sup>51</sup> The military has also been a "norm leader in arenas such as the racial integration of American society, and the importance of patriotic values in encouraging civilian recycling during World War II, among others."<sup>52</sup> Actions taken by the military, like utilizing renewable energy and assessing climate risks to infrastructure, legitimize the risks of climate change and set a positive precedent for other agencies and citizens.<sup>53</sup>

Regardless of the proper role of DoD in recognizing climate change as a national security threat, the military forces play an important role in disaster response and will continue to do so for the foreseeable future. The 2017 hurricane season was the costliest, as well as one of the deadliest, on record.<sup>54</sup> The hurricane response "involved 43 States and resulted in the activation of more than 50,000 members of the National Guard."<sup>55</sup> It required a massive mobilization effort on the part of local, state, and Federal governments, including active-duty troops, the National Guard, and State Defense Forces.

#### II. U.S. DISASTER MANAGEMENT AND THE ROLE OF THE MILITARY

Disaster management requires a coordinated effort across local, state, tribal, and federal governments, NGOs, and private businesses. Disaster management and response in the United States "takes a

<sup>50.</sup> Climate Concerns Increase; Most Republicans Now Acknowledge Change, MONMOUTH UNIV. POLLING INST., (Nov. 29, 2018), https://www.monmouth.edu/polling-institute/documents/monmouthpoll\_us\_112918.pdf/; see also Cary Funk & Meg Hefferon, Many Republican Millennials Differ With Older Party Members on Climate Change and Energy Issues, PEW RESEARCH CTR. (May 14, 2018), http://www.pewresearch.org/fact-tank/2018/05/14/many-republican-millennials-differ-with-older-party-members-on-climate-change-and-energy-issues/ ("About a third (36%) of Millennials in the GOP say the Earth is warming mostly due to human activity, double the share of Republicans in the Baby Boomer or older generations.").

<sup>51.</sup> See Jim Norman, Americans Give Military Branches Similar High Marks, GALLUP (May 26, 2017), https://news.gallup.com/poll/211112/americans-give-military-branches-similar-high-marks.aspx ("The biggest gaps in favorable opinion [of the military] are between Republicans and Democrats.").

<sup>52.</sup> Sarah E. Light, Valuing National Security: Climate Change, the Military, and Society, 61 UCLA L. REV. 1772, 1776 (2014).

<sup>53.</sup> See generally id.

<sup>54.</sup> Doyle Rice, 2017's Three Monster Hurricanes — Harvey, Irma and Maria — Among Five Costliest Ever, USA TODAY (Jan. 30, 2018), https://www.usatoday.com/story/weather/2018/01/30/2017-s-three-monster-hurricanes-harvey-irma-and-maria-among-five-costliest-ever/1078930001/.

<sup>55.</sup> CLAMO DOMESTIC DISASTER RESPONSE, supra note 9.

'bottom up' approach", with initial responsibility falling on local governments, emergency responders, and volunteer groups.<sup>56</sup> If local personnel are overwhelmed, state or tribal governments usually step in to bolster local efforts; when necessary, the state governor will issue a state disaster or emergency declaration. In most instances, the federal government will only step in when state and local resources are overwhelmed.<sup>57</sup> The Stafford Act provides the statutory authority and framework for federal disaster response. Section 101 of the Stafford Act states that:

The Congress hereby finds and declares that (1) because disasters often cause loss of life, human suffering, loss of income, and property loss and damage; and (2) because disasters often disrupt the normal functioning of governments and communities, and adversely affect individuals and families with great severity; special measures, designed to assist the efforts of the affected States in expediting the rendering of aid, assistance, and emergency services, and the reconstruction and rehabilitation of devastated areas, are necessary.<sup>58</sup>

Congress intended "to provide an orderly and continuing means of assistance by the Federal Government to State and local governments in carrying out their responsibilities to alleviate the suffering and damage which result from such disasters." Even when a state or tribal government requests aid, the Federal Emergency Management Agency (FEMA) and other federal agencies "supplement the efforts and available resources of States, local governments, and disaster relief organizations" and only take control of management in extraordinary situations. 60

Upon request of the governor or the Chief Executive of a tribal government for assistance, the President may declare that a major disaster or emergency exists in the affected area.<sup>61</sup> However, the type

<sup>56.</sup> JARED T. BROWN & BRUCE R. LINDSAY, CONG. RESEARCH SERV., R41981, CONGRESSIONAL PRIMER ON RESPONDING TO MAJOR DISASTERS AND EMERGENCIES 1 (2018).

<sup>57.</sup> See Robert T. Stafford Disaster Relief and Emergency Assistance Act § 401, 42 U.S.C. § 5170 (2018) ("All requests for a declaration by the President that a major disaster exists...shall be based on a finding that the disaster is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments and that Federal assistance is necessary.").

<sup>58. 42</sup> U.S.C. § 5121(a) (2018).

<sup>59. 42</sup> U.S.C. § 5121(b).

<sup>60. 42</sup> U.S.C. §5122(2) (2018); see also BROWN & LINDSAY, supra note 56 ("[E]xcept in the most extraordinary circumstances, local and state/tribal governments are in charge of the disaster response.").

<sup>61. 42</sup> U.S.C. § 5170; 42 U.S.C. § 5191 (2018). "Emergency" is defined as:

of declaration impacts the assistance a state receives. An emergency declaration can occur "in advance or anticipation of the imminent impact of an incident that threaten such destruction as could result in a major disaster," but it is more limited in scope than major disaster declarations and is intended for short-term situations. Major disaster declarations, on the other hand, can trigger a wide variety of Federal recovery programs, many focused on the long-term recovery of individuals and the community, in the wake of disaster. 63

The DoD is one of the Federal agencies called into action by the Stafford Act. The Act provides a general rule for "utilization of DoD resources":

During the immediate aftermath of an incident which may ultimately qualify for assistance under . . . this Act, the Governor of the State in which such incident occurred may request the President to direct the Secretary of Defense to utilize the resources of the Department of Defense for the purpose of performing on public and private lands any emergency work which is made necessary by such incident and which is essential for the preservation of life and property. If the President determines that such work is essential for the preservation of life and property, the President shall grant such request to the extent the President determines practicable. Such emergency work may only be carried out for a period not to exceed 10 days.<sup>64</sup>

[A]ny occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States.

#### 42 U.S.C. § 5122(1). "Major disaster" is defined as:

[A]ny natural catastrophe (including any hurricane, tornado, storm, high water, winddriven 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 Act 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).

- 62. The Disaster Declaration Process, FEMA, (Jan. 8, 2018), https://www.fema.gov/disaster-declaration-process; see also 42 U.S.C. § 5192(c) (2018) ("The President shall promulgate and maintain guidelines to assist Governors in requesting the declaration of an emergency in advance of a natural or man-made disaster (including for the purpose of seeking assistance with special needs and other evacuation efforts) under this section by defining the types of assistance available to affected States and the circumstances under which such requests are likely to be approved.").
- 63. See, e.g., 42 U.S.C. § 5174 (2018) (Federal Assistance to Individuals and Households); 42 U.S.C. § 5177 (2018) (Unemployment Assistance); 42 U.S.C. § 5182 (2018) (Legal Services); 42 U.S.C. § 5183 (2018) (Crisis Counseling Assistance and Training); 42 U.S.C. § 5184 (2018) (Community Disaster Loans).
  - 64. 42 U.S.C. § 5170b (2018).

In addition to the Stafford Act, the National Response Framework (NRF) and DoD directives outline the various roles and responsibilities of the military's federal disaster response. The NRF mobilizes all levels of disaster response, from local faith groups to federal departments, and serves as a "guide to how the Nation responds to all types of disasters and emergencies." The DoD Directive on Defense Support of Civil Authorities (DSCA) provides guidance on how federal military forces can respond to emergencies and, in particular, outlines when they can quell civil disturbances.

In response to natural disasters, the military can quickly provide disciplined personnel, expertise, and equipment to aid relief efforts. The federal government and many states organize their disaster response according to fifteen Emergency Support Functions (ESFs), such as "Transportation" and "Communications," that outline which agencies take a lead role and which act in support.<sup>68</sup> The NRF assigns lead agencies and support agencies to the ESFs depending on the agencies' specific capabilities. For example, the Department of Transportation (DOT) is the lead agency for the Transportation ESF because DOT has the expertise and capability to maintain critical transportation systems and infrastructure during an emergency. Of the fifteen ESFs, the NRF designates DoD and the Army Corps of Engineers as the lead coordinating agencies for the Public Works and Engineering ESF, respectively.<sup>69</sup>

On the state level, the National Guard plays a similar role to DoD. For example, Washington State organizes its disaster response according to ESFs like the NRF.<sup>70</sup> There, the Adjutant General both commands all Washington Army and Air National Guard forces and

<sup>65.</sup> See generally DEP'T OF HOMELAND SEC., NATIONAL RESPONSE FRAMEWORK i (3d ed. 2016) [hereinafter NATIONAL RESPONSE FRAMEWORK]; DEP'T OF DEF., DIR. 3025.18, DEFENSE SUPPORT OF CIVIL AUTHORITIES (Dec. 29, 2010), http://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodd/302518p.pdf?ver=2018-03-19-093120-683 [hereinafter DSCA].

<sup>66.</sup> NATIONAL RESPONSE FRAMEWORK, supra note 65.

<sup>67.</sup> See generally DSCA, supra note 65.

