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Deployable Federal Assets Supporting Domestic Disaster Response Operations: Summary and Considerations for Congress

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Summary

For most disasters across the nation, the affected local, state, or tribal governments have sufficient capabilities to respond to the incident. However, for disasters with consequences that require unique capabilities or that overwhelm the existing capabilities of a respective state or tribal government, Congress has authorized and appropriated a suite of deployable federal assets to support domestic disaster response operations. This report reviews several key concepts about these federal assets, and highlights possible issues Congress may consider when evaluating their authorization and appropriation.

In this report, a *deployable federal asset* generally means sets of specially trained federal employees whose mission is to provide on-scene assistance to communities by supporting their disaster response. Deployable federal assets can be described as the federal government's "first responders" to a disaster. They typically only provide assistance at the request of states or tribes and in circumstances where the capabilities of non-federal government entities are insufficient. The federal government also scopes its assistance to provide only the assets that are required by the situation. The maximum disaster consequences that the federal government is prepared to address with its full set of response capabilities is largely unknown.

Given the diversity of deployable federal assets, there are many legal authorities and executive branch policies that guide their use in response operations. Some of the most notable authorities are the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. §5121 et seq.), Title XXVIII of the Public Health Service Act, the Homeland Security Act of 2002 (6 U.S.C. §101 et seq.), and the Posse Comitatus Act (18 U.S.C. §1385 et seq.). Some primary federal policies guiding the use of deployable federal assets include the National Response Framework (NRF) and accompanying Federal Interagency Operational Plan (FIOP), the National Incident Management System (NIMS), and the Defense Support for Civilian Authorities (DSCA).

Congress may consider several policy issues as it evaluates the future authorization and appropriations for deployable federal assets, and in its oversight of the assets' response capabilities. There may be theoretical benefits gained by the provision of deployable federal assets, including the pooling of disaster risk across the nation and greater efficiency in the supply of response capabilities. There may also be theoretical disadvantages, including that the provision of deployable federal assets creates a moral hazard resulting in greater disaster risk for the nation, and that federal investment may crowd out the investment of non-federal entities in similar response capabilities. Congress may also assess the various models for staffing these assets, including the benefits and costs of conditional employments, dedicated staffing versus multiuse staffing, and "federalizing" staff into temporary federal employment for response operations. Congress may evaluate whether the provision of deployable federal assets should grant federal officials greater decision-making authority in the management of response operations. Finally, there are a number of challenges that may inhibit congressional oversight, such as the small sample size of incidents available to evaluate the effectiveness of deployable federal assets and the lack of specificity in many of the authorizations and appropriations for these assets.

This report also provides brief summaries of examples of deployable federal assets. These assets are managed, either solely or jointly, by a variety of federal departments and agencies, including components of the Departments of Agriculture, Defense, Homeland Security, and Health and Human Services; the Environmental Protection Agency; the National Transportation Safety Board; and others. A synopsis of these assets is provided in **Table 1**.

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Introduction

Natural, accidental, or intentional hazards[1] produce disasters of varying severity and consequence in the nation every day. Local, state, or tribal governments respond to the significant majority of these disasters without support from the federal government. This is especially true in the initial phase of disaster response—often generalized as the first 72 hours after the originating incident. However, on an as-needed basis, the federal government can provide significant assistance to support the local, state,[2] or tribal response operation through deployable federal assets.

This report examines a variety of deployable federal assets that can support a disaster response operation. These assets may be able to support the response to certain types of consequences from certain disasters (e.g., radiological exposure from a nuclear incident) or consequences common to all disasters (e.g., command and control support, or communications assistance). This report provides a general analysis of key concepts involving deployable federal assets, including

- what it means to be a deployable federal asset;
- when the assets will be used to support response operations;
- what the main authorities and policies are that guide the use of assets; and
- what level of support the federal government is prepared to provide for response operations.

This report also examines several issues Congress may wish to consider as it evaluates the future authorization and funding for various deployable federal assets. Issues examined in the report include the potential policy benefits and disadvantages of federal investment in deployable federal assets, the cost-effectiveness of different staffing models for the assets, the methods for financing the deployment of the assets, whether federal assets should have greater operational control in response operations, and the challenges Congress may face in its oversight of the use of the assets. This report concludes by providing summaries of examples of deployable federal assets, including available information on their authorization, funding, and past uses in disasters. Brief information on the selected assets is condensed and presented in **Table 1**.

Key Concepts[3]

What is a deployable federal asset?

A *deployable federal asset* is not a generally recognized term in the field of domestic emergency management, but rather is a term developed for the purposes of this report to characterize a broad

[1] Using the Department of Homeland Security's risk lexicon, a natural hazard is a "source of harm or difficulty created by a meteorological, environmental, or geological phenomenon or combination of phenomena" (e.g., an earthquake or hurricane); an accidental hazard is a "source of harm or difficulty created by negligence, error, or unintended failure" (e.g., an oil spill, train derailment, or dam failure); and an intentional hazard is a "source of harm, duress, or difficulty created by a deliberate action or a planned course of action" (e.g., a terrorist attack, cyber-attack, or other criminal incident). See Department of Homeland Security, *DHS Risk Lexicon: 2010 Edition*, September 2010, at http://www.dhs.gov/dhs-risk-lexicon.

[2] As used in this report, "state" generally includes "any State of the United States, the District of Columbia, Puerto Rico, the [U.S.] Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands" as defined by the Sec. 102(4) of the Stafford Act, 42 U.S.C. §5122(4).

[3] For more background on how the nation responds to disasters and on federal emergency management, see CRS Report R41981, *Congressional Primer on Responding to Major Disasters and Emergencies*, by Francis X. McCarthy

swath of federal resources. The term is used to classify sets of specially trained federal employees whose mission, though not necessarily exclusive mission, is to provide on-scene assistance to communities by supporting their disaster response.[4] To aid a community, these deployable federal assets may provide unique capabilities not frequently available at a local, state or tribal level;[5] or they may be able to supplement existing capabilities that have been overwhelmed in significant disasters.[6] A *capability*, as defined in federal law, is "the ability to provide the means to accomplish one or more tasks under specific conditions and to specific performance standards. A capability may be achieved with any combination of properly planned, organized, equipped, trained, and exercised personnel that achieves the intended outcome."[7] In combination with specialized personnel and capabilities, a deployable federal asset may provide federally owned commodities, such as power generation or telecommunications equipment. A deployable federal asset also operates on an "alert" status so that they can deploy to a no-notice incident in a community expeditiously, often within the first 24 hours or less. Colloquially, deployable federal assets can be described as the federal government's "first responders" to a disaster. However, even within the confines described above, some of the deployable federal assets summarized later in the report do not comply with one of the defining elements. For example, the National Urban Search and Rescue (US&R) Task Forces are not federal employees, though they can be deployed in a federal capacity at the direction of the Federal Emergency Management Agency (FEMA) and receive significant funding to maintain national response capabilities.

This report does **not** discuss, and the term deployable federal asset does **not** include, other forms of federal assistance that can be used to support a domestic disaster response, including

- financial assistance, such as numerous grant and loan programs;[8]
- logistics assistance, such as aiding in the delivery of water, food, and medical commodities;[9] and
- technical assistance, such as legal counsel, engineering expertise for infrastructure damage assessments, or scientific expertise on natural hazards.[10]

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and Jared T. Brown and CRS Report R42845, *Federal Emergency Management: A Brief Introduction*, coordinated by Bruce R. Lindsay.

[4] Response is defined as "actions to save lives, protect property and the environment, stabilize communities, and meet basic human needs following an incident." See U.S. Department of Homeland Security, *National Response Framework*, Second Edition, May 2013, p. 1, at http://www.fema.gov/library/viewRecord.do?id=7371.

[5] Examples discussed later in the report include the 249th Engineer Battalion (Prime Power) and the National Transportation Safety Board Disaster Assistance.

[6] Examples discussed later in the report include the Federal Incident Management Assistance Teams (IMATs) and the Visible Intermodal Prevention and Response (VIPR) Teams.

[7] Section 641(1) of the Post-Katrina Emergency Reform Act of 2006 (Title VI of P.L. 109-295, 6 U.S.C. §741).

[8] For a summary of some of these financial assistance programs, see CRS Report RL31734, *Federal Disaster Assistance Response and Recovery Programs: Brief Summaries*, by Carolyn V. Torsell and Jared C. Nagel. There are also numerous CRS reports available that discuss federal financial assistance programs in greater detail. Tax relief may also be available following disasters. For information on relief provided through the Internal Revenue Code (IRC), see CRS Report R42839, *Tax Provisions to Assist with Disaster Recovery*, by Erika K. Lunder, Carol A. Pettit, and Jennifer Teefy.

[9] For example, the Logistics Management Directorate of FEMA can provide extensive logistics capabilities in support of national disaster response operations. For more, see the Logistics Management Directorate's website at http://www.fema.gov/logistics-management-directorate.

[10] For example, the National Weather Service provides technical expertise on meteorological natural hazards, to include predictions on the path and magnitude of hurricanes and potential tornado-producing weather systems. Likewise, the Centers for Disease Control and Prevention's (CDC's) National Center for Environmental Health, Health Studies Branch, studies the epidemiology of disasters, provides a rapid health needs assessment tool to be used by communities

The term deployable federal asset also does not include the significant number of federal government personnel that are already permanently "deployed" throughout the nation. These federal personnel may support a local, state, or tribal government through their normally authorized activities, in both normal and disaster situations. For example, Federal Aviation Administration (FAA) air traffic controllers provide a daily public service to a community, and they strive to continue that service in disasters to support the community. Likewise, the Department of Homeland Security's (DHS's) field personnel, such as Custom and Border Protection agents, Immigration and Customs Enforcement agents, and Secret Service agents, perform essential homeland security and emergency management duties on a regular basis in communities across the nation. In particular, the U.S. Coast Guard provides significant emergency management and homeland security capabilities through regionally based personnel throughout the nation, in fulfillment of its maritime security and safety missions.[11] The field personnel of scientific government agencies can also provide on-scene technical expertise to support disaster response operations, such as personnel from the U.S. Geological Survey (USGS)[12] and the National Oceanic and Atmospheric Administration (NOAA).

When does the federal government provide support to response operations?

When a hazard produces a disaster in a community, the assets and resources needed to address the consequences of the incident are generally provided by local, state, or tribal governments. This complies with general principles of federalism found in emergency management policy, and the often repeated truism that "all disasters are local." However, due to the magnitude of the disaster, a local, state, or tribal government may (a) be unable to respond to the unique consequences of a disaster (e.g., it lacks a capability to eliminate a certain biological contaminant), or (b) have its capability to respond become overwhelmed by the scale of consequences (e.g., there are too many survivors requiring temporary shelter assistance). In either circumstance, the community may first request assistance through an Emergency Management Assistance Compact (EMAC) or similar mutual-aid agreement with a neighboring jurisdiction.[13] These mutual-aid agreements allow communities to leverage the resources of the surrounding region before requesting assistance from a higher level of government, such as how neighboring fire departments may be called upon to assist during particularly challenging incidents.

In general, to obtain federal assistance to address unmet needs arising from the disaster, an official request must be made through the jurisdictional chain relevant to the community (i.e., from a city to county, county to state, and then state to federal; or from a mayor to county executive, a county executive to a governor, and a governor to the President). Generally, tribal

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responding to a disaster, and, upon request, provides expertise in disaster epidemiology to local, state, federal, and international public health partners to help them prepare for and respond to natural and man-made hazards. For more, see, respectively, the website for the NWS at http://www.weather.gov/, and the website for the CDC HSB at http://www.cdc.gov/nceh/hsb/disaster/default.htm.

[11] For examples of the Coast Guard's capabilities, see a description of "2014 Performance Highlights" in U.S. Coast Guard, *2016 Budget in Brief*, February 2, 2015, at http://www.uscg.mil/budget/docs/2016_Budget_in_Brief.pdf.

[12] For a brief description of how the USGS supports disaster response, see U.S. Geological Survey, *USGS Emergency Response Resources*, Fact Sheet 2011-3079, September 2013, at http://pubs.usgs.gov/fs/2011/3079/pdf/fs2011-3079.pdf.

[13] The EMAC is a congressionally ratified compact that provides a legal structure by which states affected by a disaster may request emergency assistance and aid from other states. The legal model has been replicated by local and tribal government jurisdictions. The EMAC was ratified in P.L. 104-321. For more on EMAC, see http://www.emacweb.org/.

governments may appeal for assistance directly to the federal government, but may also seek the assistance of a relevant state or other local government first. There are many federal laws and regulations that prescribe how a request for assistance may be made, but the most prominent is the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. §5721 et seq.; henceforth the Stafford Act).[14]

The federal government may also provide assistance without a request in more limited circumstances. For example, a request does not need to be made by a state or tribal government when the primary responsibility for the response rests with the federal government. This most frequently occurs because the incident involves an issue or hazard for which, under the Constitution or a federal law, the President or other federal authority has exclusive or preeminent responsibility and authority.[15] Likewise, there are situations when the federal government or a federal asset will provide immediate assistance, primarily to prevent the direct loss of life or significant property damage, without the request rising through the "normal" request procedures.[16] For instance, the Department of Defense (DOD), through its Defense Support of Civil Authorities (DSCA) regulations and policies, authorizes local DOD officials to provide immediate assistance without a formal request rising through the state and lead federal officials. Called the "immediate response authority," regulations state that

> In response a request for assistance from a civil authority, under imminently serious conditions and if time does not permit approval from higher authority, DOD officials may provide an immediate response by temporarily employing the resources under their control, subject to any supplemental direction provided by higher headquarters, to save lives, prevent human suffering, or mitigate great property damage within the United States.[17]

What level of support is the federal government prepared to provide and for how catastrophic a disaster?

For many reasons, the federal government attempts to scale its support for any disaster response operation appropriately. Most obviously, the federal government scales its support so as not to waste federal resources, but also to avoid overwhelming the community with excess assets and inhibiting an efficient response. This scalability of support by the federal government can include denying the requests of local, state, and tribal governments for more commitment of resources. For example, a duly authorized federal official receiving a request may determine that the use of an asset is not required by the conditions in the relevant incident. Under the Stafford Act process, this can mean the denial of a request for a major or emergency disaster declaration, or the provision of certain types of direct federal assistance and not others under a major disaster declaration. The federal government may also provide a different type of asset than the one requested to address an unmet need.

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[14] For more on how requests are managed through the Stafford Act declaration process, see CRS Report R43784, *FEMA's Disaster Declaration Process: A Primer*, by Francis X. McCarthy.

[15] See, primarily, Sec. 501(b) of the Stafford Act, 42 U.S.C. §5191(b). Most notably, this situation arises when the area affected by the disaster is on federal property (in national waters, lands, parks, or military installations, etc.) or when the Federal Bureau of Investigation becomes the lead federal law enforcement agency in response to a terrorism incident.

[16] See, primarily, Sec. 502(a)(8) of the Stafford Act, 42 U.S.C. §5192(a)(8). This authority allows the federal assistance to be provided "where necessary to save lives, prevent human suffering, or mitigate severe damage, which may be provided in the absence of a specific request.... "

[17] 32 C.F.R. §185.4(g).

In theory, in the most extreme of catastrophic disasters,[18] all applicable resources of the federal government could be directed to support response operations under the authority of the Stafford Act.[19] The full resources of the DOD could also be used to support a disaster response under what DOD claims is its "inherent emergency power."[20] An exemption in the Antideficiency Act relating to "emergencies involving the safety of human life or the protection of property" may also allow the use of federal resources, to include deployable assets, without sufficient funding having been previously provided by Congress.[21]

It is difficult, if not impossible, to project the magnitude of consequences that the full resources of the federal government would be able to respond to sufficiently. Additionally, government plans that provide detailed assessments of a maximum response capacity are likely to be classified, given the sensitivity of that information for national security. That said, some public information is available that illustrates the potential magnitude of consequences the federal government is conceivably planning to address. For example, in a 2011 draft of the National Preparedness Goal, FEMA described a "meta-scenario" that was used to define the national—not just federal[22]—capabilities needed for response and recovery. The meta-scenario was described as

> a no-notice event impacting a population of seven million within a 25 thousand square mile area. The impacted area includes several states across multiple regions. Severe damage is projected to critical infrastructure including essential transportation infrastructure. Ingress and egress options are severely limited. The projected number of fatalities is 195,000 during the initial hours of the event. It is projected that 265,000 survivors will require emergency medical attention. At least 25 percent of the impacted population will require mass care, emergency sheltering, and housing assistance.[23]

This meta-scenario was not mentioned directly in the final version of the National Preparedness Goal, and appears to have been simplified in text to a "no-notice, cascading incident."[24] Other

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[18] Possible scenarios range from the impact of a meteor or comet, an attack by a foreign or domestic adversary using a weapon(s) of mass destruction, a series of catastrophic earthquakes and subsequent tsunamis, or the eruption of a supervolcano.

[19] See Sec. 402(1) of the Stafford Act, 42 U.S.C. §5170a(1), which authorizes the President, in any major disaster, to "direct any Federal agency, with or without reimbursement, to utilize its authorities and the resources granted to it under Federal law (including personnel, equipment, supplies, facilities, and managerial, technical, and advisory services) in support of State and local assistance response and recovery efforts, including precautionary evacuations." The legal definition of a *major disaster* in the Stafford Act confines the types of hazards that can result in a major disaster declaration, but it is difficult to imagine a scenario where a truly catastrophic disaster would not result in one or more major disaster declarations. Even if the provoking hazard is not specifically included in the major disaster definition—such as a terrorist attack or cyber incident—the consequences of the hazard requiring response capabilities are likely to fall into the scope of the definition. See Sec. 102(2) of the Stafford Act, 42 U.S.C. §5122(2) for the definition of a *major disaster*. Some legislative consideration has been given to establishing a formal process in the Stafford Act to declare a "catastrophic" disaster; for more on that issue see CRS Report R41884, *Considerations for a Catastrophic Declaration: Issues and Analysis*, by Bruce R. Lindsay and Francis X. McCarthy.

[20] For more information on the DOD's inherent emergency power and other authorizations for the use of federal military in disaster response, see CRS Report RS22266, *The Use of Federal Troops for Disaster Assistance: Legal Issues*, by Jennifer K. Elsea and R. Chuck Mason.

[21] 31 U.S.C. §1342. For more information on the Antideficiency Act (31 U.S.C. §§1341-1342, §§1511-1519) and this "emergency" and other exemptions, see CRS Report RL34680, *Shutdown of the Federal Government: Causes, Processes, and Effects*, coordinated by Clinton T. Brass.

[22] National capabilities mean the capabilities of the whole of community, including available assets from local, state, tribal governments, and the private and nonprofit sectors.

[23] See Federal Emergency Management Agency, *National Preparedness Goal*, National Review Draft, p.6, August 2011.

[24] Department of Homeland Security, *National Preparedness Goal*, First Edition, September 2011, p. 4, at

planning and exercise scenarios, especially the National Level Exercise 2011,[25] provide further extreme examples of potential capacity requirements.[26] Both FEMA and the DOD are currently developing and revising national and regional catastrophic plans that may improve future understanding of the maximum capacity to respond to a disaster or series of disasters.[27]

What principal legal authorities permit, and what key executive branch policies guide the use of deployable federal assets?

As there is a wide array of deployable federal assets throughout many federal departments and agencies, this section of the report does not provide a comprehensive list of every authority or policy that guides the use of the assets for disaster response operations. However, the following section does discuss a broad legal authority for the provision of federal assistance and executive branch policies guiding that assistance.