<sup>68.</sup> NATIONAL RESPONSE FRAMEWORK, *supra* note 65, at 33. The Framework provides fifteen ESFs: Transportation; Communications; Public Works and Engineering; Firefighting; Information and Planning; Mass Care, Emergency Assistance, Temporary Housing, and Human Services; Logistics; Public Health and Medical Services; Search and Rescue; Oil and Hazardous Materials Response; Agriculture and Natural Resources; Energy; Public Safety and Security; Long-term Community Recovery (superseded by National Disaster Recovery Framework); and External Affairs. *Id.* at 34–37.

<sup>69.</sup> Id. at 34.

<sup>70.</sup> See generally WASH. MILITARY DEP'T EMERGENCY MGMT. DIV., COMPREHENSIVE EMERGENCY MGMT. PLAN 84 (2016), https://mil.wa.gov/uploads/pdf/PLANS/final-wacemp-basic-plan-june2016-signed.pdf.

serves as Director of the State's Emergency Management and Enhanced 911 programs.<sup>71</sup> The Washington Military Department Emergency Management Division serves as the coordinating agency for three ESFs, while the Washington Military Department's National Guard serves as the lead coordinating agency for one ESF and serves as a supporting agency for eleven others.<sup>72</sup>

The National Guard and federal military forces are well-equipped to provide support for transportation, communication, and search and rescue, among other functions. Many National Guard units have access to "wheeled vehicles capable of traversing varied terrain" including High Mobility Multipurpose Wheeled Vehicles (HMMWVs).<sup>73</sup> Some Army National Guard units are also capable of providing aviation support, like utility helicopters and light fixed-wing aircraft. 74 National Guard armories also have important communication abilities—they "operate[] high-frequency (HF) radios for long-range communication and ultra high-frequency (UHF) and very high-frequency radios (VHF) for short-range coordination of field activities."<sup>75</sup> Hurricane Katrina exposed gaps in communication to which the Army has responded by developing "high-tech capabilities that enable rapid, inter-agency communications during an emergency."<sup>76</sup> One of these is Joint Incident Site Communications Capability which includes communication vehicles equipped with radio and communications and Internet capabilities to establish remote command posts.<sup>77</sup> These capabilities are essential when traditional communication systems are overwhelmed or inoperable following a natural disaster. While the military's support capabilities are "generally derived from DoD warfighting capabilities,"<sup>78</sup> many of the

<sup>71.</sup> The Adjutant General, Washington, WASH. MILITARY DEP'T., https://mil.wa.gov/about-us/the-adjutant-general (last visited Dec. 12, 2018).

<sup>72.</sup> Id. at 84.

<sup>73.</sup> James Stuhltrager, Send in the Guard: The National Guard Response to Natural Disasters, 20 NAT. RESOURCE & ENV'T 21, 22 (2006).

<sup>74.</sup> Id.

<sup>75.</sup> *Id.* at 23.

<sup>76.</sup> Claire Heininger, *Army Provides Mobile Satellite Communications for Disaster Response*, U.S. ARMY (Jan. 24, 2011), https://www.army.mil/article/50731/army\_provides\_mobile\_satellite\_communications\_for\_disaster\_response.

<sup>77.</sup> *Id.*; see also Stuhltrager, supra note 73, at 23 ("Some states – such as Florida, Pennsylvania, and Texas – are equipped with the Interim SATCOM Incident Site Command Set (ISISCS), which provides a comprehensive suite of satellite communication, Internet, video conference, and radio/phone interoperability.").

<sup>78.</sup> Joint Chiefs of Staff, Joint Pub. 3-28, Defense Support of Civil Authorities I-3 (2018).

same capabilities necessary on the battlefield have useful domestic applications as well.

#### III. THE USE OF THE MILITARY IN DOMESTIC ARENAS

The role of the U.S. military in ordinary, domestic affairs is extremely limited and regulated. Military forces—active duty troops, the National Guard, and State Defense Forces—can be relied upon for disaster support; however, the abilities of federal military forces are more limited than those of the National Guard or State Defense Forces. Under the Posse Comitatus Act, federal troops cannot be used for any domestic law enforcement activities without Congressional authorization.<sup>79</sup> State-controlled troops such as the National Guard or a State Defense Force, are not subject to the restrictions of the Posse Comitatus Act and can enforce laws.<sup>80</sup> In extraordinary circumstances, such as those under the Insurrection Act, federal military forces may be utilized to enforce laws;<sup>81</sup> however, such circumstances rarely arise.

Following a natural disaster, both federal and state troops can assist with recovery efforts such as maintaining communication lines or performing search and rescue missions. In most natural disaster scenarios, the Posse Comitatus Act does not restrict the military's capabilities in any meaningful way because governors can rely on their own National Guard units and those of neighboring states to respond without relying heavily on federal military forces. However, the events of Hurricane Katrina provide an insightful example into how these Acts may hinder disaster response. As hurricanes become increasingly severe and threaten significant portions of the Atlantic and Gulf Coasts as a result of climate change, the Posse Comitatus Act and inflexibility of the Insurrection Act may inhibit the ability of the President to respond quickly and effectively to catastrophic natural disasters.

#### A. The Posse Comitatus Act

The Posse Comitatus Act (PCA) reflects the deeply held American fear of military intrusion into domestic affairs. King George's use of soldiers to control and suppress unruly colonists "affronted the English tradition against domestic use of military

<sup>79. 18</sup> U.S.C. § 1385 (2018).

<sup>80.</sup> See id. (applying to the Army and Air Force); see also infra Part IV.

<sup>81. 10</sup> U.S.C. §§ 251–55 (2018).

<sup>82.</sup> See infra Part V.

troops" and was a catalyst for the American Revolution. 83 The Declaration of Independence lists King George's "[keeping] among us, in times of peace, Standing Armies without the Consent of our legislatures" and "render[ing] the Military independent of and superior to the Civil Power" as examples of the English Crown's "repeated injuries and usurpations." The Founding Fathers reacted to these egregious violations by subordinating the American military to civilian control and limiting the use of the military domestically to extraordinary circumstances. 85

The events surrounding the Civil War and the use of federal troops during Reconstruction spurred the passage of the PCA in 1877.<sup>86</sup> Federal troops were relied on to execute the laws as southern state governments were rebuilt following the Civil War.<sup>87</sup> The placement of federal troops at polling places during the election of 1876 and the subsequent contested results, in particular, led Congress to act.<sup>88</sup> The text of the PCA reads:

Whoever, except in cases and under circumstances expressly authorized by the Constitution or Act of Congress, willfully uses any part of the Army or the Air Force as a posse comitatus or otherwise to execute the laws shall be fined under this title or imprisoned not more than two years, or both.<sup>89</sup>

The language of the PCA leaves room for exceptions—the PCA does not apply "under circumstances expressly authorized by the Constitution or Act of Congress." Congress has used this clause to

<sup>83.</sup> David Engdahl, Soldiers, Riots, and Revolution: The Law and History of Military Troops in Civil Disorders, 57 IOWA L. REV. 1, 24 (1971).

<sup>84.</sup> The Declaration of Independence (U.S. 1776).

<sup>85.</sup> E.g., U.S. Const. art. II, § 2, cl. 1 ("The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States . . . . "); U.S. Const. art. IV, § 4 ("The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature, or of the Executive (when the Legislature cannot be convened) against domestic Violence.") (emphasis added); see also William C. Banks, Providing "Supplemental Security"—The Insurrection Act and the Military Role in Responding to Domestic Crises, 3 J. NAT'L SECURITY L. & POL'Y 39, 39 (2009) ("Because the military grew out of our nation's revolutionary and constitutional heritage, its subordination to civilian control has been a central feature of our government since its beginning.").

<sup>86.</sup> Scott R. Tkacz, In Katrina's Wake: Rethinking the Military's Role in Domestic Emergencies, 15 Wm. & MARY BILL RTS. J. 301, 307–08 (2006).

<sup>87.</sup> *Id.* at 308

<sup>88.</sup> Cong. Research Serv., R42659, The Posse Comitatus Act and Related Matters: The Use of the Military to Execute Civilian Law 21 (2018).

<sup>89. 18</sup> U.S.C. § 1385 (2018).

<sup>90.</sup> *Id*.

create many statutory exceptions to the PCA, including the Insurrection Act.<sup>91</sup>

#### B. The Insurrection Act

While the Founding Fathers recognized the perils of an unfettered military, the Constitution does not explicitly prohibit the use of federal troops to control civilians. Recognizing that the federal army may need to defend the fledgling country from domestic rebellion, Congress quickly authorized the president to call forth the militia in line with the Constitution. 92

The Calling Forth Act of 1792 gave the President the authority to "call forth such number of the militia of the state or states most convenient to the place of danger or scene of action, as he may judge necessary to repel such invasion" in the event the United States "shall be invaded, or be in imminent danger of invasion from any foreign nation or Indian tribe." The Act also authorized the President call forth the militia "to cause the laws to be duly executed" in the event that ordinary judicial proceedings or the power of the federal marshals is not enough to cease the obstruction of laws. Under the authority of this statute, President Washington quashed the Whiskey Rebellion in Pennsylvania two years after enactment, calling forth 13,000 militiamen from four states.

The modern version of the Insurrection Act strongly resembles the language of the early Calling Forth Act. <sup>96</sup> The Insurrection Act is broken into five sections, with sections 251–253 outlining the President's power to call forth the militia to execute the laws. Section 251 provides that "[w]henever there is an insurrection in any State against its government, the President may, upon the request of its legislature or of its governor if the legislature cannot be convened, call

<sup>91.</sup> See CONG. RESEARCH SERV., supra note 88, at 31–32 n.224 (listing over 20 statutory exceptions).

<sup>92.</sup> See U.S. CONST. art. I, § 8, cl. 15 (authorizing Congress "[t]o provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions").

<sup>93.</sup> Calling Forth Act of 1792, ch. 28, 1 Stat. 264 (repealed 1795).

<sup>94.</sup> Id.

<sup>95.</sup> WILLIAM C. BANKS & STEPHEN DYCUS, SOLDIERS ON THE HOME FRONT 50–51 (2016); see also President George Washington, *Proclamation of September 15, 1792, Founders Online*, NATIONAL ARCHIVES, https://founders.archives.gov/documents/Washington/05-11-02-0058 (last visited Dec. 11, 2018).

<sup>96.</sup> But see infra part VI for a discussion on the amendment to the Insurrection Act, 10 U.S.C. §§ 251-255, both passed and repealed in the years after Hurricane Katrina.

into Federal service such of the militia of the other States." 97 Section 252 may be invoked when "unlawful obstructions, combinations, or assemblages, or rebellion against the authority of the United States, make it impracticable to enforce the laws of the United States in any State by the ordinary course of judicial proceedings."98 In such circumstances, the President "may call into Federal service such of the militia of any State, and use such of the armed forces, as he considers necessary to enforce those laws or to suppress the rebellion."99 Section 253 enables the President to use the militia or the armed forces to suppress "any insurrection, domestic violence, unlawful combination, or conspiracy, if it ... hinders the execution of the laws of that State" and "constituted authorities of that State are unable, fail, or refuse to protect that right, privilege, or immunity, or to give that protection."<sup>100</sup> It also applies when an insurrection "opposes or obstructs the execution of the laws of the United States or impedes the course of justice under those laws." 101

Following the devastation of Hurricane Katrina, Congress briefly amended Section 253 to clarify the circumstances when the Insurrection Act could be invoked. The John Warner National Defense Authorization Act for Fiscal Year 2007 was largely an appropriations bill with one amendment to the Insurrection Act "slipped in" that sparked significant outrage from state politicians. The revised version amended the language of the Act and provided that the President "may employ the armed forces" to "restore public order and enforce the laws... when, as a result of a *natural disaster*, *epidemic, or other serious public health emergency, terrorist attack or incident, or other condition* in any State or possession of the United States, the President determines that domestic violence has occurred...." The amendment triggered a strong response from state governors who decried the amendment as a gross expansion of

<sup>97. 10</sup> U.S.C. § 251 (2018).

<sup>98. 10</sup> U.S.C. § 252 (2018).

<sup>99.</sup> Id.

<sup>100. 10</sup> U.S.C. § 253 (2018).

<sup>101.</sup> *Id*.

<sup>102.</sup> John Warner National Defense Authorization Act for Fiscal Year 2007, Pub. L. No. 109-364, § 1076, 120 Stat. 2083, 2404, *repealed by* National Defense Authorization Act for Fiscal Year 2008, Pub. L. No. 110-181 § 1068, 122 Stat. 3, 325. *See infra* Part VI for further discussion of the amendment

<sup>103.</sup> See 152 Cong. Rec. 21697 (2006) (statement of Senator Leahy) ("The implications of changing the act are enormous, but this change was just slipped in the defense bill as a rider with little study.").

<sup>104. 10</sup> U.S.C § 333 (2006) (emphasis added).

federal power into their traditional role as commanders of each of their state National Guard.<sup>105</sup> The amendment was repealed a year later following an outcry from all fifty state governors and members of Congress.<sup>106</sup>

The Insurrection Act has only been used sporadically by Presidents in recent years. Both Presidents Eisenhower and Kennedy invoked the Insurrection Act to send federal troops to aid desegregation, 107 and President George H.W. Bush invoked the Insurrection Act to help restore law and order in the midst of the Rodney King riots in 1992. 108 Although President George W. Bush considered the Insurrection Act following reports of rioting and lawlessness in Hurricane Katrina's wake, federalism issues and public opinion may have kept him from invoking the Act. 109

#### IV. THE MILITARY RESPONSE

The military actors responding to disaster scenarios can be divided into the National Guard, federal military forces, and State Defense Forces. The National Guard, usually under the command and control of the governor, is the primary military group responsible for disaster response and relief. In situations where the local response is overwhelmed, federal military forces—active duty Army, Navy, Marine, and Air Force servicemen and women—can be called upon for additional support. Many states also have state militias that can support response activities.

#### A. The National Guard

The National Guard is usually a state's most important military asset in responding to natural disasters and lending military support to local authorities. The National Guard is uniquely situated because they can serve under a state governor or the President, depending on the circumstances. First, in response to natural disasters, man-made disasters, and Homeland Security missions, a state governor can

<sup>105.</sup> See Jennifer Steinhauer, Governors Resist Shifting Authority Over Guard, N.Y. TIMES (Aug. 15, 2005), https://www.nytimes.com/2006/08/15/us/15governors.html (noting that the governors claimed the amendment "would undermine their authority and autonomy").

<sup>106.</sup> *Id.*; National Defense Authorization Act for Fiscal Year 2008, Pub. L. No. 110-181 § 1068, 122 Stat. 3, 325.

<sup>107.</sup> CONG. RESEARCH SERV., supra note 88, at 42.

<sup>108.</sup> Exec. Order No. 12804, 57 Fed. Reg. 19,361 (May 5, 1992) (providing for the restoration of law and order in the city and county of Los Angeles, and other districts of California).

<sup>109.</sup> See infra Part V for further discussion of this sequence of events.

activate the state National Guard to "state active duty" (SAD).<sup>110</sup> Under SAD, the National Guard serves under the command of their respective state governor through an adjutant general, receives state benefits and payment, and is not subject to the restrictions of the PCA.<sup>111</sup>

Second, the National Guard can serve under Title 32 status at the request of the Governor and approval of the President.<sup>112</sup> Under Title 32, the National Guard remains under the command of the state governor and exempt from the PCA while receiving federal pay and benefits.<sup>113</sup> Title 32 status is particularly useful "for operations spanning multiple states, as it eliminates the disparity in state pay rates and ensures governors command integrity of the National Guard forces."<sup>114</sup>

Third, under Title 10, the President can federalize the National Guard by either ordering the National Guard to active duty as reserves or by calling the National Guard into Federal service as a militia. When serving under Title 10, "active duty" means full-time duty in the active military service of the United States. Under Title 10, the President serves as the Commander-in-Chief of the "activated" National Guard units, and the National Guard troops are subject to the restrictions of the PCA. Generally, Title 10 status is reserved for international deployments.

## B. Federal Military Forces

Whereas the National Guard can operate under three different duty statuses domestically, federal military forces—active and Reserve Army, Navy, Air Force, and Marine Corps troops—are always under the command and control of the President under Title 10.<sup>119</sup> As such,

<sup>110.</sup> E.g., VA. CODE ANN. § 44-75.1(4) (West 2018). See also STEVE BOWMAN ET AL., CONG. RESEARCH SERV., RL33095, HURRICANE KATRINA: DOD DISASTER RESPONSE 7 (2005), https://fas.org/sgp/crs/natsec/RL33095.pdf.

<sup>111.</sup> BOWMAN, supra note 110.

<sup>112. 32</sup> U.S.C. § 502(f) (2018).

<sup>113.</sup> Id.; BOWMAN ET AL., supra note 110, at 8.

<sup>114.</sup> Ryan Burke, Lessons from Katrina: Commanding the Military During Disaster Response—Then and Now, 12 INT. J. EMERGENCY. MGMT. 221, 223 (2016).

<sup>115. 10</sup> U.S.C. § 12304 (2018).

<sup>116. 10</sup> U.S.C. § 101(d)(1) (2018).

<sup>117.</sup> BOWMAN ET AL., supra note 110, at 9.

<sup>118.</sup> Burke, *supra* note 114 at 223.

<sup>119.</sup> *Id.*; see e.g., 10 U.S.C. § 3011 (2018) ("The Department of the Army is separately organized under the Secretary of the Army. It operates under the authority, direction, and control of the Secretary of Defense.").

federal military forces are subject to the restrictions of the PCA.<sup>120</sup> Even with these restrictions, federal military forces play a role in domestic disaster response, such as "[i]nfrastructure protection and emergency repair" and "[e]mergency contracting support for lifesaving and life-sustaining services."<sup>121</sup>

Although the Coast Guard is part of the "armed forces" as defined in 10 U.S.C. § 101(a)(4), the Coast Guard operates under the Department of Homeland Security during peacetime. 122 The President or Congress can transfer the Coast Guard to the Department of the Navy in times of war. 123 Unlike other armed forces, Congress delegated explicit law enforcement authority to the Coast Guard, thus exempting it from the PCA. 124

### C. State Defense Forces

State Defense Forces (SDFs) are local military forces that operate solely under the authority of state governments. SDFs were born out of America's longstanding militia tradition and the Second Amendment. The Militia Act of 1903 brought all state militia forces under the umbrella of the National Guard. However, when nearly all National Guard troops mobilized in World War I, state governors called for organized state militias. The Home Defense Act of 1917 permitted the states to organize state defense forces when the National Guard was federalized. Congress officially recognized SDFs in 1956, under Title 32 of the U.S. Code:

In addition to its National Guard, if any, a State, the Commonwealth of Puerto Rico, the District of Columbia, Guam, or the Virgin

- 120. 18 U.S.C. § 1385 (2018).
- 121. NATIONAL RESPONSE FRAMEWORK, supra note 65, at 34.
- 122. 14 U.S.C. § 103(a) (2018).
- 123. 14 U.S.C. § 103(b) (2018).
- 124. See 14 U.S.C. § 522 (2018) ("The Coast Guard may make inquiries, examinations, inspections, searches, seizures, and arrests upon the high seas and waters over which the United States has jurisdiction, for the prevention, detection, and suppression of violations of laws of the United States."); 14 U.S.C. § 703 (2018) (empowering "[c]ommissioned, warrant, and petty officers of the Coast Guard" as customs officers").
- 125. See U.S. CONST. amend. II ("A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.").
  - 126. Militia Act of 1903, 32 Stat. 775 (1903).
- 127. See Eric Durr, New York Guard was Born in World War I as the National Guard Went to War, U.S. ARMY (Apr. 25, 2017), https://www.army.mil/article/186638/new\_york\_guard\_was\_born\_in\_world\_war\_i\_as\_the\_national\_guard\_went\_to\_war ("That need to replace National Guard Soldiers who had been protecting railroad bridges, water lines and canals resulted in the creation of the New York Guard, the state's volunteer self-defense force, on Aug. 3, 1917.").
  - 128. National Defense Act of 1916, Pub. L. No. 64-85, 39 Stat. 166.