Authorities

The specific authority for each example of a deployable federal asset is discussed later in the report. Of general importance to all deployable federal assets is the *essential assistance* authority provided by the Stafford Act. This authority allows any federal agency, at the approval of the President, to provide "assistance essential to meeting immediate threats to life and property resulting from a major disaster."[28] Though federal essential assistance is only available during Stafford Act declared major disasters, the federal government is also allowed to provide considerable assistance during Stafford Act declared emergencies.[29] A Stafford Act emergency can be declared in "any 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."[30] These provisions, and others of the Stafford Act, may provide sufficient legal justification for the use of federal resources, including those established under more general authority without specific direction on their use in disasters, to support response operations.

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http://www.fema.gov/pdf/prepared/npg.pdf.

[25] In 2011, emergency managers and stakeholders across the nation participated in the annual "National Level Exercise" (NLE) using the scenario of a catastrophic earthquake in the New Madrid Seismic Zone. The annual NLE is the centerpiece of FEMA's National Exercise Program. The National Exercise Program is established to test, evaluate, and improve national capabilities to prepare for disasters. For more on NLE 2011, see Federal Emergency Management Agency, *National Level Exercise 2011 (NLE): Quick Look Report*, June 14, 2011, at https://www.llis.dhs.gov/sites/default/files/nle11_quick_look_report.pdf.

[26] Numerous other documents provide some indications about the maximum response capabilities of the federal government, including documents that were produced under a previous version of the National Response Framework, and the "National Planning Scenarios" developed pursuant to a now-obsolete presidential directive, Homeland Security Presidential Directive 8 (HSPD-8). For example, see the Department of Homeland Security, *Catastrophic Incident Supplement to the National Response Framework*, For Official Use Only.

[27] For more on these planning efforts, see U.S. Government Accountability Office, *Civil Support: Actions Are Needed to Improve DOD's Planning for a Complex Catastrophe*, GAO-13-763, September 2013, at http://www.gao.gov/assets/660/658406.pdf.

[28] Sec. 403 of the Stafford Act, 42 U.S.C. §5170b.

[29] Sec. 502 of the Stafford Act, 42 U.S.C. §5192.

[30] Sec. 102(1) of the Stafford Act, 42 U.S.C. §5122(1).

CRS also has a number of available reports that analyze federal authorities for disaster assistance, including the authorizing legislation for deployable federal assets.[31]

Policies

The National Response Framework (NRF) is the foremost policy that guides "how the Nation responds to all types of disasters and emergencies ... [and] describes specific authorities and best practices for managing incidents that range from the serious but purely local to large-scale terrorist attacks or catastrophic natural disasters."[32] As a *national* policy, it is intended to guide not just federal response operations, but also local, state, and tribal government response operations, and the response operations of the private and non-profit sectors. The NRF also establishes 14 different Emergency Support Functions (ESFs) to organize the response capabilities of the nation.[33] Mainly through supplementary documents to the NRF, including a Federal Interagency Operational Plan (FIOP), ESF annexes, incident annexes, and other support annexes, the NRF sets out specific responsibilities of federal agencies involved in the response operations. At the more detailed level of the Response FIOP, the response requirements and capabilities of the federal government are identified through a generalized concept of operations.[34] Varying levels of specific information on *how* the requirements and capabilities will be fulfilled, often by deployable federal assets, are further discussed in the Annexes to the FIOP.[35] Although the NRF is often closely linked with the Stafford Act, the NRF is always in effect and does not require a formal Stafford Act declaration to be used. Any disaster requiring federal

[31] As examples among others, see

- CRS Report RL33053, *Federal Stafford Act Disaster Assistance: Presidential Declarations, Eligible Activities, and Funding*, by Francis X. McCarthy;
- CRS Report R43990, *FEMA's Public Assistance Grant Program: Background and Considerations for Congress*, by Jared T. Brown and Daniel J. Richardson.
- CRS Report R43251, *Oil and Chemical Spills: Federal Emergency Response Framework*, by David M. Bearden and Jonathan L. Ramseur;
- CRS Report RL33579, *The Public Health and Medical Response to Disasters: Federal Authority and Funding*, by Sarah A. Lister;
- CRS Report R42659, *The Posse Comitatus Act and Related Matters: The Use of the Military to Execute Civilian Law*, by Charles Doyle and Jennifer K. Elsea; and
- CRS Report R42114, *Federal Laws Relating to Cybersecurity: Overview of Major Issues, Current Laws, and Proposed Legislation*, by Eric A. Fischer

[32] See U.S. Department of Homeland Security, *National Response Framework*, Second Edition, May 2013, p. 1, at http://www.fema.gov/library/viewRecord.do?id=7371. For extensive support documents and presentations on the NRF, see http://www.fema.gov/nrf/.

[33] ESFs group agencies with pertinent authorities, resources, and expertise to accomplish a set of capabilities needed in disaster response, regardless of disaster type. For instance, ESF #9 is "Search and Rescue," which unifies agencies with the appropriate resources and authorities to conduct search and rescue operations following an incident. Each ESF has a coordinating agency, typically several different primary agencies, and a larger number of support agencies. There were originally 15 ESFs in earlier versions of the NRF, but one, ESF #14—Long-term Community Recovery, was replaced by the National Disaster Recovery Framework.

[34] Department of Homeland Security, *Response Federal Interagency Operational Plan*, July 2014, at https://www.fema.gov/media-library/assets/documents/97362.

[35] For example, see Annex C: Operational Coordination of the FIOP, which has multiple sub-appendixes on key core capabilities, such as Appendix 4 to Annex C: Fatality Management Services. In this particular appendix, the role of deployable federal assets of the National Disaster Medical System (NDMS) are identified and explained. See Department of Homeland Security, Response Federal Interagency Operational Plan, Appendix 4 to Annex C, July 2014, at https://www.fema.gov/media-library/assets/documents/97362.

coordination, including those declared under other federal authorities, arguably can be managed through the NRF.

A central guideline of the NRF is the National Incident Management System (NIMS).[36] Originally conceived of in Homeland Security Presidential Directive 5 (HSPD-5),[37] NIMS is now mandated in law for the federal government and strongly encouraged for state and local governments through requirements to grant assistance.[38] NIMS is a preparedness and response management model that incorporates the Incident Command System (ICS). ICS is a command and control system and structure originally developed by firefighters as a means of providing cohesive response to multijurisdictional (or multidepartment) incidents. ICS standardizes response operations by using similar terminology, communication systems, and organizational structures to eliminate or reduce confusion during a unified response.[39] NIMS uses ICS concepts to establish a response structure that is scalable (capable of growing as more organizations come together to respond to the incident) and that can be used by all jurisdictions, agencies, and organizations to ensure a unified response to complex events.

Another significant federal policy is set forth by Defense Support for Civilian Authorities (DSCA) regulations and DOD directives.[40] DSCA guides the use of DOD deployable federal assets in accordance with the Constitution and other legal requirements. There are also many incident-specific planning guidelines, such as the National Strategy for Pandemic Influenza,[41] which provide critical guidance on the use of deployable federal assets for those incidents.

Considerations for Congress

There are several policy issues that Congress may consider when evaluating future authorization and funding for various deployable federal assets. Though each deployable federal asset has unique oversight issues, the following sections of this report discuss cross-cutting matters related to oversight of these assets as a whole.

Policy Benefits and Disadvantages of Deployable Federal Assets

There are several theoretical policy benefits and disadvantages that may result from authorization and appropriation of deployable federal assets by Congress. In the following section, several of these salient benefits and disadvantages, rooted in macroeconomic and social science theory, are

[36] Extensive information about NIMS is available from FEMA on its website at http://www.fema.gov/national-incident-management-system.

[37] Executive Office of the President, *Homeland Security Presidential Directive-5: Management of Domestic Incidents*, February 28, 2003, at https://www.dhs.gov/publication/homeland-security-presidential-directive-5.

[38] See, among others, 6 U.S.C. §314(a)(2)(b). The requirement for NIMS adoption and training is embedded in both the Homeland Security Grant Program and Emergency Management Performance Grant program.

[39] For example, prior to ICS, a police and fire department responding to the same incident might use different command structures and communicate with different terms. For instance, a "code blue" for one department might mean something else for another. The organization's structure might also be different, as a "chief" in one department might have a different role and responsibility in another. ICS (and NIMS) is therefore an attempt to eliminate potential confusion caused by these differences.

[40] DOD regulatory guidance for DSCA is contained in DOD Directive 3025.18, *Defense Support of Civil Authorities*, December 29, 2010 (incorporating change 1, September 21, 2012), at http://www.dtic.mil/whs/directives/corres/pdf/302518p.pdf. The joint doctrinal publication on this topic is Joint Publication 3-28, *Defense Support of Civil Authorities*, July 31, 2013, at http://www.dtic.mil/doctrine/new_pubs/jp3_28.pdf.

[41] Executive Office of the President, Homeland Security Council, *National Strategy for Pandemic Influenza*, November 2005, at http://www.flu.gov/planning-preparedness/federal/pandemic-influenza-strategy-2005.pdf.

discussed briefly. These benefits and disadvantages are largely a result of the federalism structure of the nation, and may also apply to the provision of deployable assets by states. In other words, to a different degree, the authorization and appropriation of deployable assets by state legislatures may result in similar benefits and disadvantages.

Benefits

The authority and funding for deployable federal assets can be considered a form of risk pooling. It allows the nation, as a whole, to combine or "pool" uncorrelated hazard risk (such as from earthquakes and terrorist attacks), and the response capability requirements associated with those risks (such as mass care and power generation capabilities). Essentially, not every local, state, or tribal government may use the response capabilities provided by a certain deployable asset within a given time frame (a year, or decade), but each may be attempting to manage the risk of needing such an asset from a variety of hazards. For example, consider the federal government's resourcing of DOD Chemical, Biological, Radiological, and Nuclear Response (CBRN) Forces. Every community in the nation faces some low level of risk (though not uniform) that a hazard will produce consequences that these assets have a capability to address. If communities are able to pool their risk through the centralized federal capability, each may be able to ensure they have access to the capability when required without maintaining the asset wholly on its own. Risk pooling also occurs at a local, state, and tribal government level through emergency management mutual-aid agreements.

An associated benefit of this risk pooling is that the federal government may be able to provide the response capabilities of deployable federal assets at a lower cost than smaller governments, due to economies of scale.[42] For example, the per unit "production" cost of the capabilities provided by U.S. Army Corps of Engineers Planning and Response Teams may be significantly less at the federal level than at a state or local level. Reductions in the cost of production may occur because the federal government gains efficiencies in the costs of training and equipping the larger number of units the nation requires instead of the one or two units that might be required at the state or local level.

Disadvantages

There are also possible disadvantages with the establishment of deployable federal assets. The mere existence and use of federal response capabilities provided by deployable federal assets may produce a type of moral hazard.[43] The moral hazard may occur if and when non-federal actors, including other government entities and private citizens, increase their risk exposure to hazards under the reasonable expectation that the federal government will provide sufficient response capabilities when needed to address disaster consequences. Observers have argued that moral hazard may result from most forms of federal disaster assistance, especially financial assistance.[44] In the context of deployable federal assets, for example, the establishment of federal firefighting

[42] An *economy of scale* is "A situation in which the average cost of production decreases as production increases." See *Dictionary of the Social Sciences,* ed. Craig Calhoun (New York, NY: Oxford University Press, 2002).

[43] A *moral hazard* "refers to the possibility that policies or decisions may create incentives for undesirable behavior. Moral hazards often arise where the monitoring of contracts is difficult or where policies diminish the risks associated with certain kinds of behavior." See *Dictionary of the Social Sciences,* ed. Craig Calhoun (New York, NY: Oxford University Press, 2002).

[44] See, for example, discussion of the potential moral hazard of disaster assistance at Raymond J. Burby, "Hurricane Katrina and the Paradoxes of Government Disaster Policy: Bringing about Wise Governmental Decisions for Hazardous Areas," *Annals of the American Academy of Political and Social Science*, vol. 604 (March 2006).

capabilities may deter other governmental actors and private individuals from mitigating their wildfire risk, or encourage potentially risky development in the wildland-urban interface.[45]

Another theoretical disadvantage is that federal provision of response capabilities may crowd out[46] investment in those same capabilities by other actors, including the private sector. As such, other actors may be less likely, or even unable, to develop their own response capabilities due to federal investments. For example, the federal government's investment in the capabilities provided by the 249th Engineer Battalion (Prime Power) may raise the cost of similar energy-related response capabilities for non-federal actors. Or, the federal government's investment in Federal Incident Management Assistance Teams (IMATs) may crowd out the investment of other actors in highly trained and skilled emergency managers, because the federal government is both dominating the supply of a potentially limited resource and driving up its cost to other potential purchasers. The crowding out may be less problematic if it only decreases the investment of non-federal government entities, but does not reduce the investment from the private sector or individual citizens. If true, local governments may be simply transferring the financial responsibility to the federal government for the investment in a capability, though such commitment is still coming from the national tax base. However, if the government's spending crowds out private sector investment (e.g., critical infrastructure owners and operators) in response capabilities, it may be more problematic for the nation's risk profile as the investment may reduce the nation's aggregate supply of capabilities and increase the taxpayer's proportional burden for providing those capabilities. For example, if the private sector provides less of a capability because of the crowd-out effect, the nation may have less of the capability in total. To compensate for the loss of private sector investment, either partially or entirely, the resulting government expenditure on the capability may increase, thus increasing taxpayer costs.

Cost-Effectiveness of Various Models for Staffing Federal Assets

As deployable assets continue to be resourced, Congress may wish to evaluate the cost-effectiveness of various models of staffing deployable federal assets. These models are not mutually exclusive. Even within the selection of samples of deployable federal assets covered in this report, there is considerable diversity in how personnel are employed by the federal government—if they are employed by the government directly at all. Below are a few short examples of how deployable assets are staffed.

- **Conditional employment**: In this model, assets are significantly staffed by federal employees on term-limited, seasonal, or reserve appointments. For example, personnel of Forest Service Firefighting Assets are often seasonal employees, typically only working as temporary agency employees during the length of the fire season. This conditional employment model may accrue savings in salaries and benefits, but may decrease the effectiveness of the capability by reducing the available training time for employees or discouraging highly qualified employees from continuing their service. It may also generate a higher turnover employment ratio in the asset.
- **Dedicated versus multiuse staffing**: A *dedicated* staffing model means that the sole mission and job description of the employee revolves around their participation and responsibilities with the deployable federal asset. A *multiuse*

[45] For more on wildfire protection, see CRS Report RS21880, *Wildfire Protection in the Wildland-Urban Interface*, by Katie Hoover and Kelsi Bracmort.

[46] *Crowding out* is "the fall in private consumption or investment resulting from a rise in government expenditure." See *Dictionary of the Social Sciences*, ed. Craig Calhoun (New York, NY: Oxford University Press, 2002).

staffing model means the employee has one or more additional responsibilities, and is only dedicated to the mission of the deployable asset during activations or trainings. As examples, personnel of the Transportation Security Administration's (TSA's) Visible Intermodal Prevention and Response (VIPR) Teams may be multiuse staff, as the team may be comprised of various different DHS/TSA staff elements with other, primary assigned duties, such as Federal Air Marshals. In contrast, Federal Coordinating Officers (FCOs) and Federal Disaster Recovery Coordinators (FDRCs) are full-time employees dedicated exclusively to their deployable mission. Much of the assessment on cost-effectiveness of the two models has to do with frequency of use for the capabilities of the asset, and the level of specialized training that is required to maintain their operational readiness. An additional disadvantage that should be considered when evaluating the multiuse model is the impact deployments have on the execution of their alternate missions, and whether those missions could continue to be performed if the employees were deployed at greater than expected lengths of time.

- **"Federalization" or "Activation" employment model:** This staffing model generally means that a majority or all of the employees of a deployable federal asset are not regularly employed or paid by the federal government. Rather, the employees may be public employees of other government entities (e.g., state or local agencies), or even private citizens with specialized skills (e.g., physicians). The President or other federal government official has the authority to "federalize" or "activate" the asset, and in doing so, may pay the salaries of the employees while deployed, and grant the employee many of the benefits and protections afforded to permanent federal employees. Typically, these assets also receive some level of regular federal funding for training, equipment, and other needs. The National Urban Search and Rescue (US&R) Task Forces and components of the National Disaster Medical System (NDMS) use variations of this staffing model. Benefits of this model include that it may leverage non-federal expertise in national response operations from citizens that otherwise would not be interested or incentivized to join the federal government. This model may also be the most cost-effective, as it may limit federal expenditures when the asset is not being used nationally. However, disadvantages of this model include a restricted ability to manage the quality of training and capabilities of personnel staffing in the asset, and greater challenges integrating the asset into the ICS structure with other assets.

Financing the Deployment of Federal Response Assets

In general, costs to maintain a deployable federal response asset—such as rostering and training of personnel and maintenance of equipment—are predictable, and are provided through a standing funding mechanism, typically the annual appropriation to the responsible agency. Deployment costs, or those costs related to using the asset to provide direct assistance to a community, may not have regular funding mechanisms. For some types of incidents and deployable assets, Congress has provided, or agencies have developed, various mechanisms to bear the largely unpredictable costs of deployments. For other types of incidents and deployable assets, there is no such established mechanism. In these cases, Congress may provide supplemental appropriations, or responsible agencies must bear deployment costs through other funds available in their annual budgets. Specific mechanisms to fund maintenance and management costs are discussed in the summaries of specific deployable assets later in this

report. Selected types of funding mechanisms and challenges in funding deployments are discussed in general below.

The Disaster Relief Fund (DRF) is a common source of deployment funding for direct federal assistance authorized by the Stafford Act.[47] When an emergency or major disaster is declared under the Stafford Act, FEMA officials, through the delegated authorities of the President, may direct other federal agencies to provide assistance to the affected communities through *mission assignments*. Mission assignments are formal work orders for specific activities and/or assets under Stafford Act authority. Typically, mission assignments are provided to federal agencies with the promise of reimbursement of costs through the DRF.[48] Depending on the details of the disaster declaration, some of these costs may be shared by the state or tribal government, with a minimum of 75% of the cost being covered by the federal government.[49]

Although the DRF, via mission assignments, is a significant source of funding for many deployable federal assets, not all federal activities during Stafford Act declared incidents may be paid for through the DRF. In practice, FEMA generally avoids paying for the deployment of assets through the DRF when the capability of the asset is a normally authorized activity of the agency, or when the agency has a more specific authority to provide emergency assistance for a particular disaster consequence than is written in the Stafford Act. For example, FEMA, as a matter of policy, has determined that it generally will not provide funding to the U.S. Army Corps of Engineers or the Natural Resources Conservation Service to provide emergency protective measures[50] related to the rehabilitation of levees and other flood control works.[51] Therefore, in such circumstances, federal agencies may require another source of funding to pay for these activities during deployment in Stafford Act declared incidents.

There are also many types of incidents where a Stafford Act declaration is not made and certain federal response assets may still be deployed. This most regularly occurs when assets are deployed in a preventive or precautionary role at National Special Security Events (NSSEs), such as presidential inaugurations and major sporting events. Although these events are predictable and, barring an incident, deployment costs may be modest, NSSEs do not trigger assistance through the Stafford Act and do not have any other blanket funding mechanism to cover asset deployment costs.[52] Often the responsible agencies cover deployment costs through the administrative budgets for the specific assets.

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[47] For more on the DRF, see CRS Report R43537, *FEMA's Disaster Relief Fund: Overview and Selected Issues*, by Bruce R. Lindsay.