Islands may, as provided by its laws, organize and maintain defense forces. A defense force established under this section may be used within the jurisdiction concerned, as its chief executive (or commanding general in the case of the District of Columbia) considers necessary, but it may not be called, ordered, or drafted into the armed forces.<sup>129</sup>

State defense forces are organized and authorized under state law, in compliance with 32 U.S.C. § 109(c). <sup>130</sup> As of 2012, more than 20 states and Puerto Rico had established state guards, with total membership over 14,000. <sup>131</sup> Texas, Virginia, and Georgia, in particular, have robust SDFs and even have SDF navies. <sup>132</sup> Unlike the National Guard and federal military forces, SDFs generally cannot be federalized and are always under the command of their respective governors through an adjutant general. <sup>133</sup> However, like the National Guard, SDFs can deploy to other states at the request of the governor. <sup>134</sup> They are generally used when the National Guard is "either undermanned, federalized by the [P]resident under the Stafford Act, deployed in support of federal forces, or eliminated by a foreign enemy." <sup>135</sup> Although SDFs and the National Guard work together under the

<sup>129. 32</sup> U.S.C. § 109(c) (2018); see also 32 U.S.C. § 109(b) (1956).

<sup>130.</sup> For example, the Texas State Guard is defined as the "volunteer military forces that provide community service and emergency response activities for this state, as organized under the Second Amendment to the United States Constitution, and operating as a defense force authorized under 32 U.S.C. Section 109." TEX. GOV'T CODE. ANN. § 437.001(16) (West 2018).

<sup>131.</sup> James Carafano et al., *Why More States Should Establish State Defense Forces*, HERITAGE FOUNDATION BACKGROUNDER 2 (Feb. 28, 2012), https://www.heritage.org/defense/report/why-more-states-should-establish-state-defense-forces.

<sup>132.</sup> See id

<sup>133.</sup> *Id.* at 3; *but see infra* Part VI for a brief discussion of the uncertainties regarding the President's ability to call forth SDFs.

<sup>134.</sup> See GA. CODE ANN. § 38-2-91 (West 2018), which provides that:

<sup>(</sup>a) Upon the request of the governor of another state, the Governor in his discretion may order all or any portion of the organized militia to assist the military or police forces of the other state who are actually engaged in defending the other state. Such forces may be recalled by the Governor at his discretion.

<sup>(</sup>b) The Governor in his discretion may request the governor of another state to order all or any portion of the organized militia of the other state to assist the military or police forces of this state who are actually engaged in defending this state.

<sup>135.</sup> Jonathon R. Pohnel, State Defense Forces and Their Role in American Homeland Security (Mar. 2015) (unpublished master's thesis, Naval Postgraduate School) (on file with the Dudley Knox Library, Naval Postgraduate School), https://sgaus.org/wp-content/uploads/2016/10/15Mar\_Pohnel\_ Jonathan.pdf; see also VA. CODE ANN. § 44-54.4 (West 2018) (stating that Virginia Defense Force shall "provide for an adequately trained organized reserve militia to assume control . . . in the event of the mobilization of the Virginia National Guard" and "provide a military force to respond to the call of the Governor in those circumstances described in § 44-75.1."). Circumstances included under VA. CODE ANN. § 44-75.1 (West 2018) include insurrection, obstructing the execution of laws, natural or man-made disasters.

adjutant general, members are prohibited from serving in the SDF and the National Guard simultaneously. 136

# V. HURRICANES KATRINA AND CORA: HIGHLIGHTING THE NEED FOR FEDERAL INTERVENTION

Hurricane Katrina and "Hurricane Cora" serve as examples for the military response to natural disasters. Hurricane Katrina provides a real-life example of a catastrophic natural disaster that required a massive mobilization of military forces to assist with relief. While devastating, it serves as a case study for disaster management and spurred an outpouring of academic literature on disaster response, including in-depth critiques of the military's role and the federalism issues that may have hampered the military's response time. 137 Hurricane Cora, on the other hand, was a simulated hurricane used by FEMA as part of its National Level Exercise 2018 to test emergency response. 138 This simulated hurricane hugged the East Coast of the United States as a Category 4 hurricane from Florida until it made landfall near Washington, D.C. 139 This simulation is a useful example for future disaster management because hurricanes may move further north as a result of climate change, putting major cities like Washington, D.C. and New York City at risk. It also provides a scenario where five or more states could all be significantly impacted from the same storm, highlighting the need for an integrated, communicative, and centralized response network.

The federal military response to Hurricane Katrina highlights many of the issues that could still affect the military response to natural disasters today and serves as a reminder to prepare for worst-case disaster scenarios. With a more flexible Insurrection Act and clearer communication, President Bush's response to Hurricane Katrina likely would have occurred quicker and reduced some of the chaos experienced in the first days following landfall. Hurricane Katrina

<sup>136.</sup> See 32 U.S.C. § 109(e) (2018) ("A person may not become a member of a defense force established under subsection (c) if he is a member of a reserve component of the armed forces.").

<sup>137.</sup> E.g., U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-06-643, HURRICANE KATRINA: BETTER PLANS AND EXERCISES NEEDED TO GUIDE THE MILITARY'S RESPONSE TO CATASTROPHIC NATURAL DISASTERS 21 (2006) [hereinafter GAO HURRICANE KATRINA]; Christina E. Wells, Katrina and the Rhetoric of Federalism, 26 MISS. C. L. REV. 127 (2007) (discussing coordination and preparation failures during Hurricane Katrina).

<sup>138.</sup> FEMA, NATIONAL LEVEL EXERCISE 2018: EXECUTIVE SUMMARY (2018), https://www.fema.gov/media-library-data/1531489062928c7d82e3b92be153719688d9c6d71e1fb/NLE EXEC SUMM2018 20180620 508PASS.PDF.

<sup>139.</sup> *Id*.

presented a "perfect storm" of problems. First, the population of New Orleans was highly vulnerable—large portions of the city fell below the poverty line, lacked access to transportation, and lived in portions of the city subject to flooding. <sup>140</sup> Second, the state and local governments inadequately responded to the oncoming hurricane. <sup>141</sup> Third, a significant portion of Louisiana's National Guard troops were deployed in Iraq and Afghanistan. <sup>142</sup> Lastly, after landfall, many local law enforcement officials abandoned their posts. <sup>143</sup>

With vast swaths of the city underwater and a dearth of law enforcement officials to both maintain order and rescue stranded citizens, Louisiana's Governor Kathleen Blanco refused President Bush's request to federalize the National Guard under the Insurrection Act and bring in federal troops. According to a Senate Special Report issued in 2006, the reasons behind the delayed response remain opaque. However, the Special Report notes that Governor Blanco may have resisted attempts to federalize National Guard troops because keeping the National Guard under state control would allow them to serve as law enforcement, unfettered by the PCA.

President Bush was faced with a dilemma: override Governor Blanco and unilaterally deploy federal troops to Louisiana, or obey her

<sup>140.</sup> See generally Shirley B. Laska & Betty Hearn Morrow, Social Vulnerabilities and Hurricane Katrina: An Unnatural Disaster in New Orleans, 40 MARINE TECH. SOC'Y J. 16 (2006).

<sup>141.</sup> See How New Orleans' Evacuation Plan Fell Apart, NPR (Sept. 23, 2005), https://www.npr.org/templates/story/story.php?storyId=4860776 (discussing how buses were diverted to the Superdome—a shelter of last resort—during the evacuation because of traffic, nursing homes failed to evacuate, and buses failed to return to the Superdome out of security concerns); see also Wells, supra note 137, 137–40.

<sup>142.</sup> Brock N. Meeks, *Guardsmen on a Rescue and Relief Mission*, MSNBC (Aug. 30, 2005, http://www.nbcnews.com/id/9117367/ns/us\_news-katrina\_the\_long\_road\_back/t/guardsmenrescue-relief-mission/#.XBKis2hKjnE ("About 35 percent, or 3,000 Louisiana National Guard troops, '[were] supporting deployed operations'...."); *see* HURRICANE KATRINA: DOD DISASTER RESPONSE, CONG. RESEARCH SERV., RL33095, 13–14 (2006) (finding that while DoD officials denied any negative impact on disaster relief from overseas deployments, anecdotal evidence suggests otherwise); BANKS & DYCUS, *supra* note 95, at 107 ("To complicate matters further, much of the Louisiana guard's critically needed equipment, including radios and bulldozers, had been shipped to Iraq to support the ongoing war there.").