[48] Mission assignments rely on the President's authority to direct federal agencies to support disaster response and recovery operations, namely found at Sec. 402, 403, and 502 of the Stafford Act (42 U.S.C. §§5170a, 5170b, and 5192). See Federal Emergency Management Agency, *Financial Management Support Annex, National Response Framework*, May 2013, at http://www.fema.gov/media-library/assets/documents/32264?id=7387. Specific examples of mission assignments are available through daily mission assignment activity reports published on FEMA's website at http://www.fema.gov/media-library/assets/documents/30824?id=6984.

[49] See, primarily, Sec. 403(c)(4) of the Stafford Act, (42 U.S.C. §5170b(c)(4). For more on disaster cost-shares in Stafford Act declarations, see CRS Report R41101, *FEMA Disaster Cost-Shares: Evolution and Analysis*, by Francis X. McCarthy.

[50] Emergency protective measures is generally defined by FEMA as activities necessary to "eliminate or reduce an immediate threat to life, public health, or safety; or eliminate or reduce an immediate threat of significant damage to improved public or private property through cost-effective measures." See Federal Emergency Management Agency, *Public Assistance Guide*, FEMA 322, 2007, p. 71, at http://www.fema.gov/public-assistance-policy-and-guidance.

[51] Federal Emergency Management Agency, *Rehabilitation Assistance for Levees and other Flood Control Works*, RP9524.3, September 23, 2011, p. 2, at https://www.fema.gov/pdf/government/grant/pa/9524_3.pdf.

[52] For more on NSSEs, see CRS Report R43522, *National Special Security Events: Fact Sheet*, by Shawn Reese.

Generally, federal agencies are not allowed to augment their funding from outside sources unless specifically authorized by Congress. These issues are covered by the general area of law called augmentation of appropriations,[53] and can inhibit federal agencies from using any source of funding other than direct appropriations from Congress to pay for the cost of deployments. Absent statutory authorization, federal agencies are generally restricted from accepting private funding to pay for the deployment of federal assets or other federal activities (e.g., accepting money from a private company for the use of an asset to restore electrical power to the company's facilities).[54] Federal agencies are also generally restricted from receiving unreimbursed assistance from employees of deployable federal assets, or from receiving the volunteer assistance of the general public to serve in any official federal capacity.[55]

As an example of how Congress may address these funding challenges, consider the 2009 influenza pandemic. When an incident results in a Stafford Act declaration, reimbursement is often available through the DRF to reimburse agencies for many activities carried out as part of ESF #8—Public Health and Medical Services, coordinated by the Department of Health and Human Services (HHS).[56] However, a Stafford Act declaration was not made in response to the 2009 influenza pandemic, and there is no precedent for a major disaster declaration in response to an infectious disease incident, whether naturally occurring, or bioterrorism.[57] Furthermore, there is no standing federal mechanism to cover the costs of health care that is provided as part of a disaster response. Congress provided supplemental appropriations to fund the response to the 2009 influenza pandemic,[58] and to cover unreimbursed healthcare costs associated with the response to Hurricane Katrina in 2005.[59]

Congress has also established two dedicated trust funds—managed by the U.S. Coast Guard and the Environmental Protection Agency respectively—to finance the costs of a federal response to a discharge of oil or release of a hazardous substance, pollutant, or contaminant. Each agency is responsible for disbursing monies from these trust funds to other federal departments and agencies, states, and local entities that may be involved in a federal response. The federal government may recover its response costs from the liable party (or parties) and may use these funds to replenish the respective trust fund, with the exception of the costs of responding to pollutant or contaminant incidents for which liability is not established. These funding mechanisms are discussed further in the "National Response System for Oil and Chemical Spills" section of this report.

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[53] For a full discussion of augmentation of appropriations, see U.S. Government Accountability Office, *Principles of Federal Appropriations Law, Third Edition, Volume II*, GAO-06-382SP, February 2006, at http://www.gao.gov/assets/210/202819.pdf.

[54] 31 U.S.C. §3302.

[55] 31 U.S.C. §1342.

[56] Even when there is a Stafford Act declaration, FEMA does not reimburse for health care costs except for such care required to provide immediate emergency care, evacuation, and stabilization. See FEMA Recovery Policy 9525.4, "Emergency Medical Care and Medical Evacuations," February 3, 2014, at http://www.fema.gov/9500-series-policy-publications.

[57] CRS Report RL34724, *Would an Influenza Pandemic Qualify as a Major Disaster Under the Stafford Act?*, by Edward C. Liu.

[58] See the Supplemental Appropriations Act, FY2009 (P.L. 111-32). For discussion of the supplement funding required and the overall H1N1 incident, see CRS Report R40554, *The 2009 Influenza Pandemic: An Overview*, by Sarah A. Lister and C. Stephen Redhead.

[59] For discussion, see U.S. Government Accountability Office, *Hurricane Katrina: Allocation and Use of $2 Billion for Medicaid and Other Health Care Needs*, GAO-07-67, February 28, 2007, at http://www.gao.gov/products/GAO-07-67.

Federalism and Operational Control

As previously discussed, the federal government generally provides disaster assistance, including deployable federal assets, at the request of a state or tribal government. In addition, the federal government almost always operates in a support role in the affected communities. While federal assets, especially federal troops, generally remain in the control of the federal officials, the set of unmet needs they are tasked with addressing is largely dictated by the incident commanders at the local or state level. In other words, federal resources are provided at the discretion of the affected entities, in deference to federalism principles, with a lesser degree of executive decision-making on their use being made by federal officials.

This can create situations where the federal government is providing considerable support with limited authority to direct the overall management of the incident. For example, this could result in disagreements over tactical decisions such as where to prioritize search and rescue operations, the best way to triage and manage mass care requirements of survivors, and what critical services should or can be restored before other services. Congress may wish to consider whether the provision of federal assistance should grant the federal government more decision-making power if disagreements arise in the incident management. On the positive side of the argument, greater federal authority may more easily allow the application of lessons learned from other disasters to the current incident if the state or local incident command has less experience to draw on. It may also increase regional coordination of a response by allowing federal officials to influence decisions across a unified command structure. Further, federal assets may be able to place greater priority on addressing the consequences of a disaster that have national implications versus more localized implications.[60] On the negative side, any changes to federal authority that allow the federal government to have greater operational control over state and local response management may dissuade such entities from requesting assistance in the first place. Further, local knowledge and expertise on the unmet needs of the affected population may be sidelined or underappreciated by federal officials, to the detriment of the survivors. Also, the possibility that the federal government could "overrule" a local command decision may lead to breakdowns in the NIMS structure that would have negative impacts on all response operations.

Challenges in Monitoring and Evaluating Deployable Federal Assets

In Congress's oversight of federal operations, Congress may face numerous challenges when attempting to monitor and evaluate the benefits of deployable federal assets in supporting response operations.

These challenges include the following.

- The use of deployable federal assets is a relatively rare occurrence, though some are used much more frequently than others.[61] Also, reporting by the federal

[60] For example, federal assets may be more likely to restore nodes of critical infrastructure systems needed to avoid or remediate cascading impacts outside the immediately affected area (e.g., pipelines transporting natural gas through the affected region that do not provide service to the immediate area, or a local dam that provides regional power generation) instead of focusing on the restoration of critical infrastructure providing end service of the community (e.g., power transmission lines to residential or commercial areas, or reducing flooding in local transportation hubs).

[61] Some assets, such as Federal Coordinating Officers (FCOs) and Federal Disaster Recovery Coordinators (FDRCs) are used far more frequently than others, such as the Department of Defense Chemical, Biological, Radiological, and Nuclear (CBRN) Response Forces.

government on the use of its assets, even in raw numbers, is limited,[62] making it difficult to assess the percentage of incidents that result in the provision of one or more deployable federal assets.[63]

- Analyzing the benefits of deployable federal assets based on a roughly comparable counterfactual scenario[64] may be difficult because of the uniqueness of each disaster and the particular capabilities of each local government.[65]
- The authorizations and appropriations for many deployable federal assets have a low degree of specification. For example, many assets draw their authority from broadly worded provisions in statute,[66] and others are appropriated by Congress in large, unspecific accounts.[67] Without a higher degree of specification in authorization or appropriation, the existence and use of the deployable asset may not generate significant oversight attention. This may also lead to limited reporting by the executive branch on the activities of the asset through the annual budgeting and appropriation process, to include a lack of detailed information in documents like agency budget justifications.

Thus, in general, the limited use of deployable federal assets and the unique circumstances of each disaster result in a small sample size that Congress and others can use to evaluate the benefits of the capabilities provided by the asset. This sample size may be expanded, however, when it includes numerous national, regional, and local discussions-based and operations-based response exercises.[68]

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[62] As an example statistic on usage, National Disaster Medical System (NDMS) assets have been used more than 300 times since 1984. However, it is unclear what incidents provoked these deployments, what kinds of NDMS assets were deployed, for how long, and where the assets deployed. As another example, it is clear that for every emergency or major disaster declaration under the Stafford Act, a Federal Coordinating Officer (FCO) and Federal Disaster Recovery Coordinator (FDRC) will deploy. However, it is unclear how many times, and for what circumstances, a Federal Disaster Recovery Coordinator (FDRC) will deploy.

[63] Further, in order to calculate a percentage of incidents resulting in the assistance of a deployable federal asset, one must be able to determine the number of incidents that non-federal government entities respond to and manage without such support. For example, one might argue that all multi-car accidents should be counted as incidents, or that every five alarm fire is an incident, etc. Depending on where the consequence threshold is set for what constitutes an incident, the percentage of incidents that involve federal assets will change significantly.

[64] In other words, evaluating the benefit of a federal asset by comparing the results of incidents where federal assistance was provided versus incidents where assistance was not provided.

[65] For example, consider the following hypothetical scenarios. Incident A, where federal assets were deployed, involves a tornado that destroyed public infrastructure including schools and hospitals in a community but had limited impact on residential areas. Incident B involves another tornado of relatively equal magnitude that hit a residential area resulting in greater casualties and housing needs but less damage to public infrastructure. The Incident A community has significant pre-existing capabilities for mass care of survivors, but limited capabilities for essential infrastructure restoration; and in Incident B, the community had the reverse strengths and capabilities. Evaluating the effectiveness of using deployable federal assets in Incident A by comparing the results of not using the assets in Incident B would involve controlling for the divergence in both the consequences of the "comparable" tornados and the pre-existing community capabilities.

[66] For example, most of the deployable federal asset assistance provided by the U.S. Army Corps of Engineers is broadly authorized by the Flood Control and Coastal Emergency Act, P.L. 84-99 (33 U.S.C. §701n), which may obscure the full scope and importance of the assets to domestic emergency management.

[67] For example, Incident Management Assistance Teams are explicitly authorized in law (42 U.S.C. §5144), but receive funding through the Disaster Relief Fund account at FEMA. No specific information regarding their budgetary cost was included in any of the agency's FY2015 budget justification documents.

[68] As defined by the Homeland Security Exercise and Evaluation Program (HSEEP), discussion-based exercises include "seminars, workshops, tabletop exercises (TTXs), and games. These types of exercises can be used to familiarize players with, or develop new, plans, policies, agreements, and procedures. Discussion-based exercises focus

Given the above challenges, the recommendations of after-action reports (AARs) and the implementation of subsequent after-action report improvement plans (AAR-IPs), for both real incidents and exercises, may help inform Congress in its oversight of the use of deployable federal assets. AARs and AAR-IPs are generally developed by both the respective state and federal governments after significant real-world incidents and full-scale exercises, and frequently by the affected local governments as well. However, these evaluations often tend to be produced by the responding or exercising agency—either directly or by contract to a third party—and therefore may lack independent objectivity. Further, the Government Accountability Office (GAO) has identified that opportunities exist to enhance the oversight, primarily provided by DHS and FEMA, of how capability gaps identified in selected exercises, real-world incidents, and other assessments are resolved.[69] In other words, though problems are regularly identified in AARs and AAR-IPs, how and if those problems have been resolved is not always tracked.

However, through after action reviews, Congress may discover general thematic issues that limit the effectiveness of deployable federal assets, or be able to highlight shortcomings with the capabilities of a particular asset. For example, following Hurricane Sandy, both FEMA and the White House produced AARs that highlighted federal challenges requiring improvement, including some on the use of deployable federal assets.[70] Of note, Congress's ability to use AARs and AAR-IPs in its oversight may be hindered—but not stopped—by the security classification of some documents, given their sensitivity to national security.[71]

Brief Summaries of Sample Federal Assets

This section of the report provides brief summaries of **examples** of deployable federal assets that can support disaster response operations. This section of the report is not comprehensive, and does not provide an exhaustive list of every federal asset that may be used to address a multitude of unique needs that can arise when responding to the plethora of hazards facing the nation. For instance, this section does not contain summaries of an array of specialized, law enforcement response assets provided by the Department of Justice or the Department of Homeland Security to respond to the consequences of intentional hazards, such as the Federal Bureau of Investigation's

on strategic, policy-oriented issues." Operations-based exercises "include drills, functional exercises (FEs), and full-scale exercises (FSEs). These exercises can be used to validate plans, policies, agreements, and procedures; clarify roles and responsibilities; and identify resource gaps. Operations-based exercises are characterized by actual reaction to an exercise scenario, such as initiating communications or mobilizing personnel and resources." See the Department of Homeland Security, *Homeland Security Exercise and Evaluation Program (HSEEP)*, April 2013, pp. 2-4 and 2-5, at https://www.llis.dhs.gov/HSEEP/Documents/homeland-security-exercise-and-evaluation-program-hseep.

[69] U.S. Government Accountability Office, *Opportunities Exist to Strengthen Interagency Assessments and Accountability for Closing Capability Gaps*, GAO-15-20, November 2014, at http://www.gao.gov/products/GAO-15-20.

[70] For example, in a FEMA-specific AAR for Hurricane Sandy, it was noted that the deployment of so many FEMA employees to the response had a negative impact on the ability of many FEMA components to continue their normal functions (and could have had a worse impact if another incident arose). Thus, FEMA noted it needed to incorporate the impact of deploying federal personnel has on its continuity of operation plans. Likewise, an interagency AAR led by the White House made a number of recommendations on how the federal response to future disasters could be improved based on lessons learned during Hurricane Sandy. Respectively, see Federal Emergency Management Agency, *Hurricane Sandy FEMA After-Action Report*, July 1, 2013, p. 34, at http://www.fema.gov/media-library/assets/documents/33772; and Executive Office of the President, Federal Interagency Sandy After-Action Review Team, *The Federal Response to Hurricane Sandy After-Action Report*, For Official Use Only, June 1, 2013.

[71] This is especially true for documents related to intentional hazards (e.g., terrorist attacks).

Critical Incident Response Group (CIRG).[72] Also, cyber-related response teams, such as DHS's United States Computer Emergency Readiness Team (US-CERT) are not summarized below.[73]

Table 1 reviews the basic information provided in each summary of sample deployable federal assets. Each summary begins with the contact information of the relevant CRS expert available to answer further questions from Congress on the asset. Additional CRS expertise is available to address questions on other assets not summarized in the report.[74]

[72] For more information on the Critical Incident Response Group, see the FBI's website at http://www.fbi.gov/about-us/cirg.

[73] Given the nature of a cyber-related hazard and disaster, the US-CERT and other federal assets may not, but potentially could, physically "deploy" but instead support response operations remotely. For more information on the United States Computer Emergency Readiness Team, see DHS's website at http://www.us-cert.gov/.

[74] Requests can be directed to the coordinator of this report for any unlisted asset.

Table 1. Synopsis of Examples of Deployable Federal Assets

Example of Asset	Managing Department(s)/ Agency(s)	Primary Authority	Brief Description of Duties
Incident Management Assistance Teams (IMATs)	DHS/FEMA	42 U.S.C. §5144	Provide on-scene incident command capabilities and identify and satisfy initial requirements for federal assistance. Serve in core responsibilities in ICS structure for federal assistance to local disasters and for federally led incidents.
Federal Coordinating Officers (FCOs)	DHS/FEMA	42 U.S.C. §5143	Coordinate all federal assistance to affected state(s)/tribe(s) in Stafford Act declared emergencies or disasters.
Urban Search and Rescue (US&R) Teams	DHS/FEMA	6 U.S.C. §722	Provide specialized assistance locating and rescuing victims after buildings or other structures collapse, or in response to natural hazards such as landsides or earthquakes.
Visible Intermodal Prevention and Response (VIPR) Teams	DHS/TSA	6 U.S.C. §1112	Deploys transportation security assets (e.g. security inspectors, air marshals, and canine teams) to specific locations and events as needed.
Protective Security Advisors (PSAs)	DHS/NPPD	6 U.S.C. §121(d)(6)	Anticipate and assess damage to the area's critical infrastructure assets, including assessing the potential for cascading effects due to interdependencies among those assets. They also can help prioritize re-entry and recovery efforts related to critical infrastructure.
U.S. Public Health Service Commissioned Corps	HHS/ASH	42 U.S.C. §§202-233	Provide medical and public health workforce surge capacity in response to mass casualty incidents and other public health emergencies.
Strategic National Stockpile	HHS/CDC	42 U.S.C. §247d-6b	Provide medicine and medical supplies when a public health emergency has overwhelmed local supplies. Also contains unique supplies to respond to certain chemical, biological, radiological, and nuclear agents.
Forest Service Firefighting Assets	USDA/FS	16 U.S.C. §551	Response assistance can be delivered in many forms, including firefighting support, fire suppression and assistance planning, command and control support, emergency road clearing, logistics facility support, radio/communications system support, and cache support for mass care shelters.

Example of Asset	Managing Department(s)/ Agency(s)	Primary Authority	Brief Description of Duties
General Purpose Forces	DOD	Title 10 and Title 32 of the U.S. Code	Units of the Armed Forces possess capabilities that can be used during disaster response missions, such as transportation, medical, communications, engineering, and logistics units.
Chemical, Biological, Radiological, and Nuclear (CBRN) Response Forces	DOD/National Guard	Title 10 and Title 32 of the U.S. Code, generally, plus 50 U.S.C. §2314, and other provisions of law.	Provide specialized response capabilities to major domestic CBRN incidents.
Planning and Response Teams (PRTs)	DOD/USACE	33 U.S.C. §701n	Perform Army Corps emergency response functions, which include: provision of ice, water, emergency power, debris removal, temporary housing, temporary roofing, and structural safety assessments.
249th Engineer Battalion (Prime Power)	DOD/USACE	33 U.S.C. §701n	Provide technical expertise and operational assistance in all aspects of power and electrical systems generation and distribution in support of contingency and emergency response operations to assist with power emergencies especially for life-saving and life-sustaining facilities like hospitals, shelters, water and sewer facilities, and police and fire stations.
Nuclear Counterterrorism and Incident Response (NCTIR) Program	DOE/NNSA	50 U.S.C. §2404	Provide rapid response in the event of a radiological or nuclear incident, whether predetonation or postdetonation, as well as technical support for other first responders.
National Transportation Safety Board Disaster Assistance	NTSB	49 U.S.C. §1136 and §1139	Provide assistance to families of passengers involved in major aviation and passenger rail disasters.
National Response System assets (for oil spills and releases of hazardous substances, pollutants, or contaminants)	EPA, DHS/USCG	33 U.S.C §1321(j); 33 U.S.C. §2701 et seq.; and 42 U.S.C. §9601 et seq.	Coordinate federal actions and deployment of federal assets to respond to discharges of oil into U.S. waters and adjoining shorelines, and releases of hazardous substances, pollutants, or contaminants into the environment. The Environmental Protection Agency (EPA) serves as the lead federal agency in the inland zone, and the U.S. Coast Guard serves as the lead federal agency in the coastal zone. The lead federal agency also coordinates participation of state and local governments, and non-governmental entities, including the party (or parties) liable for the incident.

Example of Asset	Managing Department(s)/ Agency(s)	Primary Authority	Brief Description of Duties
National Disaster Medical System assets	HHS, DOD, and VA	42. U.S.C. §300hh-11	Provide on-scene and local medical care, patient evacuation, and definitive medical care in response to mass casualty incidents.

Source: CRS.

Department of Homeland Security Assets

Federal Incident Management Assistance Teams (IMATs)

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Purpose and Responsibilities

Federal Incident Management Assistance Teams (IMATs) are a relatively new federal asset managed by FEMA, though they evolved from a previous deployable federal asset called Emergency Response Teams (ERTs). The IMATs' primary mission is to provide on-scene incident command capabilities and to work with the affected community to identify and satisfy initial requirements for federal assistance. In practice, IMATs form the core command structure guiding and managing federal assistance to the response operation. In doing so, an IMAT is able to assist the state and local management of a response operation. FEMA also trains IMATs in the management of chemical, biological, radiological, nuclear, and explosives (CBRNE) incidents.[75] In addition to major disasters and emergencies declared under the Stafford Act, IMATs may deploy in advance of an incident (e.g., before landfall of a hurricane), for special events (e.g., a Super Bowl or national political convention), and for national level exercises.

The structure and concept of operations for IMATS are currently being revised by FEMA, and thus are subject to change in the future. The new revisions to the design of IMATs have been made, in part, because of lessons learned from the large-scale deployment during Hurricane Sandy.[76] As currently envisioned by FEMA, there will be 3 national IMATs and 13 regional IMATs. Each national IMAT will have an Incident Command System (ICS) structure filled by 33 term-appointed FEMA employees[77] and will be led by a member of the Senior Executive Service (SES, who could possibly be a current or former Federal Coordinating Officer, described below). FEMA is also seeking one team member each from nine different departments/agencies.[78] Each of the regional IMATs will be staffed by 12 term-appointed FEMA employees. All personnel will have specialized training and experience in the key areas of an ICS structure, to include operations, planning, and logistics. IMATs are being designed to deploy within 2 hours and arrive at an incident within 12 hours to support the response operation. The revised IMAT structure has

[75] Department of Homeland Security, Federal Emergency Management Agency, *Disaster Relief Fund Fiscal Year 2015 Congressional Budget Justification*, p. 8. The full DHS Congressional budget justification is available at http://www.dhs.gov/sites/default/files/publications/DHS-Congressional-Budget-Justification-FY2015.pdf.

[76] Executive Office of the President, Federal Interagency Sandy After-Action Review Team, *The Federal Response to Hurricane Sandy After-Action Report*, For Official Use Only, June 1, 2013.

[77] These employees are called "CORE" employees, which stands for Cadre of On-Call Response/Recovery Employees. According to FEMA, these employees "are hired to work for a specific, limited period, between two to four years. These positions may be renewed if there is ongoing disaster work and funding is available.... " and "are generally eligible for the same benefits as [full-time] employees, but do not gain competitive status nor career tenure during their term." See FEMA's website on employment options, at http://www.fema.gov/career-paths-fema.

[78] In their capacity as Emergency Support Function (ESF) coordinators under the NRF, FEMA is seeking representatives from the U.S. Army Corps of Engineers (ESF #3—Public Works and Engineering), the Department of Health and Human Services (ESF #8—Public Health and Medical Services), the Environmental Protection Agency (ESF #10—Oil and Hazardous Materials), and the Department of Energy (ESF #12—Energy). In addition, FEMA is seeking the expertise of representatives from the U.S. Coast Guard and the Office of Infrastructure Protection in DHS, the National Weather Service, the American Red Cross, and a Department of Defense Planning Officer. It is unclear whether and how these additional departments and agencies have committed employees to the national IMATs.

been implemented for several of the teams, including two national teams and approximately six regional teams, and is projected to be fully implemented by FY2016.

Authorization and Appropriations

National and regional IMATs are designed to fulfill the roles of specifically authorized assets called, in statute, an "Emergency Response Team"[79] and "regional office strike team," respectively.[80] Both of these named assets were authorized by the Post-Katrina Emergency Management Reform Act (PKEMRA, Title VI of P.L. 109-295), which added the underlying authorizing language for the concept of IMATs to both the Stafford Act and the Homeland Security Act of 2002.

Maintenance and operational funding for the salaries of IMAT staff derive from appropriations made to the Disaster Relief Fund (DRF), also administered by FEMA. The DRF is the primary source of funds for Stafford Act response and recovery operations.[81] Current, specific budget figures from the DRF appropriation for the IMATs are not publically available, though they have been available in prior years.[82] However, when the new IMAT structure is fully implemented in FY2016, FEMA estimates that the recurring annual costs of maintaining the IMATs will be about $31.6 million, with an additional, cumulative $19 million in spending as one-time capital costs in their development.[83]

Examples of Past Use in Disaster Response Operations

During Hurricane Sandy, FEMA deployed all three national IMATs and nine of the regional IMATs to support incident management in the large geographic area of affected states and communities. However, the IMATs used during Hurricane Sandy were constructed and staffed differently than is currently being designed by FEMA. Since Hurricane Sandy, FEMA has deployed some of the newly constructed IMATs, especially regional IMATs, to incidents across the nation. For example, a national IMAT was deployed to assist in the response to the Washington State, Snohomish County mudslide in March 2014.

Federal Coordinating Officers (FCOs) and Federal Disaster Recovery Coordinators (FDRCs)

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Purpose and Responsibilities

A Federal Coordinating Officer (FCO) is responsible for the overall coordination and management of all federal resources and assistance being provided to support a disaster response operation. In a fashion, the FCO is the "leader" of the federal government's response and is

[79] See Sec. 303 of the Stafford Act, 42 U.S.C. §5144; as added by Sec. 633 of PKEMRA, 120 Stat. 1421.

[80] See Sec. 507 of the HSA of 2002, 6 U.S.C. §317(f); as added by Sec. 611 of PKEMRA, 120 Stat. 1402.

[81] For more on the DRF, see CRS Report R43537, *FEMA's Disaster Relief Fund: Overview and Selected Issues*, by Bruce R. Lindsay.

[82] For example, the Administration requested a total of $13.8 million and 102 positions (95 full time equivalents) for IMATs in FY2011. See U.S. Department of Homeland Security, *FY2011 Congressional Justification*, Federal Emergency Management Agency, Operations, Management and Administration, 2010, p. 26.

[83] Telephone consultation and email correspondence with the Response Directorate, Federal Emergency Management Agency, April 17, 2014.

tasked with efficiently facilitating the delivery of assistance from a wide array of federal departments and agencies, including other deployable federal assets. If there are defense assets involved in the response, DOD may use a Defense Coordinating Element (DCE) led by a Defense Coordinating Official (DCO) to support the FCO's coordination of all federal assets. A formal cadre of FCOs was first established in 1999. Prior to that, FCOs, or officials acting in a similar capacity to the FCO, were assigned to disasters on an ad hoc basis. There are now approximately 40 FCOs, each of whom is a full time employee of FEMA.[84]

The role of the FCO has considerable history relative to the more recently established position of the Federal Disaster Recovery Coordinator (FDRC), which was first established by policy in the National Disaster Recovery Framework.[85] The FDRC may serve as a deputy under the FCO when in the response phase of a disaster, but serves a similar coordinating purpose as the FCO relating to the provision of federal disaster recovery assistance in the long-term recovery process. There are approximately 10 FDRCs, each of whom is a full time employee of FEMA.

Authorization and Appropriations

FCOs are directly authorized by the Stafford Act.[86] By statute, the President must appoint an FCO for every Stafford Act emergency and major disaster declaration.[87] This requirement does not apply to FDRCs, who are deployed more selectively based on long-term disaster recovery needs of the community. FCOs have also been delegated many of the authorities of the President in the Stafford Act, namely those relating to the coordination of federal resources. Any state or tribe receiving a Stafford Act declaration is also encouraged, but not required, to appoint a Coordinating Officer to fulfill similar roles and duties as the FCO, but at the state/tribal level. For multi-state/tribal incidents producing more than one Stafford Act declaration, the President may appoint a single FCO and deputy FCOs for affected states/tribes, or appoint one FCO to each state/tribe.[88]

The cost of maintaining and deploying FCOs and FDRCs is funded by appropriations to the DRF. For FY2016, FEMA is requesting funding sufficient for 55 full-time equivalent FCOs/FDRCs through the DRF. As with IMATs, current, specific budget figures for the FCOs/FDRCs have not been publically reported by FEMA in recent congressional justification documents. However, FEMA estimates that the cost of maintaining and deploying 55 FCOs/FDRCs is approximately $12.9 million in a fiscal year.[89] The FCOs and FDRCs are also supported by an Office of the Federal Disaster Coordinating Officer (OFDC) in FEMA, which is responsible for hiring, training, equipping, managing and evaluating the FCOs/FDRCs. FEMA estimates that the OFDC will cost $5.9 million in FY2016.[90]

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[84] FCOs and FDRCs are hired as Schedule A, Excepted Service appointments. For a description of this authority, see 5 C.F.R. §213.3101.

[85] Department of Homeland Security, *National Disaster Recovery Framework*, September 2011, at http://www.fema.gov/national-disaster-recovery-framework.

[86] See Sec. 302 of the Stafford Act, 42 U.S.C. §5143. The role is further described in 44 C.F.R. §206.42.

[87] FCOs may also be used in non-Stafford Act declared incidents to assist communities and coordinate other federal assistance, but in such situations they would not be vested with the authorities of the Stafford Act.

[88] See Sec. 302(c) and (d) of the Stafford Act, 42 U.S.C. §5143.

[89] Telephone consultation and email correspondence with the Response Directorate, Federal Emergency Management Agency, April 17, 2014.

[90] Department of Homeland Security, Federal Emergency Management Agency, *Disaster Relief Fund Fiscal Year 2016 Congressional Budget Justification*, p. 17. The full DHS Congressional budget justification for FY2016 is available at http://www.dhs.gov/dhs-budget.

Examples of Past Use in Disaster Response Operations

As an FCO is assigned to every Stafford Act declaration, they regularly support disaster response operations across the nation. In addition, when an IMAT is deployed to support a response operation, the FCO will serve as the lead of that team (or the leader of the IMAT will serve in the capacity of the FCO). However, FCOs may not deploy when an incident first occurs, rather they may only arrive on-scene, at least in official capacity, after a declaration is made. However, significant incidents often precipitate Stafford Act disaster declarations by a few hours or a day, and therefore the FCO cadre is prepared to respond and deploy to a disaster promptly.

National Urban Search and Rescue (US&R) Response System Task Forces

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Purpose and Responsibilities

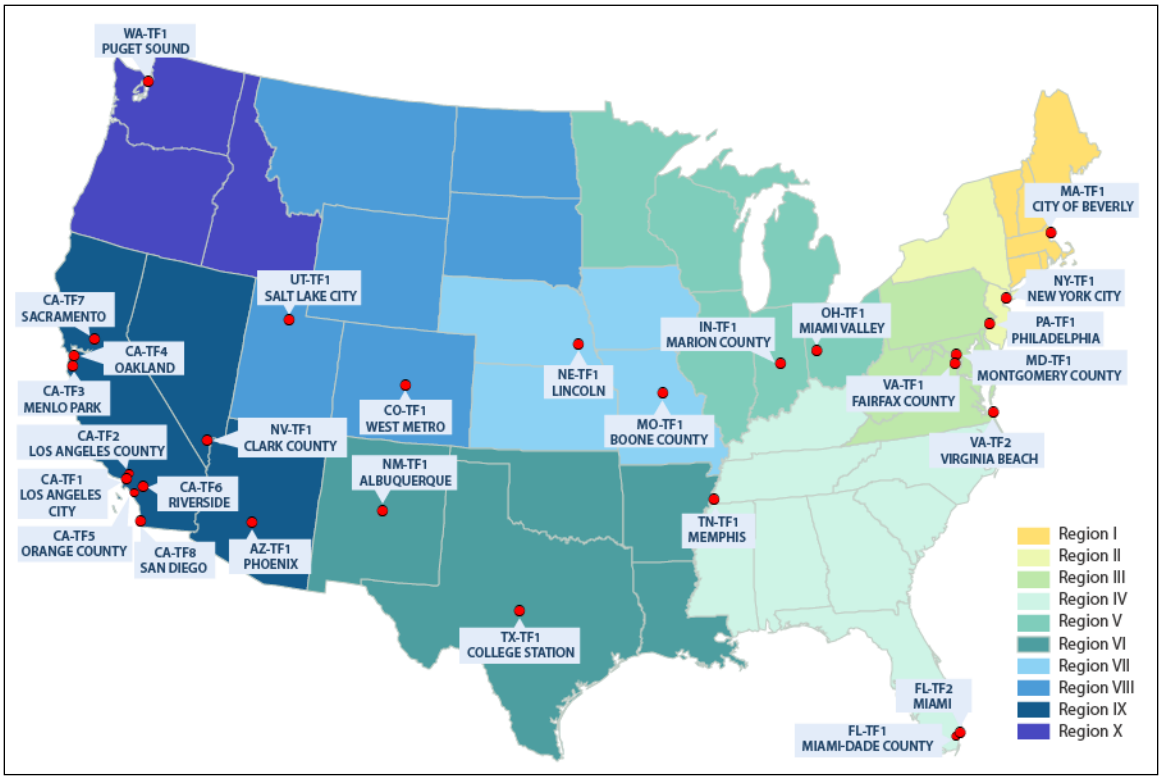
National Urban Search and Rescue (US&R) Responses System Task Forces are designated and administered by FEMA to provide specialized assistance locating survivors after buildings or other structures collapse, or in response to hazards such as landsides, earthquakes, or terrorist attacks. Maritime search and rescue capabilities are generally provided by the U.S. Coast Guard.

Although the national US&R Task Forces are formally state or local government entities, they are a deployable federal asset that receives funding, training, and accreditation from the federal government to provide a national capability. In general, when deployed, national US&R Task Forces work to: stabilize damaged structures; identify risks of additional collapses; locate, extricate, and provide medical care for survivors; and meet other needs at disaster sites. Task Forces deploy as necessary and on request to support the response to disasters, and may be pre-positioned for certain incidents (such as hurricanes). National US&R Task Forces may integrate and work in conjunction with other federal and local search and rescue teams/operations. National US&R Task Forces are designed to be ready for deployment in 4 to 6 hours, and on-scene in a significant portion of the continental United States in 16 hours.

There are currently 28 national US&R Task Forces throughout the United States (see **Figure 1**). Each Task Force can deploy as either a Type I configuration (with 70 personnel, with an additional 10 support personnel) or Type III configuration (with 28 personnel, with up to 4 support personnel). However, to ensure that a full Type I team can deploy on short notice, each Task Force is encouraged to maintain a full roster of 210 personnel (a three-deep roster for a 70-person Type I team configuration). Each Task Force has unit members with expertise and training in a variety of skillsets, including engineering, emergency medicine, canine handling, firefighting, hazardous material handling, communications, logistics, and other areas. There are also three national Incident Support Teams (ISTs) that are comprised of highly qualified specialists readily available for rapid assembly and deployment to a disaster area. ISTs provide advice, management and logistics assistance, and coordination of US&R Task Forces, to the on-scene incident command. The Task Forces also include specially trained canine units. When activated by FEMA, Task Force members are appointed as temporary excepted federal volunteers, which is a designation intended to provide them with liability protection and worker's compensation.[91]

[91] 44 C.F.R. §208.11.

Figure 1. Location of National US&R Task Force Teams



Source: CRS adaptation of FEMA figures on the locations of Task Forces in the National Urban Search and Rescue Response System.

Note: There are no National US&R Task Forces outside the contiguous United States.

Authorization

The federal role in urban search and rescue efforts has developed slowly over time. Its roots may be traced to congressional enactment of the Earthquake Hazards Reduction Act of 1977 (P.L. 95-124) to stimulate research and planning related to preparation for, and response to, the devastation of earthquakes. Following establishment of the FEMA in 1979, Congress amended the 1977 statute to require FEMA to serve as lead agency for the National Earthquake Hazards Reduction Program (NEHRP).[92]

As a consequence of the Loma Prieta earthquake of 1989, Congress and FEMA revisited the scope of the NEHRP. FEMA established the National Urban Search and Rescue Response System that same year. Also, in the aftermath of that earthquake, Congress passed the National Earthquake Hazards Reduction Program Reauthorization Act of 1990.[93] These amendments to the 1977 statute expanded the federal response authority to include the following charge:

> develop, and coordinate the execution of, federal interagency plans to respond to an earthquake, with specific plans for each high-risk area which ensure the availability of

[92] 94 Stat. 2257.

[93] 104 Stat. 3231-3243.

> adequate emergency medical resources, search and rescue personnel and equipment, and emergency broadcast capability.[94]

In 2006, Congress formally authorized the establishment of the Urban Search and Rescue Response System in FEMA.[95] Under this authority the FEMA Administrator, and delegates, coordinate the activities of US&R Task Forces when called into federal service.

Appropriations

Task Forces are funded both by the federal government and their respective sponsoring agency (either a state or local government entity, most commonly a city fire department). In order to participate, each of the Task Forces is required to have both a Preparedness and a Response Cooperative Agreement with DHS/FEMA that govern the responsibilities and reimbursement of expenses for the Task Force. In general, the federal government and sponsoring agencies of national Task Forces share the cost of maintaining the capability, though the exact terms of compensation are subject to the Preparedness Cooperative Agreement negotiated by FEMA and the sponsoring agency.[96] FEMA also provides funding for costs incurred when Task Forces are deployed to respond to disasters, as negotiated in the Response Cooperative Agreement.[97] Federal funding for the deployment of the Task Forces in response to Stafford Act declared major disasters or emergencies is provided through the DRF.

The federal funding to maintain the National US&R Response System and the Task Forces is generally directly designated in appropriation bills for the Salaries and Expenses account in FEMA. Congress appropriated approximately $41.3 million in FY2012,[98] and $35.2 million each in FY2013, FY2014, and FY2015 for the National US&R Response System and Task Forces.[99] For FY2016, FEMA has requested approximately $27.5 million.[100] However, deployment costs for Task Force teams are not accounted for in these amounts, as these costs are generally provided through the Disaster Relief Fund when applicable for a Stafford Act declaration.

Examples of Past Use in Disaster Response Operations

National US&R Task Forces have deployed after the bombing of the Alfred P. Murrah Federal Building in Oklahoma City in 1995, the terrorist attacks of 2001, Hurricane Katrina, the Haiti Earthquake, and Hurricane Sandy, among many other notable disasters. National US&R Task Forces responded to an estimated 53 incidents between 1992 and 2010, accounting for over 316 individual Task Force deployments in both Type I and III configurations during the time period.[101]

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[94] 104 Stat. 3234, 42 U.S.C. §7704(b)(2)(A)(iv).

[95] Section 634, P.L. 109-295, 120 Stat. 1421, 6 U.S.C. §722.

[96] 44 C.F.R. §208, Subpart B on Preparedness Cooperative Agreements outlines the allowable expenses covered by FEMA for maintaining the Task Force.

[97] 44 C.F.R. §208, Subpart C on Response Cooperative Agreements outlines the allowable expenses covered by FEMA for various stages of deployment.

[98] P.L. 112-74, 125 Stat. 959.