<sup>143.</sup> Dan Barry & Jere Longman, *A Police Department Racked by Doubt and Accusations*, N.Y. TIMES (Sept. 30, 2005), https://www.nytimes.com/2005/09/30/us/nationalspecial/a-police-department-racked-by-doubt-and-accusations.html.

<sup>144.</sup> Sean McGrane, Note, Katrina, Federalism, and Military Law Enforcement: A New Exception to the Posse Comitatus Act, 108 MICH. L. REV. 1309, 1327 (2010).

<sup>145.</sup> S. COMM. ON HOMELAND SEC. AND GOVERNMENTAL AFFAIRS, HURRICANE KATRINA: A NATION STILL UNPREPARED 505 (2006), https://www.govinfo.gov/content/pkg/CRPT-109srpt322/pdf/CRPT-109srpt322.pdf.

<sup>146.</sup> Id. at 506.

request for local control over the response.<sup>147</sup> Hanging in the balance was a city in desperate need of assistance. President Bush deferred to Governor Blanco and the "federal military response arrived late and remained independent of state forces."<sup>148</sup> When federal troops did arrive, they were widely viewed as the heroes of Hurricane Katrina, and the military response peaked at more than 70,000 troops.<sup>149</sup>

Although troops played a critical role in the aftermath of Katrina, a Government Accountability Office report found several areas of the military's response in need of improvement, including communication and integration of military units. 150 Hurricane Katrina "destroyed or severely degraded many commercial landline and cellular telephone systems, and emergency radio systems were oversubscribed making it difficult to establish necessary connections between officials and responders at the local, state, and federal levels." Some National Guard assets were sent with restrictions on their use, leaving some areas with excess communication capabilities while others had none. 152 Furthermore, the federal military forces were under the command and control of Northern Command's Joint Task Force Katrina, while the National Guard forces were under command and control of the Governors of Mississippi and Louisiana. 153 Although response operations were coordinated across the groups, they were not integrated, which led to inefficiencies and duplication of effort. 154

Now, ten years later, such inefficiencies could still threaten disaster response. In 2018, following an "unprecedented" 2017 hurricane season, FEMA brought together governments, private industry, and NGOs for a National Level Exercise to test their ability

<sup>147.</sup> *Id.* at 1318. One anonymous official stated that Bush's failure to federalize the Louisiana National Guard came down to a question of politics and bad optics:

<sup>&</sup>quot;Can you imagine how it would have been perceived if a president of the United States of one party had pre-emptively taken from the female governor of another party the command and control of her forces, unless the security situation made it completely clear that she was unable to effectively execute her command authority and that lawlessness was the inevitable result?"

Eric Lipton et al., *Political Issues Snarled Plans for Troop Aid*, N.Y. TIMES (Sept. 9, 2005), https://www.nytimes.com/2005/09/09/us/nationalspecial/political-issues-snarled-plans-for-troopaid.html.

<sup>148.</sup> BANKS & DYCUS, supra note 95, at 106.

<sup>149.</sup> GAO HURRICANE KATRINA, supra note 137, at 21.

<sup>150.</sup> See generally id.

<sup>151.</sup> Id. at 25.

<sup>152.</sup> Id.

<sup>153.</sup> See generally id.

<sup>154.</sup> Id. at 26.

to respond to a hurricane striking the Mid-Atlantic, a threat comparable to Katrina. National Level Exercises are congressionally mandated, biannual simulations to "test and evaluate the readiness of Federal, State, local, and tribal governments to respond and recover in a coordinated and unified manner to catastrophic incidents." The most recent National Level Exercise was a simulated Category 4 hurricane. In the model, Hurricane Cora made landfall near Hampton Roads, Virginia "bringing a 15-foot (0.3 meter) storm surge and up to 9 inches (23 centimeters) of rain to some areas within the first six hours." Such a hurricane would directly impact Washington, D.C., Virginia, Maryland, Pennsylvania, North Carolina, and Delaware with indirect impacts likely felt throughout the Eastern seaboard.

The simulated results were certainly catastrophic. An Associated Press article described the destruction:

In the scenario, Cora also slammed hurricane-force winds into three nuclear power stations. One was damaged. Thirty-three major power substations were at risk from storm surge and major flooding. Key roads and bridges were also damaged, and debris blocked the Newport News Channel and other waterways. Coast Guard Station Cape Charles lost power, and Coast Guard Station Chincoteague was severely damaged by high winds. The ferocious fictional storm also damaged and closed Reagan National Airport in Washington. The make-believe hurricane threatened hundreds of cell towers, and the area where power was knocked out included 135 data centers in Virginia and another 60 in Maryland. <sup>158</sup>

Unlike many of the recent hurricanes that have effects limited to one or two states, a mid-Atlantic or northeastern landfall would require a coordinated response effort across several states. In these scenarios, natural disasters lose their localized character. In the same way that Hurricane Katrina had far-reaching ramifications on oil prices, a direct hurricane impact on Washington, D.C. or New York City could have economic and political ramifications across the country. Such a hurricane would disrupt both air and sea traffic,

<sup>155.</sup> FEMA to Conduct National Level Exercise, FEMA (May 2, 2018), https://www.fema.gov/news-release/2018/05/02/fema-conduct-national-level-exercise; FEMA, supra note 138, at 1.

<sup>156. 6</sup> U.S.C. § 748(b)(3)(A) (2018); *National Level Exercise 2018*, FEMA, https://www.fema.gov/nle (last visited Dec. 12, 2018).

<sup>157.</sup> Jeff Martin, Category 4 Hurricane Devastates East Coast in FEMA Simulation, ASSOCIATED PRESS (Sept. 11, 2018), https://apnews.com/2a3ea3cb7cd949939120121d88de94bc.

<sup>158.</sup> Id.

<sup>159.</sup> E.g. Katrina and Oil Prices, COUNCIL ON FOREIGN RELATIONS (Sept. 7, 2015), https://www.cfr.org/interview/katrina-and-oil-prices.

leading to disruptions to some of the busiest airports and seaports in the United States.

Both of these hurricane scenarios provide insight into disaster preparation and response. The tragedy of Hurricane Katrina exposed gaps in disaster preparation and provides positive proof of the need to improve emergency response systems across all levels of government. The possibility of an actual event like the Hurricane Cora exercise raises similar questions about response issues that need to be addressed promptly in the face of potential increases in hurricane frequency and intensity.

## VI. EXPANDING THE ROLE OF THE MILITARY IN A WARMING WORLD

The local, state, and federal government should prepare for worst-case natural disaster scenarios, akin to Hurricanes Katrina and Cora. Congress should clarify the powers of the President to call forth the militia and provide a more flexible framework for federalization in catastrophic disaster scenarios. Congress should also attempt to remove the inefficiencies that led to the conflict between Governor Blanco and President Bush in the days following Hurricane Katrina's landfall in Louisiana. Although it is possible that the President may need to federalize the National Guard against a governor's wishes, the likelihood of that situation remains small. The President can still provide military support and assistance without coming into conflict with the PCA.

Furthermore, many natural disaster responses can be handled at the local and state levels. However, with the threat of climate change and ever-increasing natural disasters, states should invest in State Defense Forces to better respond to natural disasters and reduce the need for federal assistance. State defense forces can be a cost-effective, local solution to a growing need for emergency responders.

### A. The Tools for Effective Disaster Response

Congress should give the U.S. military the tools to effectively and efficiently respond to catastrophic natural disasters, while specifying the situations in which such tools can be used. To reduce any risk of delaying disaster response in the future, the Federal and state governments should address any potential federalism issues early, via legislation or agency procedures.

Hurricane Cora highlighted some of the unusual problems associated with a mid-Atlantic hurricane, including the interesting

logistical scenario of having the President act as the Commander-in-Chief of the District of Columbia National Guard while state governors would, at least initially, control their respective National Guards. <sup>160</sup> It would be possible for the President, through the Secretary of Defense, to have to coordinate with state governors to have non-District of Columbia National Guard units operating in Washington, D.C. These National Guard units would probably not be considered "federalized" but would still effectively be operating under the command of the President. In this scenario, it is unclear whether they would fall under Title 32 or Title 10 status. The distinction may not have a functional impact but could slow the response time by creating confusion over the scope of their abilities and their command structure in the same way that federalism questions stalled the Katrina response.

One proposed solution—the use of a dual commander for multistate disaster response—was codified in the National Defense Authorization Act for Fiscal Year 2012.<sup>161</sup> A dual-status commander (DSC) acts either under state status or under Title 10 as a Federal officer but may receive orders from either chain of command.<sup>162</sup> The new provision states that:

When the Armed Forces and the National Guard are employed simultaneously in support of civil authorities in the United States, appointment of a commissioned officer as a dual-status commander... should be the usual and customary command and control arrangement, including for missions involving a major disaster or emergency as those terms are defined in section 102 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. § 5122). <sup>163</sup>

<sup>160.</sup> D.C. CODE ANN. § 49-409 (2019) ("The President of the United States shall be the Commander-in-Chief of the militia of the District of Columbia."). While the President is the Commander-in-Chief, Executive Order 11,485 "authorized and directed [the Secretary of Defense] to supervise, administer and control the Army National Guard and the Air National Guard of the District of Columbia . . . while in militia status." Executive Order 11,485 also states that the Secretary of Defense "may order out the National Guard under title 39 of the District of Columbia Code to aid the civil authorities of the District of Columbia" but that such orders are "subject to the direction of the President as Commander-in-Chief." Exec. Order No. 11,485, 34 Fed. Reg. 15439, 15443 (Oct. 4, 1969).

<sup>161.</sup> See generally National Defense Authorization Act for Fiscal Year 2012, Pub. L. No. 112-81, § 515, 125 Stat. 1298 (2011), https://www.congress.gov/bill/112th-congress/house-bill/1540/text.

<sup>162.</sup> CENTER FOR LAW AND MILITARY OPERATIONS (CLAMO), DOMESTIC OPERATIONAL LAW 2018 HANDBOOK FOR JUDGE ADVOCATES 68 (2018), https://www.loc.gov/rr/frd/Military\_Law/pdf/ domestic-law-handbook-2018.pdf.

<sup>163. 10</sup> U.S.C. § 12304a(c)(1) (2018).

Although the use of a DSC has been generally successful,164 it is reasonable to prepare for a Katrina-like scenario where a governor refuses to assent to a DSC. 165 Because both the state and the President have to agree to install a DSC, 166 it may be beneficial to create a procedure that can be used in lieu of mutual agreement or to trump mutual agreement. For example, additional language could make the dual-status command the only command structure, other than Presidential control, in "major disasters" or "emergencies" that involve more than one state. Similarly, a procedure should be established for conflicting orders from both chains of command. While DoD directives currently advise the DSC to seek counsel from a Judge Advocate from each chain of command, it does not provide instruction if both sides refuse to agree. 167 While one possible solution is to dissolve the dual-status commander role, DoD should further clarify this to prevent delays if the situation arose in the future. Except in this unique circumstance, the use of a DSC should be a far less contentious alternative to the invocation of the Insurrection Act because it addresses federalism concerns by keeping some state control over the National Guard.

Another proposed solution would be to re-adopt the 2007 amendment to the Insurrection Act to clarify when the President may invoke the act following a natural disaster. The Insurrection Act is only invoked in extraordinary situations. Most natural disasters are relatively local and will not require large-scale federal intervention; however, Congress should plan for a worst-case scenario and ensure that the President is not hindered by federalism questions. Although there is a long American tradition of separating the U.S. military from domestic policing, the exceptions to the PCA undermine this distinction. While the National Guard under the command and control of a governor can enforce laws, the same National Guard loses that power when under the command and control of the President. <sup>168</sup> If one of the concerns related to the military enforcing laws is a lack of

<sup>164.</sup> RYAN BURKE & SUE MCNEIL, U.S. ARMY WAR COLLEGE, TOWARD A UNIFIED MILITARY RESPONSE: HURRICANE SANDY AND THE DUAL STATUS COMMANDER 54–61 (2015).

<sup>165.</sup> Notably, President Bush and Governor Blanco discussed the prospect of using a dual-status commander following the landfall of Hurricane Katrina. Governor Blanco refused. S. COMM. ON HOMELAND SEC. AND GOVERNMENTAL AFFAIRS, *supra* note 145, at 70.

<sup>166.</sup> *Dual Status Commander (DSC)*, NAT'L GUARD (Dec. 2017), https://www.nationalguard.mii/Portals/31/Resources/Fact%20Sheets/Dual%20Status%20Commander%20Fact%20Sheet%20(Dec. %202017).pdf

<sup>167.</sup> JOINT CHIEFS OF STAFF, *supra* note 78, at D-2–D-3.

<sup>168.</sup> NAT'L GUARD, supra note 166.

training or familiarity with domestic law, then this distinction between the federalized National Guard and state-controlled National Guard appears arbitrary. The same National Guard troops that could enforce laws under state control could not do so under federal control. The 2007 amendment to the Insurrection Act would have allowed the President to invoke the Act in response to a natural disaster and utilize the armed forces and the National Guard to enforce laws and "restore public order." Thus, the National Guard would be able to act as law enforcement even under federal control in instances specifically listed in the statute. Congress should reconsider the 2007 amendment to the Insurrection Act or consider alternative exceptions to the PCA that would only activate in response to a major natural disaster.

The Senate Armed Service Committee characterized the 2007 amendment to the PCA as:

[A] provision that would update the Insurrection Act to clarify the President's authority to use the armed forces, including the National Guard in federal service, to restore order and enforce federal laws in cases where, as a result of a terrorist attack, epidemic, or natural disaster, public order has broken down.<sup>171</sup>

The Senate Committee Report on the amendment further stated that the pre-amendment Insurrection Act "grant[ed] the President broad powers to use the armed forces in situations of public disorder . . . ."<sup>172</sup> However, "the antique terminology and the lack of explicit reference to such situations as natural disasters or terrorist attacks may have contributed to a reluctance to use the armed forces in situations such as Hurricane Katrina."<sup>173</sup> The report also noted that the President's authority is temporary and subject to notification requirements to Congress.<sup>174</sup>

The most notable change to the Insurrection Act from the amendment came in the form of enumerated instances—"natural disaster, epidemic, or other serious public health emergency, terrorist attack or incident"—that could cause "domestic violence" to such an

<sup>169.</sup> John Warner National Defense Authorization Act for Fiscal Year 2007, Pub. L. No. 109-364, § 1076, 120 Stat. 2083, 2404, repealed by National Defense Authorization Act for Fiscal Year 2008, Pub. L. No. 110-181 § 1068, 122 Stat. 3, 325. For an in-depth discussion of the changes to the Insurrection Act resulting from the 2007 amendment, see Thaddeus A. Hoffmeister, An Insurrection Act for the 21st Century, 39 STETSON L. REV. 861 (2010).

<sup>170.</sup> See id.

<sup>171.</sup> S. Rep. No. 109-254, at 5 (2006).

<sup>172.</sup> Id. at 384.

<sup>173.</sup> Id.

<sup>174.</sup> Id.

extent that the state is unable to maintain public order.<sup>175</sup> In these instances, the President "may employ the armed forces, including the National Guard in Federal service, to restore public order and enforce the laws of the United States..."

While Senator Leahy and all fifty governors railed against the amendment as a gross expansion of presidential power and an infringement on states' rights,<sup>177</sup> at least one commentator believes that the amendment did nothing to change the President's substantive powers but rather clarified when the Insurrection Act could be used.<sup>178</sup> Congress should reconsider this amendment and allow for a robust debate, rather than hiding the amendment in an appropriations bill. Many of the changes to the Insurrection Act are likely less offensive than the state governors feared.<sup>179</sup>

If Congress keeps the unamended Insurrection Act, Congress should consider providing statutory definitions to some of the terms in the Act to clarify the circumstances in which the Act can be invoked. The Insurrection Act is riddled with undefined words and phrases that hinder its effective use. While courts have generally interpreted "insurrection" to mean an armed uprising against the government, Presidents have interpreted it to mean anything from a riot to an uprising. Congress could provide definitions for some of the terms, like "insurrection" and "domestic violence," that would specifically address events following catastrophic natural disasters. This would achieve effectively the same result as amending the Insurrection Act directly without altering the original terminology.

<sup>175.</sup> John Warner National Defense Authorization Act for Fiscal Year 2007, *supra* note 102.

<sup>176.</sup> *Id.* Compare this with the current Insurrection Act that states: "The President, by using the militia or the armed forces, or both, or by any other means, shall take such measures as he considers necessary to suppress, in a State, any insurrection, domestic violence, unlawful combination, or conspiracy" that hinders or obstructs the execution of the laws. 10 U.S.C. § 253.

<sup>177.</sup> See 152 Cong. Rec. 21696 (2006) (remarks by Senator Leahy) (stating that the amendment "subvert[s] solid, longstanding posse comitatus statutes that limit the military's involvement in law enforcement, thereby making it easier for the President to declare martial law"); David S. Broder, Governors Wary of Change on Troops, WASH. POST (Aug. 6, 2006) http://www.washingtonpost.com/wpdyn/content/article/2006/08/05/AR2006080500732.html,

<sup>(&</sup>quot;Iowa Gov. Tom Vilsack, the senior Democrat, called the proposal 'one step away from a complete takeover of the National Guard, the end of the Guard as a dual-function force that can respond to both state and national needs."").

<sup>178.</sup> Danielle Crockett, The Insurrection Act and Executive Power to Respond with Force to Natural Disasters 3–4 (unpublished research paper, available online with Berkeley Law library at https://www.law.berkeley.edu/library/resources/disasters/Crockett.pdf).

<sup>179.</sup> Hoffmeister, supra note 169 at 901–03.

<sup>180.</sup> Id. at 901 n.248.

The 2007 amendment also altered what military forces the President can call forth by changing the word "militia" to "National Guard."<sup>181</sup> While this may seem like a minor change, it could actually limit the military forces that the President can call forth by prohibiting the federalization of state militias, or SDFs. 182 Under the current Insurrection Act, the President can rely on the "militia or the armed forces" to enforce laws. 183 While 32 U.S.C. § 109(c) states that SDFs "may not be called, ordered, or drafted into the armed forces," it is currently unclear whether or not this exempts SDFs from ever being federalized. In *Perpich v. Department of Defense*, the Supreme Court refused to decide the issue but stated that "[i]t is nonetheless possible that [SDFs] are subject to call under [the Insurrection Act] which distinguish the 'militia' from the 'armed forces,' and which appear to subject all portions of the 'militia'—organized or not—to call if needed for the purposes specified in the Militia Clauses."184 In short, the amendment provided a stronger guarantee that SDFs would remain under state-control if the Insurrection Act were invoked than the current version of the Act. This, combined with more robust SDFs, could address some of the governors' concerns about federal usurpation of their control over state military forces.

In addition to the original changes made in the 2007 amendment—namely specifying causes of domestic violence, changing the term "militia" to "National Guard," and making the President's decision to employ the armed forces to restore order discretionary<sup>185</sup>—Congress could institute more checks on the President's power. Congress might insert a ten-day time limit to § 233, like the Stafford Act's emergency powers provision, that can be extended with a request from the

<sup>181.</sup> Compare 10 U.S.C. § 253 ("The President, by using the militia or the armed forces..."), with John Warner National Defense Authorization Act for Fiscal Year 2007, supra note 102 ("The President may employ the armed forces, including the National Guard in Federal service...").