[99] See P.L. 113-6, 127 Stat. 357 for FY2013; P.L. 113-76, 128 Stat. 60 for FY2014; and P.L. 114-4, 129 Stat .53 for FY2015.

[100] Department of Homeland Security, *FY2016 Congressional Budget Justification*, Federal Emergency Management Agency, Salaries and Expenses, Budget Request and Supporting Information, p. 37, at http://www.dhs.gov/dhs-budget.

[101] Federal Emergency Management Agency, *Review of the National Urban Search and Rescue (US&R) Response System*, For Official Use Only, March 2012.

Visible Intermodal Prevention and Response (VIPR) Teams

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Purpose and Responsibilities

Responding to the 2005 terrorist train bombings in Madrid, Spain, the Transportation Security Administration (TSA) developed the Visible Intermodal Prevention and Response (VIPR) team program. The VIPR program is intended to enhance security across all modes of transportation by providing TSA assets and capabilities to augment federal, state, and local law enforcement and security agencies in protecting national assets, critical infrastructure, and facilities in the transportation domain. VIPR teams may include various combinations of DHS assets including surface transportation security inspectors, explosives detection canine teams, Federal Air Marshals, and TSA screeners and behavior detection officers. The Domestic Nuclear Detection Office (DNDO) may provide these teams with nuclear and radiological detection equipment. In FY2015, TSA realigned the VIPR program with Surface Transportation Security Inspectors. VIPR deployments are coordinated through TSA's joint coordination center, located at TSA headquarters in Arlington, VA. The VIPR program uses threat and vulnerability assessments of transportation infrastructure developed by TSA's Office of Transportation Sector Network Management as guidance to inform VIPR field operations regarding the prioritization and scheduling of deployments.

Authorization and Appropriation

Initially, VIPR teams were deployed under TSA's broad general authority promulgated in the Aviation and Transportation Security Act (P.L. 107-71) to protect against threats to all modes of transportation. Subsequently, the VIPR teams were specifically authorized under the Implementing the 9/11 Commission Recommendations Act of 2007 (P.L. 110-53). Section 1303 of the act allowed TSA to develop and deploy VIPR teams to augment the security of any mode of transportation at any location within the United States at times and for durations determined by TSA.[102] Under the legislation, TSA must consult with local security and law enforcement officials in jurisdictions where the VIPR teams deploy to agree upon operational protocols and collaborate on mission information as appropriate. Additionally, TSA must consult with all transportation entities affected by the deployment, including railroad carriers, air carriers, airports, bus and motor carrier operators, maritime vessel owners and operators, public transportation agencies, and transportation facility owners and operators.

According to DHS, Congress appropriated $89.7 million in FY2013, and $77.2 million in FY2014, for 37 VIPR teams. DHS requested $60.6 million for the VIPR program in FY2015, with plans to reduce the number of VIPR teams to 33 through the consolidation of previous teams.[103] Under the realignment plan, TSA proposed to transfer 257 full-time equivalent positions from Aviation Security and the Federal Air Marshals Service to Surface Transportation Security in a move to consolidate Surface Inspectors and multi-modal VIPR teams under one program. The FY2015 appropriation (see P.L. 114-4) for surface transportation security inspectors was set

[102] 6 U.S.C. §1112.

[103] DHS is also proposing to consolidate funding for the VIPR program under TSA's Surface Transportation Security appropriation, whereas it had previously been funded from three different sources, the Federal Air Marshals (FAMS), Aviation Security, and Surface Transportation appropriations. See, Department of Homeland Security, *FY2015 Congressional Budget Justification*, Transportation Security Administration, Surface Transportation Security, Budget Request and Supporting Information, pp. 23-25, at http://www.dhs.gov/publication/congressional-budget-justification-fy-2015.

at $3 million less than the request and TSA was directed to further reduce the number of VIPR teams to 31.

Examples of Past Use in Disaster Response Operations

VIPR teams are often deployed to specific high-profile events that may be targeted by terrorist groups and to key transportation facilities based on threat assessments and through random targeting in order to provide an element of unpredictability to potentially disrupt terrorist activities. VIPR teams thus are intended to operate primarily as a deterrent rather than a critical incident response resource. DHS estimates that the teams conducted over 15,260 actual operations in FY2013, though almost entirely as a deterrent—not as a response to real incidents.[104]

In the context of disaster response operations, the VIPR teams may provide DHS with a coordinated, targeted surge capability to respond to escalating threats or specific incidents, including natural disasters and terrorist attacks, by deploying law enforcement and security screening assets to transportation facilities.

Historically, VIPR teams have concentrated on surface modes, particularly transit systems and intercity rail. TSA estimated that more than 10,000 of the FY2013 operations were in surface modes of transportation, of which about 9,000 were in mass transit. Following the November 2013 shooting incident at LAX, however, TSA modified its VIPR deployment strategy to split deployments roughly evenly between surface and aviation modes. Subsequently, the realignment of VIPR teams in FY2015 has resulted in a formal split between aviation operations and other modes, with the VIPR program formally aligned with surface transportation security. Moving forward, this would suggest that VIPR teams would continue to support non-aviation modes, while FAMS, in coordination with airport law enforcement authorities, would provide critical incident response for aviation.

Protective Security Advisors (PSAs)

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Protective Security Advisors (PSAs) are field operatives that interact with state Homeland Security Advisors, state and local law enforcement officials, the owner/operators of critical infrastructure assets, and other critical infrastructure stakeholders in their district of responsibility. PSAs are part of the Office of Infrastructure Protection, in the National Protection and Programs Directorate, of DHS. As of 2015, there were 94 advisors in the field, with at least one advisor for each state and one in Puerto Rico, and 7 additional advisors at DHS headquarters.[105] In addition to establishing relationships with these stakeholders, PSAs help to inventory and evaluate critical infrastructure assets and provide DHS with situational awareness as it relates to critical infrastructure.

Purpose and Responsibilities

PSAs have three primary responsibilities—to help enhance the security of critical infrastructure assets (primarily by coordinating stakeholder requests for DHS training, grants, and vulnerability assessments), to provide advice and expertise in response to an emergency or disaster, and to

[104] Ibid.

[105] Department of Homeland Security, *FY2016 Congressional Budget Justification*, National Protection and Programs Directorate, Infrastructure Protection and Information Security, Budget Request and Supporting Information, p. 24, at http://www.dhs.gov/publication/congressional-budget-justification-fy-2016.

facilitate information sharing between state and local stakeholders and DHS. The PSA role in disaster response operations is to act as the Infrastructure Liaison between the state/local emergency operations center(s) and FEMA's Joint Field Office. In this role, PSAs can help anticipate and assess damage to the area's critical infrastructure assets, including assessing the potential for cascading effects due to interdependencies among those assets. They also can help prioritize re-entry and recovery efforts related to critical infrastructure.

Authorization and Appropriations

The Protective Security Advisors program is broadly authorized by the Homeland Security Act of 2002 (P.L. 107-296) which gave DHS the authority, among others, to "recommend measures necessary to protect the key resources and critical infrastructures of the United States in coordination with State and local government agencies and authorities, the private sector, and other entities." In addition, Presidential Policy Directive 21—Critical Infrastructure Security and Resilience, which updated and replaced the earlier Homeland Security Presidential Directive 7, assigns the Secretary of Homeland Security the responsibility of coordinating the national effort to promote the security and resilience of the nation's critical infrastructure.[106] According to DHS, the anticipated cost of the PSA program, to include the salaries and expenses of the PSAs themselves, is $33.3 million in FY2015.[107]

Examples of Past or Potential Use in Disaster Response Operations

Examples of how PSAs have been used to support disaster response operations include assisting the U.S. Army Corps of Engineers to prioritize private sector requests for generators to allow critical assets to be brought back on line more quickly, and working with Custom and Border Protection officials to organize helicopter flights to assess damage to power transmission lines. During Hurricane Sandy, 34 PSAs deployed to federal, state, and local emergency operations centers in the Northeast region to assist in the communication with critical infrastructure owners and operators, as well as to help prioritize and coordinate the restoration of critical infrastructure.[108] In general, PSAs may apply their expertise to reduce or prevent damages to critical infrastructure, thereby enabling the rapid restoration of critical systems during response operations.

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[106] Executive Office of the President, *Presidential Policy Directive 21—Critical Infrastructure Security and Resilience*, February 12, 2013, at http://www.whitehouse.gov/the-press-office/2013/02/12/presidential-policy-directive-critical-infrastructure-security-and-resil.

[107] Email correspondence with NPPD budget staff, May 1, 2015. Annual budget justification documents from DHS do not provide the salaries and benefits costs specifically for the PSAs, but instead provide those costs for the all "regional field operations." Thus, the line item programmatic costs for PSAs presented in budget documents do not include an isolated cost of salaries and expenses for the PSAs. See Department of Homeland Security, *FY2016 Congressional Budget Justification*, National Protection and Programs Directorate, Infrastructure Protection and Information Security, Budget Request and Supporting Information, pp. 21-25, at http://www.dhs.gov/publication/congressional-budget-justification-fy-2016.

[108] U.S. Congress, House Committee on Appropriations, Subcommittee on Homeland Security, *Department of Homeland Security Appropriations for 2014, Part 2*, 113th Cong., 1st sess., March 20, 2013, 82-379 (Washington: GPO, 2013), p. 661.

Department of Health and Human Services

U.S. Public Health Service Commissioned Corps[109]

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Purpose and Responsibilities

The U.S. Public Health Service (USPHS) Commissioned Corps is a branch of the U.S. uniformed services, but is not one of the armed services.[110] The Corps is based in HHS under the authority of the U.S. Surgeon General (SG), who is, in turn, under the Assistant Secretary for Health (ASH). USPHS commissioned officers are physicians, nurses, pharmacists, engineers, and other public health professionals who serve in federal agencies, or as detailees to state or international agencies, to support a variety of public health activities. Officers may, for example, conduct biomedical research at the National Institutes of Health or the Environmental Protection Agency. They may provide healthcare services at Indian Health Service facilities, or at DHS Immigration and Customs Enforcement facilities. Founded more than 200 years ago, the Corps now employs more than 6,500 health professionals.

In addition to their routine postings, Corps officers may also participate in short- or long-term deployments in support of a variety of public health activities. These activities may include domestic or international disease outbreak response, public health campaigns such as the global vaccination effort to eradicate polio, and domestic and international disaster response.[111]

A portion of USPHS commissioned officers are predesignated to participate in incident response teams under the USPHS Office of Force Readiness and Deployment.[112] These teams provide rapid deployment, incident support, applied public health, mental health, and additional capabilities.

Authorization and Appropriations

Authority for the Corps is found in Title II of the Public Health Service Act.[113] As uniformed services officers of the United States, Corps officers are subject to more stringent requirements than are civil service employees. For example, they are considered to be on call 24 hours a day, 7 days per week, unless on leave. They can be reassigned and relocated as needed, and are subject to involuntary deployment. They may be required to meet certain fitness standards, and to accept medical treatments and immunizations to assure their continued fitness. Although they are sometimes deployed to provide public health support for combat operations, they can also be armed by order of the President to serve in war or an emergency.[114] Militarization occurred most

[109] Unless otherwise noted, information in this section is drawn from HHS, USPHS Commissioned Corps, at http://www.usphs.gov/default.aspx.

[110] 5 U.S.C. §2101.

[111] Such deployments are not generally limited to USPHS commissioned officers, although some may be. HHS employees in civil service positions also typically participate in such deployments.

[112] USPHS Office of Force Readiness and Deployment, at http://ccrf.hhs.gov/ccrf/.

[113] Public Health Service Act Secs. 201-224, 42 U.S.C. §§202-233.

[114] Public Health Service Act Sec. 216, 42 U.S.C. §217.

recently during World War II.[115] USPHS commissioned officers are entitled to many military and veterans benefits.

Salaries and benefits for commissioned officers are paid by employing agencies. Additional costs for deployments, such as travel expenses, may be borne by HHS or may be reimbursed by another responsible party. For example, deployment costs are generally reimbursed from the DRF if Corps officers are deployed due to a FEMA mission assignment under authority of the Stafford Act.

When USPHS commissioned officers are deployed for the response to an incident, they become unavailable to carry out their routine duties. To remedy this, Congress has provided authority to establish a USPHS "Ready Reserve Corps," similar to the Armed Forces reserves; that is, individuals who are not necessarily federal employees, but who can be "federalized" as members of the Corps in order to augment existing personnel.[116] The HHS Secretary has not received appropriations for this purpose and to date has not established this reserve component.

Examples of Past or Potential Use in Disaster Response Operations

Deployment of Corps officers in response to disasters is common, usually but not exclusively involving teams with the Office of Force Readiness and Deployment. For example, in 2005, more than 2,400 officers were deployed for the responses to Hurricanes Katrina and Rita, for which they set up and staffed field hospitals, treated sick and injured evacuees, and conducted disease surveillance, among other tasks.[117] In 2014, Corps officers set up and ran a treatment center for Ebola patients in Liberia.[118]

Strategic National Stockpile

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Purpose and Responsibilities

The federal government maintains a supply of medicine and medical supplies to respond to a public health emergency (e.g., a terrorist attack, flu outbreak, or earthquake) severe enough to deplete local supplies. This supply, known as the Strategic National Stockpile (SNS),[119] includes antibiotics, intravenous fluids, and other medical supplies. Additionally, the SNS contains some medicines, such as anthrax and smallpox vaccines and treatments, which may not be otherwise available for public use. The SNS contains assets valued in excess of $6.3 billion.[120] The Centers

[115] Executive Order 9575, "Declaring the Commissioned Corps of the Public Health Service To Be a Military Service and Prescribing Regulations," 10 *Federal Register* 7895, June 29, 1945. See also John Parascandola, "History of the Militarization of the PHS Commissioned Corps," *Commissioned Corps Bulletin*, vol. XV, no. 10 (October 2001), p. 5, at http://dcp.psc.gov/ccbulletin/articles/CCBulletin_02_2014.aspx.

[116] Public Health Service Act Sec. 203, 42 U.S.C. §204. This authority was provided in the Patient Protection and Affordable Care Act (ACA), the health reform law, P.L. 111-148, as amended, section 5210, March 23, 2010.

[117] Commissioned Corps of the U.S. Public Health Service, "Commissioned Corps in Action," at http://www.usphs.gov/newsroom/features/action/default.aspx.

[118] Gregg Zoroya, "U.S. Uniformed Officers to Treat Ebola Patients in Liberia," *USA Today*, November 6, 2014.

[119] Unless otherwise cited, information in this section is available at Centers for Disease Control and Prevention, Strategic National Stockpile, at http://www.cdc.gov/phpr/stockpile/stockpile.htm.

[120] Centers for Disease Control and Prevention, *Justification of Estimates for Appropriation Committees Fiscal Year 2016*, p. 368, at http://www.cdc.gov/fmo/.

for Disease Control and Prevention (CDC) in the Department of Health and Human Services (HHS) manages the stockpile.

By statute, both the Secretary of HHS and the Secretary of Homeland Security may deploy the SNS.[121] CDC guidelines allow governors or their representatives to request supplies from the SNS.[122] The CDC intends the initial deliveries from the SNS to arrive in the affected area within 12 hours of the decision to deploy, with additional deliveries following later as needed.

Critical to the successful use and deployment of the SNS commodities is the CDC's Stockpile Service Advance Group (SSAG) and other federal personnel devoted to managing current supplies and procuring future resources. The CDC's SSAG is a team of technical experts that helps state and local authorities properly use and maintain the commodities for the incident.[123] Once delivered, local authorities assume stewardship of the supplies, although the federal government retains ownership. The SNS supplies are provided free of charge; however, local authorities must pay for costs associated with storing locally, distributing, and dispensing of the supplies.

Authorization and Appropriations

In 1999, Congress required the CDC to create a pharmaceutical and vaccine stockpile.[124] The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (P.L. 107-188) changed the name of the stockpile from the National Pharmaceutical Stockpile to the current SNS. This act also further defined the contents and purpose of that stockpile to include

> drugs, vaccines and other biological products, medical devices, and other supplies in such numbers, types, and amounts as are determined by the [HHS] Secretary to be appropriate and practicable, taking into account other available sources, to provide for the emergency health security of the United States, including the emergency health security of children and other vulnerable populations, in the event of a bioterrorist attack or other public health emergency.[125]

The Homeland Security Act of 2002 (P.L. 107-296) transferred budget authority for the SNS to the Department of Homeland Security (DHS). The Project BioShield Act of 2004 (P.L. 108-276) transferred this authority back to HHS. The Pandemic and All-Hazards Preparedness Reauthorization Act of 2013 (P.L. 113-5) reauthorized the SNS through FY2018. Currently, the Division of the Strategic National Stockpile in the CDC Office of Public Health Preparedness administers the stockpile program.[126] Funding levels for the SNS reflect maintenance costs as well as procurements, for which annual needs vary. **Table 2** displays recent SNS funding.

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[121] 42 U.S.C. §247d-6b(a)(2)(F) and 42 U.S.C. §247d-6b(a)(2)(G).

[122] Todd Piester, Branch Chief, Division of Strategic National Stockpile, CDC, "Strategic National Stockpile Overview," CDC Clinician Outreach and Communication Activity conference call, July 1, 2008, at http://www.bt.cdc.gov/coca/summaries/SNS070108.asp.

[123] In addition, CDC has a Receiving, Staging and Storing (RSS) Task Force available to assist in the transportation and logistical processing of the SNS, and Federal Medical Station (FMS) Strike Team to help community officials re-supply and recover medical commodities after an incident.

[124] H.Rept. 105-825, to accompany Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999 (P.L. 105-277).

[125] Public Health Security and Bioterrorism Preparedness and Response Act of 2002 §121 (P.L. 107-188).

[126] Department of Health and Human Services, Centers for Disease Control and Prevention, "Strategic National Stockpile," at http://www.cdc.gov/phpr/stockpile.htm.

Table 2. Strategic National Stockpile Appropriations, FY2010-FY2015

(in millions of dollars)

FY2010	FY2011	FY2012	FY2013	FY2014	FY2015
$595.661	$591.001	$533.792	$477.577	$549.343	$534.343

Source: CDC, *Justification of Estimates for Appropriation Committees Fiscal Year 2016,* p. 354, at http://www.cdc.gov/fmo/.

Notes: The FY2013 amount reflects rescission and sequestration. Amounts for FY2013 and later reflect a CDC budget accounting change and thus are not directly comparable to amounts in earlier fiscal years.

Examples of Past or Potential Use in Disaster Response Operations

The SNS is configured to be deployed in a flexible manner. Some of the stockpile is held in ready-to-transport containers called Push Packs. These contain pharmaceuticals, antidotes, and medical supplies designed to respond rapidly to a wide variety of needs in the early hours of an event when the precise nature of the emergency may still not be known. Push Packs are positioned in strategically located, secure warehouses ready for immediate deployment to a designated site within 12 hours of the federal decision to deploy SNS assets.

Other parts of the stockpile are designed to arrive between 24 and 36 hours after a request and can be specifically tailored to respond to a defined need or to supplement deployed Push Packs. Some of these assets are maintained as vendor-managed inventory, that is, caches of commercial products maintained in rotation by the manufacturers, in order to assure freshness. Products with limited markets may be stored and maintained in federal caches.

The SNS is often deployed in response to major disasters, and SNS assets may be pre-positioned for National Special Security Events and hurricanes. For example, the CDC deployed assets from the SNS to help 62 jurisdictions respond to the 2009 H1N1 influenza pandemic. The stockpile was able to replenish critically short local supplies of antiviral medication and N95 respirators.[127] In response to the 2014 Ebola outbreak, the SNS increased its supply of personal protective clothing that could be rapidly deployed to hospitals caring for Ebola patients.[128]

U.S. Department of Agriculture

Forest Service Firefighting Assets

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Purpose and Responsibilities

The Forest Service (FS)—an agency of the U.S. Department of Agriculture (USDA)—may assist federal and state efforts during and following a disaster.[129] Many times, this assistance stems from the agency's wildland fire management expertise. FS emergency response assistance is delivered

[127] Centers for Disease Control and Prevention, *Justification of Estimates for Appropriation Committees Fiscal Year 2011*, p. 295.

[128] http://www.cdc.gov/media/releases/2014/p1107-ebola-ppe.html.

[129] The FS is granted such authority under the Stafford Act (42 U.S.C. §5121 et seq.), upon a request from FEMA. Disaster assistance as discussed in this report should not be confused with emergency wildfire assistance, which the federal government also provides.

in many forms, including firefighting support, fire suppression and assistance planning, command and control support, emergency road clearing, logistics facility support, radio/communications system support, and cache support for mass care shelters.

FS disaster response assistance may be carried out with the use of wildfire suppression crews and Incident Management Teams (IMT), among other means. A wildfire suppression crew generally consists of 18-20 career or temporary agency employees trained as professional wildland firefighters. There are five different levels of wildfire suppression crews: Type 1 Interagency Hotshot Crews (IHC), Type 1, Type 2-Initial Attack (IA), Type 2, and Type 3. A Type 1 IHC is the most intensively trained crew, with the highest level of expertise and fitness than the other types of crews, and are generally placed in the most rugged terrain on the most active and difficult areas on wildfires.[130] There are 113 Interagency Hotshot Crews, with the Forest Service sponsoring the largest number of crews (89), although the Bureau of Land Management, the Bureau of Indian Affairs, and the National Park Service also have Interagency Hotshot Crews.[131] IHCs are a "national shared resource," meaning that they may be assigned to work outside of their sponsoring agency and are coordinated through the National Interagency Fire Center.[132] There are a small number of crews that are nonfederal, including crews operated by states and local governments. All crews, federal and nonfederal, must meet the standard for interagency hotshot crew operations and be certified in order to be recognized as an IHC.[133] In addition to IHCs, the other suppression crew levels may also be sent to provide disaster assistance.

An IMT provides qualified personnel to manage serious, complex, and costly incidents. Management entails coordinating the personnel, equipment, and supplies necessary to address significant incidents, and providing information to the media and the public. Similar to the IHCs, there are different levels of federally-sponsored IMTs: Type 1 IMTs, Type 2 IMTs, and the National Incident Management Organization (NIMO) IMTs.[134]

Authorization and Appropriations

Under the National Response Framework (NRF), the FS serves as the co-coordinator and primary agency for Emergency Support Function (ESF) #4—firefighting.[135] ESF #4 provides federal support for the detection and suppression of wildland, rural, and urban fires resulting from, or occurring coincidentally with, an all-hazard incident requiring a coordinated national response for assistance.[136] As the ESF #4 primary agency, the FS coordinates federal firefighting activities, and

[130] U.S. Forest Service, *Fire and Aviation Management: About Handcrews*, at http://www.fs.fed.us/fire/people/handcrews/about_handcrews.html.

[131] A list of National Interagency Hotshot Crews is available at http://www.fs.fed.us/fire/people/hotshots/IHC_index.html

[132] Department of the Interior, Department of Agriculture, *Standards for Interagency Hotshot Crew Operations*, February 14, 2011.

[133] Department of the Interior, Department of Agriculture, *Standards for Interagency Hotshot Crew Operations*, February 14, 2011.

[134] For more information on IMTs and a proposal that could alter how wildfire incidents are managed, see National Wildfire Coordinating Group (NWCG), *Evolving Incident Management: A Recommendation for the Future*, October 17, 2011. The NWCG reported on September 23, 2013, that there will be a multi-year transition from Type 1 IMTs and Type 2 IMTs to Complex IMTs.

[135] The other co-coordinator for ESF#4 is the U.S. Fire Administration.

[136] U.S. Department of Homeland Security, *National Response Framework*, May 2013; U.S. Forest Service, U.S. Department of the Interior, and U.S. Fire Administration, *Reference Guide Emergency Support Function #4 Firefighting*, December 2013.

provides personnel, equipment, and supplies in support of local, state, tribal, territorial, and insular area agencies involved in wildland, rural, and urban firefighting operations.[137] The FS works closely with at least six other federal agencies. For instance, the Environmental Protection Agency identifies critical water systems that require priority restoration for firefighting. Further, the State Department occasionally coordinates with foreign governments to identify and transfer firefighting assistance assets and resources to the United States. Expenditures made by the FS to respond to such disasters is dependent on the size and type of disaster.

The FS has several broad authorities that allow it to manage wildfires on federal, state, and private lands, regardless of whether the agency is responding to a disaster declaration. One of the primary statutes authorizing the FS to manage wildfires on National Forest System (NFS) lands is the Organic Administration Act of 1897.[138] Further, the FS has a number of cooperative agreements with states and other countries (e.g., Canada, Mexico, Australia, and New Zealand) that allow the agency to provide wildfire protection,[139] to perform approved severity activities, and to respond to states of emergency or disaster under FEMA authorities. Additionally, the FS—as outlined in an MOU with the USDA Farm Service Agency—assists with the Emergency Forest Restoration Program (EFRP), to help the owners of non-industrial private forests restore forest conditions after damage caused by natural disasters.[140] The FS received wildfire management appropriations of more than $2 billion dollars for each of the last five years.[141]

Examples of Past or Potential Use in Disaster Response Operations

In addition to being used regularly to fight fires, these assets also support the response to other hazards. For example, following Hurricane Sandy, the FS sent 10 IMTs and 41 interagency wildfire suppression crews to assist with emergency response.[142] Approximately 1,100 personnel, 950 of which were FS employees, were stationed throughout five states in the northeast that were affected by the hurricane. Two of the primary activities carried out by the FS were emergency road clearing and support for power restoration. The FS deployed more than 100 chainsaw crew teams to storm-affected states to assist with debris removal and road clearance, clearing fallen trees from more than 900 miles of road for power personnel and search and rescue missions.[143] Other tasks included assisting at FEMA logistics facilities that provide water and other commodities needed to sustain life, providing communications equipment and support to local

[137] U.S. Forest Service, *Fire and Aviation Management Briefing Paper*, May 6, 2013.

[138] 16 U.S.C. §551.

[139] The agreements are available in chapter 40 of the National Interagency Coordination Center 2014 National Mobilization Guide.

[140] EFRP is codified in 16 U.S.C. Section 2206 and is permanently authorized subject to appropriations. For more information on EFRP, see CRS Report R42854, *Emergency Assistance for Agricultural Land Rehabilitation*, by Megan Stubbs.

[141] For more information, see CRS Report R43077, *Wildfire Management: Federal Funding and Related Statistics*, by Katie Hoover and Kelsi Bracmort. In addition to annual WFM appropriations, the FS may also receive supplemental appropriations for WFM.

[142] U.S. Forest Service, "US Forest Service Wildland Firefighters and Interagency Crews Mobilized to Assist with Hurricane Sandy Response," press release, November 1, 2012, and update November 7, 2012; U.S. Forest Service, "Update: US Forest Service Wildland Firefighters and Interagency Crews Mobilized to Assist with Hurricane Sandy Response," press release, November 7, 2012; and email correspondence with the U.S. Forest Service, June 20, 2013.

[143] Federal Emergency Management Agency, *Hurricane Sandy: Timeline*, at http://www.fema.gov/hurricane-sandy-timeline; and email correspondence with the U.S. Forest Service, June 20, 2013.

emergency response agencies, and supporting command and control operations for emergency response agencies.[144]

Department of Defense

The Department of Defense (DOD) has a broad range of capabilities that can be deployed in support of civil authorities in emergency situations, including transportation assets, medical personnel and supplies, security forces, and communications equipment. The National Response Framework (NRF) and DOD refer to this type of assistance as Defense Support of Civil Authorities (DSCA).[145] DSCA is defined by DOD as

> Support provided by US Federal military forces, Department of Defense civilians, Department of Defense contract personnel, Department of Defense component assets, and National Guard forces (when the Secretary of Defense, in coordination with the governors of the affected states, elects and requests to use those forces in Title 32, United States Code, status) in response to requests for assistance from civil authorities for domestic emergencies, law enforcement support, and other domestic activities, or from qualifying entities for special events.[146]

DOD does not provide assets in response to requests from civil authorities in all cases. For example, DOD might decline to provide certain assets if doing so would degrade its ability to fulfill the department's national security obligations. Before providing assets to support civil authorities, DOD evaluates each request based on the following six criteria:

> (1) Legality (compliance with laws);
>
> (2) Lethality (potential use of lethal force by or against DoD Forces);
>
> (3) Risk (safety of DoD Forces);
>
> (4) Cost (including the source of funding and the effect on the DoD budget);
>
> (5) Appropriateness (whether providing the requested support is in the interest of the Department); and
>
> (6) Readiness (impact on the Department of Defense's ability to perform its other primary missions).[147]

The U.S. Army Corps of Engineers, an agency within the Department of Defense, is discussed later in this report.

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[144] National Interagency Fire Center, "Firefighters Mobilize to Assist with Hurricane Sandy Response," press release, October 31, 2012.

[145] In the past, DOD referred to DSCA by other names including Civil Support (CS) and Military Assistance to Civil Authorities (MACA). DOD regulatory guidance for DSCA is contained in DOD Directive 3025.18, *Defense Support of Civil Authorities*, December 29, 2010 (incorporating change 1, September 21, 2012), at http://www.dtic.mil/whs/directives/corres/pdf/302518p.pdf, and the joint doctrinal publication on this topic is Joint Publication 3-28, *Defense Support of Civil Authorities*, July 31, 2013, at http://www.dtic.mil/doctrine/new_pubs/jp3_28.pdf.

[146] Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, as amended through February 15, 2014, at http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.

[147] DOD Directive 3025.18, *Defense Support of Civil Authorities*, December 29, 2010 (incorporating change 1, September 21, 2012), paragraph 4(e), at http://www.dtic.mil/whs/directives/corres/pdf/302518p.pdf.

General Purpose Forces

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Purpose and Responsibilities

The Armed Forces are organized, trained, and equipped primarily to conduct prompt and sustained combat operations on land, sea, and air;[148] and this is, in practice, the way in which they are principally employed. However, many units of the Armed Forces possess capabilities that can be of use during disaster response missions. For example, military aircraft that transport soldiers, rations, and ammunition during combat operations can also transport doctors, food, and medical supplies to a disaster zone.

Authorization

The U.S. Armed Forces, including the Reserve Components, are governed by Title 10 of the U.S. Code. The sections of Title 10 most relevant to the organization and employment of U.S. military forces are Chapter 2 (Department of Defense), Chapter 5 (Joint Chiefs of Staff), Chapter 6 (Combatant Commands), Chapter 303 (Department of the Army), Chapter 503 (Department of the Navy), and Chapter 801 (Department of the Air Force). Due to its unique status as both a federal reserve component and the organized militia of the states, additional statutory authority for the National Guard is codified in Title 32 of the U.S. Code.

All active component units are organized, trained, equipped, and employed under the authorities contained in Title 10. These forces are always under the operational control of the President of the United States. The chain of command for active component forces extends down through the Secretary of Defense, to the Combatant Commander (for example, the Commander of United States Northern Command or USNORTHCOM), to the Joint Task Force Commander (for example, the Commander of Joint Task Force—Civil Support, a subordinate to USNORTHCOM), and then to lower echelon commanders.

Reserve component forces other than the National Guard are also governed exclusively by the provisions of Title 10 and are organized to meet the requirements of the military service to which they belong (for example, Army Reserve units are designed to meet the requirements of the Army). These forces are always under the operational control of the President of the United States as well.

National Guard forces are part of the organized militia of their respective state or territory. Simultaneously, they constitute a reserve component of the Army or Air Force and are "organized, armed, and equipped wholly or partly at federal expense."[149] They are structured to meet the requirements of the Department of the Army, in the case of the Army National Guard, and the Department of the Air Force, in the case of the Air National Guard. Owing to this unique aspect of the National Guard as both a state and a federal organization,[150] it may be employed under state law, under Title 10 of the U.S. Code, or under Title 32 of the U.S. Code.

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[148] See 10 U.S.C. §§3062, 5063, and 5062.

[149] 10 U.S.C §§101(c)(2)(C) and (c)(4)(C); 32 U.S.C. §§101(4)(C) and (6)(C).

[150] The National Guard of the United States is made up of 54 separate National Guard organizations: one for each state, and one each for Puerto Rico, Guam, the U.S. Virgin Islands, and the District of Columbia. While the District of Columbia National Guard is an exclusively federal organization and operates under federal control (Title 10) at all times, the other 53 National Guards operate as state or territorial organizations most of the time. In this capacity, each of these 53 organizations is identified by its state or territorial name (e.g., the California National Guard or the Puerto Rico National Guard), and is controlled by its respective governor.

- As members of the militia of their state or territory, National Guardsmen can be called up by their governor for full-time duty. When employed in this capacity, referred to as *state active duty* (SAD), National Guardsmen are considered state or territorial employees, not active duty military. Typical missions performed under SAD include responding to disasters and civil disorders.
- As members of the Reserve Component, National Guardsmen can be called to *federal active duty*, also referred to as *Title 10 status*. When this happens, control of the affected units and personnel passes from the governor to the President of the United States. When in federal service, Guard units and personnel typically perform military training or participate in military operations.
- A third form of duty for National Guardsmen involves duty under state control but with pay and benefits provided by the federal government. This is sometimes referred to as *Title 32 status* in reference to the relevant part of the U.S. Code. Title 32 (T32) status is typically used for training, but it can also be used for other duties, including disaster response.

Thus, a distinctive feature of National Guard units is that, while organized and largely funded by the federal government, they can be employed by either governors or the President. Typically, the chain of command for National Guard forces in SAD or T32 status extends from the Governor to the Adjutant General (the highest ranking National Guard officer in the state or territory) to lower echelon National Guard commanders. While under the control of a governor, National Guard personnel are not subject to the restrictions of the Posse Comitatus Act (that is, they can perform law enforcement functions). If National Guard forces are ordered to federal active duty (Title 10), control is transferred from the governor to the President and they then become subject to the restrictions of the Posse Comitatus Act.

Examples of Past or Potential Use in Disaster Response Operations

The most notable use of the Armed Forces to respond to a disaster occurred as a result of Hurricane Katrina in 2005. Roughly 72,000 military personnel participated in the response, including about 50,000 National Guard personnel serving in a Title 32 status. Some of the major activities conducted by these forces included search and rescue; evacuations from flooded areas and evacuations to medical treatment facilities; transportation and distribution of water, ice, food, and fuel; crowd control; local security; debris removal; medical treatment; and restoration of flood control systems. More recently, the Armed Forces assisted with the response to Hurricane Sandy. Some of the major activities conducted by active, reserve, and National Guard personnel in response to Sandy included removal of water from flooded areas and buildings; transportation and distribution of water, food, and fuel; search and rescue; security; provision of temporary shelter and blankets; generation and restoration of power; and debris removal.

Based on the tasks contained in the National Response Framework's Emergency Support Function Annexes, potential uses of DOD assets in disaster response operations are listed in the text box below.

Some Potential Uses of DOD Assets Under the National Response Framework[151]

- **Transportation:** Providing military transportation capacity to move essential resources; providing assets to complement temporarily degraded or disrupted air navigation services; providing support in the emergency operation and restoration of inland waterways, ports, and harbors, including dredging operations; restoring transportation infrastructure.
- **Communications:** Providing communications resources and capabilities.
- **Public Works and Engineering:** Providing expertise and construction management resources and support; conducting specialized salvage/wreck removal operations.
- **Firefighting:** Conducting firefighting activities on DOD installations and supporting firefighting operations on nonmilitary lands with personnel, equipment, and supplies; assisting urban and rural firefighting forces to obtain heavy equipment and/or demolition services as needed to suppress incident-related fires.
- **Mass Care, Emergency Assistance, Temporary Housing:** Providing construction, engineering, and project management expertise and support for temporary housing and sheltering; inspecting mass care shelter sites to ensure suitability and accessibility of facilities; constructing temporary shelter facilities in the affected area.
- **Logistics:** Providing planning support, subsistence, administrative supply, petroleum product, engineering and construction supply, water and mobile units, medical material, telecommunications management, and transportation management support; providing bottled and bulk drinking water, construction materials, and engineering services; providing commodities distribution assistance and expertise to include, points of distribution training and state-level project management support for commodities missions; hauling, installing, operating, and maintaining generators for critical public facilities.
- **Public Health and Medical Services:** Conducting medical evacuations; coordinating patient reception, tracking, and management of patients evacuated on DOD assets; deploying medical, surgical, and behavioral health personnel for casualty clearing and staging, patient management, and treatment; augmenting civilian hospital staff and deployable federal teams; deploying chemical, biological, radiological, and nuclear medical subject matter experts for technical consultation and medical support; providing epidemiological and occupational health support, telemedicine, and other specialized medical support; providing military medical personnel to assist in the protection of public health; providing available DOD medical supplies and materiel for use at points of distribution, hospitals or clinics, or medical care locations; assisting local, state, tribal, territorial, and insular area officials in the provision of emergency medical, surgical, and behavioral healthcare; providing public health and medical surveillance, laboratory diagnostics, and confirmatory testing.
- **Search and Rescue (SAR):** Coordinating facilities, resources, and special capabilities to conduct and support air, land, and maritime SAR; coordinating and managing the satellite imagery; providing expert analysis of imagery; deploying specially trained and equipped structural engineers during structural collapse incidents and other disaster response missions; providing technical support and advice to assess damage, mitigate hazards, and enable rescue and lifesaving operations.
- **Oil and Hazardous Materials Response:** Providing response assistance for incidents involving contaminated debris, including waste sampling, classification, packaging, transportation, treatment, demolition, storm water management, and disposal; providing technical, operational, and emergency support in the ocean engineering disciplines of marine salvage, pollution abatement, and diving services.
- **Agriculture and Natural Resources:** Providing military specialists trained in foreign animal disease diagnosis, epidemiology, microbiology, immunology, entomology, pathology, and public health.
- **Energy:** Conducting power system stabilization and reestablishment activities.

[151] The text in this shaded box is an edited version of DOD "Actions" and "Functions" listed in the National Response Framework Emergency Support Function Annexes 1 through 12, all of which are available here: http://www.fema.gov/national-preparedness-resource-library. Some of the listed actions and functions are the responsibility of the Army Corps of Engineers, discussed in a separate section of this report.

Chemical, Biological, Radiological, and Nuclear (CBRN) Response Forces[152]

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Purpose and Responsibilities

The Department of Defense has forces organized, trained, and equipped to respond to major domestic CBRN incidents, as well as general purpose forces assigned to support CBRN response efforts. These units make up the DOD CBRN Response Enterprise (CRE). The CRE includes the Defense CBRN Response Force (DCRF), two Command and Control CBRN Response Elements (C2CRE), and 10 regionally based National Guard Homeland Response Forces (HRFs), which are built around state-based National Guard CBRN Enhanced Response Force Packages (CERFPs) and Weapons of Mass Destruction Civil Support Teams (WMD-CSTs).[153] Additionally, other units within DOD have significant CBRN response capabilities, such as the Marine Corps' Chemical Biological Incident Response Force (some elements of which are part of the DCRF), the Defense Threat Reduction Agency's Consequence Management Advisory Teams, and the U.S. Army's CBRNE Command. All of these units are discussed below. All of these units can be used for disaster response missions other than CBRN-related ones if the situation warrants.