<sup>182.</sup> *See* Hoffmeister, *supra* note 169 at 902–03 (noting that the 2007 amendment would have limited the President to calling forth federal armed forces and the National Guard, not SDFs).

<sup>183. 10</sup> U.S.C. § 253.

<sup>184. 496</sup> U.S. 334, 352 n.25 (1990). Note that at the time of this decision, the Insurrection Act was codified at § 333.

<sup>185.</sup> See John Warner National Defense Authorization Act for Fiscal Year 2007, supra note 102 (changing 10 U.S.C. § 333, now 10 U.S.C. § 253, from the President "shall take such measures as he considers necessary" to "[t]he President may employ the armed forces") (emphasis added); see also Hoffmeister, supra note 169 at 903 (noting that the amendment made Presidential action optional).

governor or through congressional approval. But, by only adding a ten-day limit to § 233 which specifically addresses natural disasters, the President would still have the ability to invoke § 231 or § 232 should the situation call for it.

Several commentators have proposed federalism checks to the Insurrection Act, such as requiring judicial approval to federalize the militia. Perhaps a more effective federalism check is already codified in § 231. Section 231 provides that in the event of insurrection, "the President may, *upon the request of its legislature* or of its governor if the legislature cannot be convened, call into Federal service . . . the militia." Prior to landfall, in the case of hurricanes, the state legislature can plan to call a special session to take place a few days later. This would allow the state legislature, without the input of the governor, to meet and request Federal intervention via the Insurrection Act.

A potentially controversial but effective method could be extending the request power to the local governments of large metropolitan areas. Mayors or city councils would be more intimately aware of the conditions in their area and could provide a better picture of "domestic violence" in their communities. Formal requests from local governments could also provide political cover and support for the President's decision to federalize troops. While the President will

<sup>186.</sup> See 42 U.S.C. § 5170b ("Such emergency work may only be carried out for a period not to exceed 10 days."). Note that Congress has recognized the broad powers conferred to the Department of Defense under the Stafford Act. Title 6 of the U.S. Code states:

<sup>[</sup>T]he Posse Comitatus Act is not a complete barrier to the use of the Armed Forces for a range of domestic purposes, including law enforcement functions, when the use of the Armed Forces is authorized by Act of Congress or the President determines that the use of the Armed Forces is required to fulfill the President's obligations under the Constitution to respond promptly in time of war, insurrection, or other serious emergency.

<sup>6</sup> U.S.C. § 466 (2018) (emphasis added). Existing laws, including chapter 15 of title 10 (commonly known as the "Insurrection Act"), and the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.), grant the President broad powers that may be invoked in the event of domestic emergencies, including an attack against the Nation using weapons of mass destruction, and these laws specifically authorize the President to use the Armed Forces to help restore public order.

<sup>187.</sup> McGrane, supra note 144, at 1333; Hoffmeister, supra note 169 at 914.

<sup>188. 10</sup> U.S.C. § 251 (emphasis added).

<sup>189.</sup> N.C. Legislature to Convene October 2nd for Hurricane Florence Relief Session, ABERDEEN TIMES (Sept. 25, 2018), https://www.aberdeentimes.com/government/local-government-news/9272-n-c-legislature-to-convene-october-2-for-hurricane-florence-relief-session.

<sup>190.</sup> See 10 U.S.C. § 253 ("The President...shall take such measures as he considers necessary to suppress, in a State, any insurrection, domestic violence, unlawful combination, or conspiracy") (emphasis added).

only rarely need to invoke the Insurrection Act in the wake of a natural disaster, Congress should streamline the process and account for federalism concerns now before such a disaster arises.

## B. When in Doubt, Organize a Militia: SDFs as a Response to Federalism Concerns

The Insurrection and the Stafford Acts are invoked only when local and state resources are overwhelmed. States that feel threatened by changes to the Insurrection Act could do more to ensure that their local resources will not be overwhelmed, such as creating a robust State Defense Force (SDF). SDFs are trained, local, and organized militias that can augment state resources as emergency responders, law enforcement, or support to the National Guard. When federal aid can take days to arrive, access to a reliable, local source is essential in a disaster scenario. Regardless of changes to the Insurrection Act, states should strongly consider forming SDFs in light of changes in climate and the resulting disaster scenarios. In particular, the three states susceptible to hurricanes that do not currently have a SDF—Florida, North Carolina, and Alabama—should strongly consider creating one. To both avoid federalism concerns and quickly respond to disasters, states should strive to be as minimally dependent on the federal government for disaster response as possible.

There are many advantages to SDFs over federal military forces and out-of-state National Guard units. First, they reside in their respective states and can therefore respond quickly. Second, unlike their National Guard counterparts, they cannot be deployed or federalized. Third, SDFs can be specially trained for particular types of disasters or emergencies, and each state can determine what training their SDFs receive. Because SDFs are flexible, they can be utilized for a variety of functions. Rather than only supplementing National Guard units, SDFs can serve as emergency responders and be stationed

<sup>191.</sup> Although many commentators have maintained this, in extraordinary instances it may be possible for the President to call forth state defense forces. See Perpich v. Dep't of Def., 496 U.S. 334, 352 n.25 (1990) ("It is nonetheless possible that [SDFs] are subject to call under 10 U.S.C. §§ 331–333, which distinguish the 'militia' from the 'armed forces,' and which appear to subject all portions of the 'militia'—organized or not—to call if needed for the purposes specified in the Militia Clauses.").

<sup>192.</sup> See Kent G. Sieg, America's State Defense Forces: An Historical Component of National Defense, 1 STATE DEF. FORCE J. 1, 7 (2005), http://www.sdfpubcntr.net/introduction.htm ("Individual members of these guards can be trained to provide for physical security, crowd control, and medical and logistical support to reserve and regular forces as well as to local and state authorities.").

in communities across the state to quickly respond to local needs.<sup>193</sup> Some states, like Texas and Maryland, even utilize SDFs to provide medical care and support in emergency situations.<sup>194</sup>

Although they have certain drawbacks, including inconsistent use, lack of training, and a history of scandals, <sup>195</sup> SDFs provide a relatively inexpensive and local supplement to emergency responders and National Guard units. Representative Joe Wilson of South Carolina attempted to address some of these issues with the State Defense Improvement Act in 2009. The proposed bill aimed "to improve the readiness of State defense forces and to increase military coordination for homeland security between the States and the Department of Defense." <sup>196</sup> It also intended to address gaps in current legislation pertaining to SDFs. The bill called for the Secretary of Homeland Security and the Secretary of Defense to coordinate homeland security efforts with SDFs and clarified DoD and Homeland Security's ability to provide training to SDFs. <sup>197</sup> The bill also allowed for the Secretary of Defense to transfer excess DoD property to SDFs. <sup>198</sup>

While the bill never made it out of committee, it does provide a roadmap of improvements that can be made to the current SDF framework; states should address coordination, training, public perception, recruitment, and funding issues related to SDFs. First, there should be increased collaboration and integration amongst National Guard and SDF forces. Notably, the National Guard may train with SDFs but cannot use federal funds to do so.<sup>199</sup> While states

<sup>193.</sup> See Pohnel, supra note 135 (proposing that "SDF members could be arranged like local volunteer firemen").

<sup>194.</sup> Ralph Jay Johnson, *Paramilitary Provision of Adequate Disaster Response and Advancement of Public Health: The Case of the Texas State Guard and Operation Lone Star*, 11 DISASTER MED. PUB. HEALTH PREP. 412 (2017);

Charles E. Wiles & H. Wayne Nelson, "The National Guard for the National Guard" State Defense Force Medical Support for the National Guard, 174 MILITARY MED. xii, xii (2009).

<sup>195.</sup> Eric Kelderman, State Defense Forces Grow, Project New Image, STATELINE (Dec. 31, 2003), https://web.archive.org/web/20120712202018/http://www.pewstates.org/projects/stateline/headlines/state-defense-forces-grow-project-new-image-85899393830 (noting that the Virginia General Assembly investigated its state defense force in 1990 on reports that "a brigade was saving money to buy a tank and other units were practicing ad hoc drug raids," and that Utah disbanded its state guard in 1987 "amid media reports that convicted felons and members of the white supremacist Aryan Nations had infiltrated the organization").

<sup>196.</sup> State Defense Force Improvement Act, H.R. 206, 11th Cong. (2009).

<sup>197.</sup> Id.

<sup>198.</sup> Id.

<sup>199.</sup> NAT'L GUARD BUREAU, CNGBI 5500.01, NATIONAL GUARD INTERACTION WITH STATE DEFENSE FORCES, para. 4 (June 15, 2017) ("It is NG policy that the NG may interact with SDFs to train and conduct exercises and maneuvers in support of domestic or civil support

are responsible for funding their SDFs, it may be beneficial to introduce Federal legislation that would allow limited federal funding to be used for training purposes. In a real-life disaster scenario, SDFs will work alongside the National Guard and active troops, if necessary. SDFs will also work with various other state and federal agencies, including FEMA. It is in their interests to make sure SDFs are trained and have sufficient resources. Federal and state governments should ensure that the role of SDFs are sufficiently addressed in emergency planning. Because SDFs operate under state command, officials should ensure that protocols addressing the proper lines of communication and command are in place if the President places the National Guard under Title 10 control.<sup>200</sup>

Second, SDF forces should be held to a similar standard as the National Guard, including commitment to training. A 2014 report by the Inspector General of the DoD found that U.S. Northern Command staff believed SDFs "lacked national military standards, qualifications, Federal background checks, and the means to verify readiness." As such, the Inspector General's office did not consider or include SDFs for military planning.<sup>201</sup> To address these concerns, states should consider imposing regulations similar to those applicable to the National Guard.<sup>202</sup> The State Guard Association of the United States should also take a more active role in encouraging uniformity in SDF training and fitness requirements across states and more national SDF training exercises.