Defense CBRN Response Force (DCRF)

The DCRF is composed of various military units, which together have approximately 5,200 active component personnel. When activated, its capabilities include command and control, CBRN assessment, search and rescue, decontamination, emergency medical care, security, engineering, logistics, transportation, aviation lift, and air and ground medical evacuation. On order, it deploys in phases, with the first "force package" of approximately 2,100 personnel meant to begin deployment within 24 hours of notification and the second force package of approximately 3,100 personnel meant to begin deployment within 48 hours of notification. If activated, the DCRF would include elements of the Marine Corps' Chemical Biological Incident Response Force (CBIRF), discussed below.

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[152] The acronym CBRN is used today, although previously the acronym CBRNE was used in relation to many of these units. The additional "E" stands for high yield explosives. CBRNE Command, discussed later, has retained the "E" in its name because it includes explosive ordnance disposal units.

[153] DOD's CBRN response structure was changed in 2011-2012 in an attempt to address gaps in capabilities that were identified prior to and during the 2010 Quadrennial Defense Review. Prior to the change there were three overarching constructs for DOD CBRN response forces: CBRN Consequence Management Response Forces (CCMRF), National Guard CBRN Enhanced Response Force Packages (CERFPs), and National Guard Civil Support Teams (CST). The previous organizations were assessed to be less than ideal in terms of response time, lifesaving capabilities in the early arriving forces, and the ability to respond to a catastrophic event or multiple simultaneous events. The Quadrennial Defense Review Report explained this restructuring as follows:

> [T]he Department will begin restructuring the original CBRNE Consequence Management Response Force (CCMRF), to increase its ability to respond more rapidly to an event here at home. To address the potential for multiple, simultaneous disasters, the second and third CCMRFs will be replaced with smaller units focused on providing command and control and communications capabilities for Title 10 follow-on forces. Complementing the evolution of the first CCMRF, the Department also will draw on existing National Guard forces to build a Homeland Response Force (HRF) in each of the ten Federal Emergency Management Agency (FEMA) regions. These ten HRFs will provide a regional response capability; focus on planning, training and exercising; and forge strong links between the federal level and state and local authorities.

Department of Defense, *Quadrennial Defense Review Report*, February 2010, p. 19, at http://www.defense.gov/qdr/images/QDR_as_of_12Feb10_1000.pdf.

Command and Control CBRN Response Elements (C2CRE)

Each C2CRE has approximately 1,500 personnel. In addition to having a core element that can provide immediate response capabilities, it is designed to provide command and control and logistical support for up to 20,000 follow-on forces. The intent of this is to allow it to provide additional support to the DCRF for a single catastrophic event, or to be used separately in the case of multiple events. It is meant to begin deployment within 96 hours of notification, although its posture can be adjusted by the commander of U.S. Northern Command.

Homeland Response Force (HRF)

The 10 HRFs are regionally oriented National Guard units aligned with each of the 10 FEMA regions. Each HRF is made up of about 577 National Guard personnel and is made up of a command and control element (180 personnel), a CBRN Assistance and Support Element (CASE; 200 personnel), and a task force element (197 personnel). The command and control element can control additional National Guard CERFPs and WMD-CSTs. The CASE provides site security, force protection, and assistance with the movement of casualties. The task force element has the same structure and capabilities as a CERFP, discussed below. HRFs are expected to be ready to deploy six hours after notification.

CBRNE Enhanced Response Force Package (CERFP)[154]

National Guard CERFPs provide the following capabilities: "... incident site search of collapsed buildings and structures, conducting rescue tasks to extract trapped casualties, providing mass decontamination, performing medical triage and initial treatment to stabilize patients for transport to medical facilities ... and the recovery of CBRN incident fatalities."[155] At present, there are 17 CERFPs. Each CERFP is made up of 197 personnel, drawn from existing National Guard units, who are assigned to one of five teams within the CERFP: command and control, search and extraction, decontamination, medical, and fatalities search and recovery. They are meant to begin deployment within six hours of notification.

Weapons of Mass Destruction—Civil Support Teams (WMD-CST)

The mission of the National Guard WMD-CSTs (sometimes referred to as Civil Support Teams or CSTs) is

> To support civil authorities at a domestic site during specified events, which include use or threatened use of a weapon of mass destruction; terrorist attack or threatened terrorist attack; intentional or unintentional release of nuclear, biological, radiological, or toxic or poisonous chemicals; natural or manmade disasters in the United States that result, or could result, in the catastrophic loss of life or property by identifying hazards, assessing current and projected consequences, advising on response measures, and assisting with appropriate requests for additional support.[156]

At present there are 57 WMD-CSTs, each made up of 22 National Guard personnel who serve on full-time duty under Title 32. Each team is divided into six sections: command, operations, communications, administration/logistics, medical/analytical, and survey. Team members receive over 600 hours of specialized training and are all certified as hazardous materials technicians. WMD-CSTs are required to deploy within 90 minutes of notification and can conduct continuous

[154] See footnote 152. While the official title still includes the acronym CBRNE (rather than CBRN), CERFPs do not have explosive ordnance disposal capabilities. They can identify chemical precursors of explosives.

[155] National Guard Fact Sheet at http://www.nationalguard.mil/Portals/31/Features/Resources/Fact%20Sheets/pdf/CBRNE-CERFP%20-%20March2013.pdf.

[156] According to National Guard Bureau staff, this mission statement has been formally approved and will be published shortly in a new manual, Army Techniques Publication 3-11.46. See also 10 USC 12310(c).

operations for 72 hours without additional support. Each WMD-CST deploys with vehicles equipped with sophisticated communications capabilities and laboratory equipment to facilitate analysis of chemical, biological, and radiological hazards.

Marine Corps' Chemical Biological Incident Response Force (CBIRF)

The CBIRF has a mission to "respond to a credible threat of a Chemical, Biological, Radiological, Nuclear, or High Yield explosive (CBRNE) incident in order to assist local, state, or federal agencies and Unified Combat Commanders in the conduct of consequence management operations,"[157] and consists of about 500 Marines. Its capabilities include command and control, detection and identification, search and extraction, personnel decontamination, technical rescue (for example, collapsed structure or vehicle rescue), medical, explosive ordnance disposal, and logistics. The CBIRF has a 12-person assessment team on standby to begin deployment within one hour of notification, a 130-person team that is expected to begin deployment within two hours, and another 130-person team that is meant to begin deployment within six hours. Elements of the CBIRF would fall under the DCRF if it were activated.

Defense Threat Reduction Agency Consequence Management Advisory Teams (CMAT)

The Defense Threat Reduction Agency (DTRA) has approximately a dozen CMATs. These CMATs "provide task-organized, deployable, and technical expertise support, advice, and hazard prediction assistance for the U.S. Department of Defense and other Federal agencies during all phases of accidents or incidents of a chemical, biological, radiological or nuclear nature."[158] They may also have specialists with expertise in other areas, such as radiobiology. When needed, CMATs augment the DCRF.

U.S. Army CBRNE Command

CBRNE Command, formerly called the 20th Support Command (CBRNE), is a subordinate element of the U.S. Army's Forces Command. Its mission is to provide "highly-trained, properly-equipped, disciplined and well led forces to counter the entire range of chemical, biological, radiological, nuclear, and explosive ordnance hazards for our nation. It consolidates command and control of chemical, biological, radiological, nuclear, and high-yield explosive assets under one operational headquarters"[159] and contains three major subordinate organizations: the 48th Chemical Brigade, 52nd Ordnance Group (Explosive Ordnance Disposal), and the 71st Ordnance Group (Explosive Ordnance Disposal). The 20th Support Command capabilities include the ability to "operate in a variety of environments, from urban areas to austere sites across the spectrum of military operations. CBRNE operations detect, identify, assess, render-safe, dismantle, transfer, and dispose of unexploded ordnance, improvised explosive devices, and other CBRNE hazards."[160] The 20th Support Command is not a part of the DCRF. However, in the event of a significant CBRN incident, it could be tasked to provide support to a DCRF or other CBRN response unit.

Authorization

In general, DOD's CBRN response forces do not operate under special statutory authority, but under the general statutory authority for the organization, training, and employment of military

[157] Chemical Biological Incident Response Force website, at http://www.cbirf.marines.mil/.

[158] Defense Threat Reduction Agency website, at http://www.dtra.mil/Missions/ConsequenceManagement/ConsequenceManagementHome.aspx.

[159] U.S. Army webpage for the 20th Support Command, at http://www.army.mil/20thcbrne.

[160] Ibid.

forces found in Title 10 of the U.S. Code and, for National Guard forces, under the provisions of Title 32 and state law (see previous section on general purpose forces). However, there are two exceptions to this. Specific statutory provisions are tied to both the Marine Corps Chemical Biological Incident Response Force (now part of the DCRF) and the National Guard WMD-CSTs.

Marine Corps Chemical Biological Incident Response Force

Section 2314 of Title 50, enacted in 1996, directed the Department of Defense to establish at least one CBRN rapid response team. Subsection (a) of this statute originally stated:

> Department of Defense Rapid Response Team—The Secretary of Defense shall develop and maintain at least one domestic terrorism rapid response team composed of members of the Armed Forces and employees of the Department of Defense who are capable of aiding Federal, State, and local officials in the detection, neutralization, containment, dismantlement, and disposal of weapons of mass destruction containing chemical, biological, or related materials.[161]

This statute was fulfilled by the Marine Corps Chemical Biological Incident Response Force, which became operational in 1996. A subsequent amendment replaced the phrase "or related materials" with "radiological, nuclear, and high-yield explosives."[162]

National Guard WMD-CSTs

The National Guard's WMD-CSTs originated as part of a DOD proposal to enhance domestic preparedness against weapons of mass destruction, but Congress has provided statutory language to expand the number of teams and specify their location.

In 1998, DOD requested funding from Congress to establish 10 National Guard Rapid Assessment and Initial Detection (RAID) teams, the forerunners of WMD-CSTs. This funding was provided in P.L. 105-277, the Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999. The conference report accompanying the act provided that the funds were to be used to establish the teams and to "establish and equip small organizations in each of the 44 states not receiving an initial RAID element in 1999 to provide limited chemical/biological response capabilities…."[163] The following year, the conference report accompanying the FY2000 Defense Appropriations Act noted that "The conferees support the establishment of 17 Rapid Assessment and Initial Detection (RAID) teams. Accordingly, the conferees provided funding for an additional 198 Army National Guard and 66 Air National Guard full-time (AGR) personnel to facilitate this mission."[164]

The next year, RAID teams were renamed Weapons of Mass Destruction Civil Support Teams. H.Rept. 106-644, the Appropriations Committee report on the Defense Appropriations Act for FY2001, used this new terminology when it stated "The Department of Defense has currently fielded 10 Weapons of Mass Destruction Civil Support Teams. Last year, the Congress directed

[161] P.L. 104-201, section 1414.

[162] P.L. 109-163, section 1033.

[163] U.S. Congress, House Committee on Appropriations, *Making Omnibus Consolidated and Emergency Supplemental Appropriations for Fiscal Year 1999*, Conference Report to Accompany H.R. 4328, 105th Cong., 2nd sess., October 19, 1998, pp. 1527-8.

[164] U.S. Congress, House Committee on Appropriations, *Making Appropriations for the Department of Defense for the Fiscal Year Ending September 30, 2000 and for Other Purposes*, Conference Report to Accompany H.R. 2561, 106th Cong., 1st sess., October 8, 1999, pp. 96-97.

the establishment and organization of an additional 17 teams, for a total of 27 teams."[165] Subsequently, the National Defense Authorization Act for FY2001 included a provision in law that specified, "During fiscal year 2001, the Secretary of Defense shall establish five additional teams designated as Weapons of Mass Destruction Civil Support Teams (for a total of 32 such teams)."[166] Two years later, in the National Defense Authorization Act for FY2003, Congress again directed the expansion of the WMD-CSTs with the following statutory language: "The Secretary of Defense shall: (1) establish 23 additional teams designated as Weapons of Mass Destruction Civil Support Teams, for a total of 55 such teams; and (2) ensure that of such 55 teams, there is at least one team established in each State and territory."[167] Funding for two additional teams was provided in the 2007 Defense Appropriations Act, bringing the total to 57.[168]

Examples of Past or Potential Use in Disaster Response Operations

DOD's CBRN response elements have been used to respond to a variety of disasters. The Marine Corps CBIRF responded to the presence of anthrax and ricin on Capitol Hill in 2001 and 2004, respectively. It has also supported major events such as the Olympics, political conventions, and presidential inaugurations.[169] WMD-CSTs have also responded to CBRN events. For example, in 2014 a major chemical leak contaminated the Elk River in West Virginia. Seven WMD-CSTs supported the response effort by analyzing water samples and assessing the scope of the incident. In 2013, a WMD-CST provided analytical support to the FBI and other law enforcement agencies investigating a ricin letter in Spokane, WA, while another WMD-CST provided air toxicology testing and assessments in the aftermath of an ammonium nitrate explosion that occurred in West, TX. Perhaps most visibly, several WMD-CSTs were at the Boston Marathon in 2013 providing on-site monitoring. In the aftermath of the terrorist attack there, they assisted with command and control of the response.[170]

The potential uses of DOD CBRN response forces include command and control; communications; CBRN monitoring, detection, assessment, and identification; decontamination; search and rescue; explosive ordnance disposal; emergency medical care; transportation, including medical evacuation; security; and logistics. These units can be used for disaster response missions other than CBRN response if the situation warrants. For example, four WMD-CSTs provided communications support to the Hurricane Sandy response (2012), and CERFP search and extraction elements provided support during a flood evacuation in Colorado (2013) and a mudslide in Washington (2014).

U.S. Army Corps of Engineers Assets

Planning and Response Teams

Nicole T. Carter, Specialist in Natural Resources Policy.

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[165] U.S. Congress, House Committee on Appropriations, *Department of Defense Appropriations Bill, 2001*, Report of the Committee of Appropriations to Accompany H.R. 4576, 106th Cong., 2nd sess., June 1, 2001, p. 41. Note that this language specifies that the previous year Congress had directed 17 *additional* teams, rather than a total of 17 teams.

[166] P.L. 106-398, section 1032.

[167] P.L. 107-314, section 1403.

[168] H.Rept. 109-676, p. 89.

[169] Examples of CBIRF usage taken from CBIRF website, at http://www.cbirf.marines.mil/About/History.aspx.

[170] Examples of CST usage provided by staff at the National Guard Bureau in an email correspondence, March 18, 2014.

Purpose and Responsibilities

The U.S. Army Corps of Engineers performs its emergency response activities through more than 40 planning and response teams (PRTs). These deployable teams have been specifically trained to perform Corps emergency response functions, including provision of ice, water, emergency power, debris removal, temporary housing, temporary roofing, and structural safety assessments. The Corps also has between 15 and 20 deployable tactical operating systems; these function as mobile command, control, and communication team and equipment units during a disaster. Training includes the use of exercises simulating responses to different disasters; Corps simulations have included dam failures and floods, earthquakes, hurricanes, pandemic, and terrorist attacks.

Authorization, Appropriations

Under the National Response Framework, the Army Corps of Engineers coordinates emergency support for public works and engineering. This includes technical assistance, engineering, and construction management, emergency contracting, and repair of power systems, public water and wastewater, and solid waste facilities. The Corps also assists in monitoring and stabilizing damaged structures and demolishing structures designated as immediate hazards to public health and safety. It also provides technical assistance in clearing, removing, and disposing of contaminated and uncontaminated debris from public property, and establishing ground and water routes into affected areas. Contaminated debris management is coordinated with the U.S. Environmental Protection Agency. Implementation of Corps emergency activities also typically requires close coordination with FEMA. The Corps' funding for these activities is provided through FEMA appropriations, often through supplemental appropriations. The annual funding level highly depends on the scale and nature of the disaster. For a larger disaster, these Corps assignments can reach billions of dollars.

In addition to work performed as part of the National Response Framework, Congress has given the Corps its own emergency response authority. This authority is commonly referred to as the Corps' P.L. 84-99 authority, based on the act in which it was originally authorized, the Flood Control and Coastal Emergency Act, P.L. 84-99 (33 U.S.C. §701n). This law authorizes the Corps to perform disaster preparedness, advance measures, emergency operations (disaster response and post-flood response), rehabilitation of flood control works threatened by floods, protection or repair of federally authorized shore protection works threatened by coastal storms, emergency dredging, and flood-related rescue operations. These activities are limited to actions to save lives and protect improved property (public facilities/services and residential or commercial developments). Most of the disaster response work performed under this authority generally is funded through supplemental appropriations provided directly to the Corps. Until supplemental appropriations are available, Congress has provided the Corps with authority to transfer money from ongoing Corps projects to emergency operations. The emergency response activities performed under this authority rarely exceed $1 billion except for the largest of flood disasters. In recent years, emergency appropriations for these activities were provided through supplemental appropriations in FY2010 ($20 million under P.L. 111-212), FY2012 ($388 million under P.L. 112-77), and FY2013 ($1.01 billion in emergency funding for Hurricane Sandy response and recovery under P.L. 113-2). There was no supplemental appropriations for these activities in FY2014. Funding for preparedness to support these activities has occasionally been provided during regular appropriations. While funding for preparedness was not provided in enacted appropriations bills from FY2008 to FY2011, it was provided in FY2012 at $112 million, FY2013 at $25.6 million, FY2014 at $28 million, and FY2015 at $28 million. The Administration has requested $34 million for FY2016.

Examples of Use in Disaster Response Operations

After Hurricane Sandy, the Corps delivered 8.9 million liters of water over a three week period (or enough water for 2.5 million people), refurbished 115 housing units, and provided more than 218,000 sandbags and cold-weather gear to local first responders. The Corps also teamed with federal, state, city, and regional agencies to provide temporary power and unwater flooded areas. For example, almost 500 million gallons of seawater were trapped in New York City's mass transit system after the storm. The Corps' relevant PRTs were organized into an Unwatering Task Force which had pumps of various types and sizes sent to points around the transit system, including the Brooklyn Battery Tunnel, World Trade Center/PATH Train, and South Ferry Subway Station. The pumps relatively quickly removed about 116,000 gallons of saltwater per minute and in nine days, 475 million gallons of saltwater had been drained from the city's subways and tunnels.

In addition to supporting FEMA-assigned missions throughout the region, the Corps' New York and Philadelphia districts also carried out their own regular missions following the storm, including work under P.L. 84-99. These included helping the port of New York and New Jersey reopen, closing barrier island breaches in Long Island, and assessing damages to federally authorized and constructed shoreline projects while developing short-, mid-, and long-term alternatives for coastal storm damage risk management.

249th Engineer Battalion (Prime Power)

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Purpose and Responsibilities

The 249th Engineer Battalion (Prime Power) can rapidly deploy and provide technical expertise and operational assistance in all aspects of power and electrical systems generation and distribution in support of contingency and emergency response operations. While this battalion performs military functions for the U.S. Army abroad and assists in international disaster relief, the Corps can deploy the battalion domestically to assist with power emergencies. It focuses its emergency activities in restoring power to life-saving and life-sustaining facilities like hospitals, shelters, water and sewer facilities, police and fire stations, command centers, fueling stations, and public housing developments. The focus of the battalion, which was created in 1994 by consolidating existing Army detachments, focuses on low to medium voltage electricity. One of the battalion's companies generally is standing ready to respond to domestic disasters under the National Response Framework.