Third, states should invest in public education around SDFs to promote recruitment and improve the public's understanding of the program. Because many states do not have SDFs and the SDFs that do exist are relatively small, much of the country is unaware of their existence. A state militia, in most cases, is seen as a relic of pre-Civil War America. The public is likely to embrace SDFs with the understanding that they are akin to the National Guard. States should

operations, as appropriate... [t]he NG will not spend Federal funds, to include pay and allowances, subsistence, transportation, medical care and treatment, or use of Federal equipment for activities with the primary purpose of training or otherwise for the support of SDFs....").

<sup>200.</sup> Since SDFs operate under state control, federalization of the National Guard resulting in a new Federal command structure could cause communication gaps between the two organizations.

<sup>201.</sup> Inspector Gen. Dept. of Def., DODIG-2014-065, Evaluation of Dep't of Defense Interaction with State Defense Forces 22 (2014), https://media.defense.gov/2014/Apr/30/2001713359/-1/-1/1/DODIG-2014-065.pdf.

<sup>202.</sup> See 32 U.S.C. § 502 (2018) (requiring the National Guard to have drills or instruction 48 times per year and training at least 15 days per year).

also actively try to distance SDFs from the right-wing militia movement.<sup>203</sup> As such, states may also wish to rename their SDFs to reflect the connection to the National Guard, such as the Texas State Guard, or to refer to their emergency response role, like State Emergency Guard.

Fourth, SDFs are relatively inexpensive. Since an SDF is a volunteer military organization, "[t]here is no general requirement for a budget to cover such costs as salaries, facilities, equipment, training, travel, and general and administrative expenses. Each state legislature determines precisely what will be covered, at what cost, and for how long."<sup>204</sup> States should invest more in SDFs to attract qualified individuals and provide long-term stability to the organization, such as offering incentives to enlist. Texas, for example, offers several benefits, including stipends for training and activations, travel allowances during activations, free concealed handgun and hunting licenses, waived toll road fees, job protections when called to duty, college tuition assistance, and paid military leave for state employees.<sup>205</sup>

Funding provides an interesting phenomenon with regards to natural disaster relief and emergency planning. Response has traditionally fallen on local and state governments with the Federal government providing support in emergencies or major natural disasters. <sup>206</sup> Climate change, however, poses serious questions of equity in paying for disaster relief. It is the result of years of greenhouse gas emissions from all over the world, and all Americans have contributed to climate change in some form. This begs the question: should states, the Southeast in particular, bear the costs of climate change in the form of intensifying hurricanes when South Dakotans, Washingtonians, Iowans, and citizens of every other state have exacerbated the problem to some degree? <sup>207</sup>

<sup>203.</sup> Martin Hershkowitz, *Homeland Security: The Military's Confusing Role*, 2 STATE DEF. FORCE J. 1, 35 (2006) ("SDFs, by their own admission, suffer from the public perception of a "state militia," with all of its anti-government (think "Ruby Ridge") connotations. This association could create a negative public perception of the Air Force i.e. condoning and supporting ultra-conservative groups, without full public understanding of these groups.").

<sup>204.</sup> James Carafano et al., supra note 131, at 9.

<sup>205.</sup> Texas State Guard FAQ, TEXAS MILITARY DEP'T, (last visited Dec. 12, 2018), https://tmd.texas.gov/texas-state-guard-faq.

<sup>206.</sup> See generally Robert T. Stafford Disaster Relief and Emergency Assistance Act, supra note 57.

<sup>207.</sup> While most of the U.S. is likely to be financially impacted by climate change in some way, the costs of hurricanes to the Southeast are particularly high and are being incurred now. The estimated costs of the 2017 major hurricanes, were over 17 times higher than the Camp Fire. *Compare* Office for Coastal Management, *Hurricane Costs*, NOAA (last modified Mar. 28, 2019),

In order to pay for SDFs and other disaster measures, states should consider a revenue source that draws from citizens and noncitizens alike, thereby allocating some of the costs of disaster relief generally to out-of-state greenhouse gas emitters. Some possible examples include increased tolls or a "tourism tax" on lodging and car rentals that would specifically go to funding SDFs. State residents should also pay appropriate property taxes or sales taxes to compensate for disaster risk. While some states have adopted an increased sales tax to pay for conservation and outdoor recreation, 208 states could choose to adopt a similar model dedicated to disaster mitigation and management, including SDFs. Some costs could also be covered by a similar proposal to H.R. 206 that allowed surplus DoD property to be transferred to SDFs.<sup>209</sup>

Major disasters spread U.S. military resources thin. Over the course of the active 2017 hurricane season, "some 67,000 DoD and National Guard personnel responded to help civil authorities.<sup>210</sup> In October, the Pentagon noted that "new U.S. forces flowing into Afghanistan have been delayed due to hurricane relief efforts."<sup>211</sup> A recent report by the Heritage Foundation listed Army and Marine Corps readiness as "weak" in light of operational demands and a lack of funding.<sup>212</sup> The Air Force and Navy fared slightly better and received

https://coast.noaa.gov/states/fast-facts/hurricane-costs.html (stating that the major 2017 hurricanes cost an estimated \$226 billion), with CoreLogic, The Camp and Woolsey Wildfires in California Cause Devastating Losses Between \$15 Billion and \$19 Billion According to CoreLogic (Nov. 27, 2018), https://www.corelogic.com/news/the-camp-and-woolsey-wildfires-in-california-cause-devastating-losses-between-15-billion-and-19-billion-according-to-corelogic.aspx?WT. mc\_id=crlg\_181126\_hC1gk (estimating \$11 to \$13 billion in losses from the Camp Fire). The EPA estimates that by 2090, extreme temperatures will cost \$160 billion dollars in lost wages for the entire United States. However, the impacts of extreme temperature will be felt worst in places like Florida and Texas which are also the most affected by hurricanes. EPA, MULTI-MODEL FRAMEWORK FOR QUANTITATIVE SECTORAL IMPACTS ANALYSIS 54 (2017) ("Loss of labor hours across the U.S. is projected to be very costly, totaling over \$160 billion in lost wages per year by 2090 (range from \$87-\$220 billion). More than a third of this national loss is projected to occur in the Southeast (\$47 billion annually).")

- 208. William Petroski, *Iowa Sales Tax Hike For Outdoors Advances, But Faces Uphill Battle*, DES MOINES REG., (Mar. 17, 2015), https://www.desmoinesregister.com/story/news/politics/2015/03/17/iowa-outdoors-natural-tax/24909279/.
  - 209. State Defense Force Improvement Act, supra note 196.
- 210. Jeff Daniels, From Hurricanes to Fires, 2017 Disasters Tested DoD amid Concern that Forces are Stretched Thin, CNBC (Dec. 22, 2016), https://www.cnbc.com/2017/12/22/disasters-in-2017-tested-pentagon-amid-concern-forces-stretched-thin.html.
- 211. Jeff Daniels, Storm Relief Strains US military as New Report Gives Sober Look at Readiness, CNBC (Oct. 5, 2017), https://www.cnbc.com/2017/10/05/storm-relief-strains-us-military-as-heritage-sees-readiness-woes.html.
- 212. THE HERITAGE FOUNDATION, 2019 INDEX OF U.S. MILITARY STRENGTH, https://www.heritage.org/military-strength (2019).

a score of "marginal" in the readiness category.<sup>213</sup> Since SDF operations are limited to tasks within the United States, robust SDFs can take pressure off U.S. military forces to respond to multiple disasters and reduce the need for troops that would otherwise be engaged in overseas operations. SDFs should work together with DoD and the Department of Homeland Security to create guidelines or best practices for how to train and integrate SDFs in disaster management.

#### VII. CONCLUSION

Climate change is likely worsening the impact of natural disasters in the United States, and all levels of government should prepare for a Katrina-like catastrophic disaster scenario. Congress should address statutory roadblocks to create a streamlined response to catastrophic disasters. Federal agencies, including DoD, should establish emergency protocols that assess all possible scenarios and provide for coordination across emergency groups. States should invest in SDFs and strengthen their local response capabilities.

While the military currently plays a significant role in effectively responding to natural disasters, climate change itself requires a collaborative and integrated response across all levels and all divisions of government. In particular, all levels of government need to address one of the fundamental problems underlying disaster planning and response—human migration to disaster-prone areas. As climate change is increasingly enhancing the strength and frequency of hurricanes, floods, and wildfires, people continue to move to the most disaster-prone states, like Florida, Texas, and California.

Local and state governments need to use their police powers to move citizens away from risk-prone areas and improve building code standards to adjust to a changing climate. Local and state governments control zoning ordinances that allow citizens to build in risky areas, such as floodplains or coastal areas. Local and state governments can also disincentivize building in these high risk areas.

It is also up to the federal government to adopt legislation to reduce greenhouse gas emissions and tackle climate change. Effective legislation could mitigate climate change impacts that are already being felt in the United States and reduce future damage. It is up to policymakers to ease the burden of disaster relief by directly confronting climate change and gradually moving people and property

out of high-risk areas. The less people and property are impacted, the less need for a military response.