Appropriations

Under the National Response Framework, the Army Corps of Engineers coordinates emergency support for public works and engineering. This includes repair of power to public infrastructure. The battalion is funded primarily through Department of Defense appropriations, with its domestic response mission assignments funded through FEMA. The annual funding level highly depends on the scale and nature of the disaster.

Examples of Use in Disaster Response Operations

The battalion and the Corps' power-related PRTs often work together in response to power emergencies. In response to Hurricane Sandy, the battalion and power PRTs helped restore the regional power systems and priority facilities in the 13 affected states, completed 567 power

assessments, and installed 211 generators. They provided power to a wide range of facilities including mass transit systems like the Hudson ferry, New Jersey's PATH trains, and the Long Island railroad as well as petroleum terminals critical to regional fuel availability. The battalion also was deployed in response to Hurricane Katrina in 2005 and Hurricane Irene in 2011.

Department of Energy

Nuclear Counterterrorism and Incident Response (NCTIR) Program

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Purpose and Responsibilities

This program provides rapid response in the event of a radiological or nuclear incident, whether predetonation or postdetonation, as well as technical support for other first responders. It draws on the technical expertise resident in the nuclear weapons complex. The FY2016 request for the National Nuclear Security Administration (NNSA), a separately-organized component of the Department of Energy, proposed moving this program from its Weapons Activities account, which manages the U.S. nuclear weapons program, to the Defense Nuclear Nonproliferation account, which handles programs dealing with nonproliferation, counterproliferation, materials security, arms control, and counterterrorism. NCTIR has many subprograms and capabilities, such as the following:

The Nuclear Emergency Support Team (NEST) provides technical teams to the FBI, DoD, and DHS in the event of radiological or nuclear threats or incidents. NEST, in turn, has several specialized teams, including the Accident Response Group, Radiological Assistance Program, Nuclear-Radiological Advisory Team, and Joint Technical Operations Team. The mission of these teams is to "search for, identify, characterize, render safe, and dispose of any nuclear or radiological device." NCTIR also provides training and exercises to federal, state, and local agencies for responding to radiological or nuclear emergencies.

Forensics—determining the provenance and design of a radiological or nuclear device—whether before or after detonation is crucial for directing a U.S. military or other response to an event and for improving U.S. ability to detect and disarm similar devices in the future. National Technical Nuclear Forensics (NTNF) provides technical support, including training, equipment, response teams, and capability to analyze radioactive samples in support of this mission.

NNSA describes its Office of Emergency Operations as "the United States government's primary capability for radiological and nuclear emergency response and for providing security to the nation from the threat of nuclear terrorism."[171] It focuses on radiological search, "making sure a nuclear device is safe if such a device is found," and consequence management.[172]

NNSA's Atmospheric Release Advisory Capability is hosted by the National Atmospheric Release Advisory Center (NARAC) at NNSA's Lawrence Livermore National Laboratory. Livermore provides the following description: "NARAC is a national resource for predicting the spread of hazardous materials released, accidentally or intentionally, into the atmosphere. NARAC provides plume predictions within minutes of a release for emergency managers to use

[171] U.S. Department of Energy. National Nuclear Security Administration. "Emergency Response," at http://nnsa.energy.gov/aboutus/ourprograms/emergencyoperationscounterterrorism.

[172] Ibid.

in response to myriad disasters, from industrial fires in the wake of Hurricane Katrina, to the Chernobyl and Fukushima nuclear power plant releases to volcanic eruptions in the Philippines and Hawaii."[173]

Authorization and Appropriations

The National Nuclear Security Administration Act, Title XXXII of the FY2000 National Defense Authorization Act, S. 1059, P.L. 106-65 (October 5, 1999), which established NNSA, gave the NNSA Administrator authority over, and responsibility for, all NNSA programs, including emergency management. This act gave the Deputy Administrator for Defense Programs several duties, including "directing, managing, and overseeing assets to respond to incidents involving nuclear weapons and materials."[174]

Funds for NNSA are authorized by the armed services committees and appropriated by the energy and water development subcommittees of the appropriations committees. The FY2016 budget request for Nuclear Counterterrorism and Incident Response Programs was $234.390 million.

Examples of Past Use in Disaster Response Operations

According to NNSA, "NNSA teams are deployed more than 100 times a year mainly within the U.S. and most are radiological search deployments. The deployments are intelligence driven, support of law enforcement, and planned events such as the Super Bowl, presidential inaugurations or political conventions."[175] These deployments may be considered disaster preparedness and prevention operations.

In response to the Fukushima accident, NNSA sent its Consequence Management Response Teams, Aerial Monitoring System assets, ground radiation detectors, and other equipment to Japan. The teams conducted aerial measurements and ground samples and analyzed the resulting data for radiation.[176] To make the data widely accessible, DOE posted the data on its website.[177]

NNSA's assets are not limited to radiological or nuclear events. NARAC has responded to many other types of atmospheric releases.[178] As one example, on August 19, 2004, there was a large fire at a barrel recycling facility at the Queen City Barrel Company in Cincinnati. According to a NARAC report, the city's health department "was particularly concerned about the health effects associated with the combustion of unknown, organic chemicals potentially contained in the barrels." The department contacted NARAC, which provided four sets of plume models to the city's emergency response departments. These models included "Initial (Smoke) Projections,

[173] Lawrence Livermore National Laboratory, "Unique Facilities and Centers," p. 1, at https://www.llnl.gov/sites/default/files/fc_sheet_08-02-13.pdf. For further information, see the NARAC website at https://narac.llnl.gov/.

[174] 50 U.S.C. §2404(b)(2)

[175] U.S. Department of Energy. National Nuclear Security Administration. "Emergency Response," at http://nnsa.energy.gov/aboutus/ourprograms/emergencyoperationscounterterrorism.

[176] U.S. Department of Energy. "U.S. Department of Energy Releases Radiation Monitoring Data from Fukushima Area," March 22, 2011, at http://energy.gov/articles/us-department-energy-releases-radiation-monitoring-data-fukushima-area.

[177] U.S. Department of Energy. "The Situation in Japan (Updated 1/25/13)," at http://energy.gov/situation-japan-updated-12513.

[178] For documents on many such responses, see Lawrence Livermore National Laboratory, "NARAC Publications," section "Applications and Incident Responses," at https://narac.llnl.gov/documents.html#5.

Initial Fire Plume Health Effect Estimate, Post-Analysis of the Fire Plume, and Initial Smoldering Ember Health Effect Estimate."[179]

National Transportation Safety Board Disaster Assistance

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Purpose, Responsibilities, and Authorization

The National Transportation Safety Board (NTSB) serves primarily as an independent federal investigative agency in the aftermath of transportation disasters.[180] NTSB accident investigators are not directly involved in disaster assistance, and in fact must remain impartial to disaster response activities that may come under investigative scrutiny. However, NTSB was mandated under the Aviation Disaster Family Assistance Act of 1996 (Title VII of P.L. 104-264; 49 U.S.C. §1136) to coordinate disaster resources to provide information and assistance to victims' families[181] in the aftermath of major air carrier accidents. The Rail Safety Improvement Act of 2008 (P.L. 110-432; 49 U.S.C. §1139) expanded the NTSB role to include coordination of family assistance following rail passenger accidents resulting in major loss of life. Although not formally mandated to do so, NTSB may also provide support to family, friends, and survivors of certain general aviation accidents, commuter rail and transit accidents, mass casualty highway accidents, marine accidents, and pipeline disasters that are investigated by NTSB. While the NTSB often participates in investigations of overseas transportation accidents, particularly major aviation accidents, the U.S. Department of State's Office of American Citizen Services and Crisis Management coordinates crises and emergency situations, including transportation disasters, involving large numbers of U.S. citizens traveling abroad.

Examples of Use in Disaster Response Operations

Statutorily, NTSB has primary federal responsibility for facilitating the recovery and identification of fatally injured passengers and communicating with the families of passengers involved in major airline and passenger rail accidents. The NTSB Transportation Disaster Assistance division functions in the capacity of a facilitator to coordinate federal, state, local, and volunteer agency assets following major airline and passenger rail disasters. In this capacity, it establishes family assistance centers near accident sites. Major functions of the disaster assistance division and the family assistance centers include dissemination of accident and accident investigation information to family, friends, and survivors; coordination of victim identification; management and reclamation of personal effects; coordination of crisis counseling resources; and arrangement of a memorial service in coordination with the families. NTSB statutory responsibility includes the requirement to designate an independent nonprofit organization with experience in post-trauma communications with families to have primary responsibility for coordinating the emotional care and support of victim's families. NTSB coordinates with the

[179] M.B. Dillon et al., "LINC Modeling of August 19, 2004 Queen City Barrel Company Fire in Cincinnati, OH," Lawrence Livermore National Laboratory, UCRL-TR-206580, September 15, 2004, pp. 1-2, at https://narac.llnl.gov/uploads/LINC-QCB-Fire.pdf.

[180] The Chemical Safety and Hazard Investigation Board (Chemical Safety Board or CSB) is the complementary investigative federal agency that examines root causes of incidents at stationary sources involving "accidental releases" of regulated substances into the ambient air. For more information, see the CSB website at http://www.csb.gov/.

[181] In regulation and policy, NTSB has generally broadened the scope of "family" to include the family members and close friends of victims and the survivors of transportation disasters falling under the scope NTSB's statutory responsibility.

American Red Cross to provide this capability by working through its local chapters to partner with mental health providers trained in disaster response.

Jointly Operated Assets

National Response System for Oil and Chemical Spills

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Purpose and Responsibilities

The National Oil and Hazardous Substances Pollution Contingency Plan, commonly referred to as the National Contingency Plan (NCP), is the federal government's principal plan for responding to oil spills and releases of hazardous substances, pollutants, or contaminants. The NCP delegates federal authorities for responding to such incidents to the Environmental Protection Agency (EPA), the U.S. Coast Guard (USCG), and numerous other federal departments and agencies with relevant expertise. It provides the framework for coordinating the federal, state, and local roles in responding to such incidents and notifying the relevant departments and agencies.

The NCP is authorized in three federal statutes, the Oil Pollution Act of 1990 (OPA),[182] the Clean Water Act (CWA),[183] and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, often referred to as Superfund).[184] The NCP is codified in federal regulation at 40 C.F.R. Part 300. Unlike many other federal emergency response plans that are administrative in nature, NCP regulations have the force of law and are binding and enforceable. The NCP most often is applied as a stand-alone regulatory authority, but also may be invoked as the operable response plan under the National Response Framework as part of a larger federal response.

The NCP established a coordinated National Response System (NRS) that uses a multi-tiered, top-down framework.[185] Key components of the NRS include

- National Response Team (NRT): composed of representatives from 15 federal departments and agencies with duties assigned in the NCP. A USCG official chairs the NRT for federal responses in the coastal zone, and an EPA official chairs the NRT for federal responses in the inland zone and during non-response activities. As defined in the NCP, the coastal zone includes U.S. waters and adjoining shorelines, the Great Lakes, and specified ports and harbors on inland rivers, and the inland zone conversely is the environment inland of the coastal zone.[186]

[182] 33 U.S.C. §2701 et. seq.

[183] 33 U.S.C. §1321.

[184] 42 U.S.C. §9601 et. seq.

[185] As a practical matter, local emergency teams (e.g., fire departments) are often the first to respond to an incident. The NCP regulations envision that state and local officials typically would initiate public safety measures (40 C.F.R. §300.180(f)) in the earliest stage of a response. However, once an incident is elevated for federal attention, a designated federal official would oversee the federal response pursuant to the NCP and would be responsible for making ultimate decisions about the use of federal resources to carry out the response.

[186] 40 C.F.R. §300.5.

- Regional Response Teams (RRTs): composed of regional representatives of each NRT member agency, state governments, and local governments. The Coast Guard leads each RRT for federal responses in the coastal zone; EPA leads each RRT for federal responses in the inland zone.
- Area Committees (ACs): includes qualified personnel from federal, state, and local agencies. The primary function of each AC is to prepare an Area Contingency Plan (ACP) for its designated area.
- On-Scene Coordinator (OSC): directs federal response efforts and coordinates all other related federal efforts at the scene. The OSC is a USCG official in the coastal zone[187] and an EPA official in the inland zone. The OSC is broadly empowered to direct and coordinate all response and recovery activities of federal departments and agencies that are members of the NRT, and state, local, and private entities that may participate in a federal response (including the parties responsible for the incident). When an incident occurs, the OSC may draw upon the resources identified in the appropriate ACPs and RRTs.

The framework of the NCP primarily uses existing resources of the federal departments and agencies that are members of the NRT to call upon those resources as needed when an incident occurs. The resources that may be needed to respond to any one specific incident would depend upon the scope and nature of the incident and the associated hazards. Some of the resources may be maintained specifically for response purposes, whereas others more broadly are associated with a department or agency's primary mission. Many of the federal departments and agencies on the NRT also maintain specialized resources to respond to incidents at federal facilities or vessels under their own jurisdiction, such as the Department of Defense or Department of Energy. These departments and agencies may be called upon to contribute their respective resources to participate in a federal response to an oil spill or a hazardous substance, pollutant, or contaminant incident at a non-federal facility or vessel. Much of the work performed under a federal response also may be accomplished through private contracting to augment federal assets.

As co-chairs of the NRT, EPA and the Coast Guard also maintain certain dedicated response resources to fulfill their respective roles in leading federal responses to oil spills and hazardous substance, pollutant, or contaminant incidents. Under the Superfund program, EPA maintains an array of specialized personnel and other emergency response resources across its 10 regional offices. The Coast Guard National Strike Force Coordination Center (NSFCC) maintains a comprehensive list of Coast Guard-owned oil spill response equipment. Some of these assets also may be used to respond to releases of hazardous substances, pollutants, or contaminants in the coastal zone. The NSFCC also maintains the Response Resource Inventory (RRI), which includes equipment inventories maintained by the private sector that may be drawn upon through contracting. According to the Coast Guard,[188] it maintains the following assets:

- 9 District Response Advisory Teams, which typically comprise between 3 and 6 personnel;
- 3 National Strike Force Strike Teams, comprised of approximately 40 active duty/civilian and 40 reserve personnel; and
- specialized spill response personnel and equipment in each Coast Guard Sector office.

[187] In general, Coast Guard Captains of the Port serve as OSCs for their particular area.

[188] Email correspondence with the U.S. Coast Guard Office of Congressional Affairs, April 16, 2015.

Authorization and Appropriations

Congress has authorized two dedicated trust funds to finance the costs of a federal response to a discharge of oil or release of a hazardous substance, pollutant, or contaminant.[189] Through its National Pollution Funds Center, the U.S. Coast Guard administers the Oil Spill Liability Trust Fund (OSLTF) to finance the costs of responding to a discharge of oil.[190] EPA administers the Hazardous Substance Superfund Trust Fund to finance the costs of responding to a release of a hazardous substance, pollutant, or contaminant.[191] Respectively, each agency is responsible for disbursing monies from these trust funds to other federal departments and agencies, states, and local entities that may be involved in a federal response taken under the NCP.

A limited amount of funding from the OSLTF is available each fiscal year (up to $150 million) as mandatory (i.e., permanent) appropriations that are directly available for obligation and are not subject to discretionary appropriations.[192] In addition, the OSLTF is subject to a cap of $1 billion on total expenditures per incident.[193] Monies from the Hazardous Substance Superfund Trust Fund are subject to discretionary appropriations before they are available to respond to an incident. To enable emergency response capabilities, Congress annually appropriates monies out of this trust fund to EPA's Superfund account, and reserves a portion of these funds for emergency response actions. These funds remain available indefinitely until they are expended.

In contrast to natural disaster responses, oil spills and hazardous substance, pollutant, or contaminant incidents may involve one or more entities who caused or contributed to the incident, referred to as the responsible parties. These parties are liable for federal response (i.e., cleanup) costs and related damages within certain limitations. OPA established liability for response costs, natural resource damages, and certain categories of economic or property damages.[194] The scope of liability for releases of hazardous substances under CERCLA includes both response costs and natural resource damages, but not other economic or property damages.[195] Such other damages stemming from releases of hazardous substances generally may be pursued under tort law instead. Although CERCLA authorizes federal actions to respond to pollutant or contaminant incidents, it does not establish liability for the costs of responding to these incidents.

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[189] Neither of these trust funds is available to cover the costs of responding to a discharge of oil or a release of a hazardous substance, pollutant, or contaminant from a federal facility or vessel. Congress appropriates separate funding directly to the departments or agencies with jurisdiction, custody, or control over the facility or vessel from which the discharge or release occurred to pay the response costs of the federal government.

[190] 26 U.S.C. §9509. The vast majority of the revenues for the Oil Spill Liability Trust Fund are derived from a dedicated eight cents per-barrel tax on domestic and imported oil. The tax is scheduled to terminate at the end of 2017. See the "Federal Funding for the Oil Spill Liability Trust Fund" section in CRS Report RL33705, *Oil Spills in U.S. Coastal Waters: Background and Governance*, by Jonathan L. Ramseur.

[191] 26 U.S.C. §9507. The Hazardous Substance Superfund Trust Fund is financed mostly with revenues transferred from the General Fund of the U.S. Treasury, since the taxes on domestic and imported oil, chemical feedstocks, and corporate income that once financed this trust fund expired at the end of 1995. See the "Hazardous Substance Superfund Trust Fund" section in CRS Report R41039, *Comprehensive Environmental Response, Compensation, and Liability Act: A Summary of Superfund Cleanup Authorities and Related Provisions of the Act*, by David M. Bearden.

[192] 33 U.S.C. §2752. The U.S. Coast Guard may "advance" (i.e. withdraw) up to $150 million each fiscal year from the Oil Spill Liability Trust Fund to respond to discharges of oil. Once advanced, the monies remain available until expended.

[193] 26 U.S.C. §9509(c)(2).

[194] 33 U.S.C. §2702.

[195] 42 U.S.C. §9607(a). Liability under CERCLA also includes the costs of federal public health studies.

Under the liability provisions of OPA and CERCLA, the federal government may recover its response costs from the responsible parties (with the exception of pollutant or contaminant incidents noted above), which are to be deposited back into the respective trust fund that financed the federal response.[196] Responsible parties also are often directly involved with federal response efforts to help satisfy their liability, and may use or obtain their own resources for these purposes. In such instances, the OSC is responsible for directing and overseeing response actions taken by a responsible party to ensure that applicable requirements are met. For incidents at federal facilities or vessels, the federal department or agency with jurisdiction over the facility or vessel serves as the responsible party on behalf of the United States.

Examples of Use in Incident Response

Thousands of oil and chemical spills of varying size, magnitude, and impact occur in the United States each year. State and local governments may respond to many of these spills using their own authorities and resources, with little or no federal involvement. As a practical matter, the level of federal involvement of the National Response Team under the NCP depends in large part upon the desire of state and local governments for federal resources to carry out a response or to enforce the liability of the parties responsible for a spill.

For example, West Virginia requested federal assistance from EPA and other federal agencies under the NCP in responding to a spill of 4-methylcyclohexane methanol into the Elk River in early January 2014. This chemical spill had led to a temporary shutdown of a public water supply in Charleston, WV, and illustrates the potential magnitude of such incidents that can have broad impacts on local populations. At the request of the governor of West Virginia, the President also had declared a state of emergency under the Stafford Act, under which FEMA provided alternative water supplies when the public water supplies were not in operation.

The 2010 *Deepwater Horizon* incident in the Gulf of Mexico offers an example of an oil spill of broad magnitude and impact for which federal resources were deployed under the NCP. The subsurface oil discharge continued for 87 days, resulting in the largest oil spill in U.S. waters. During the height of the response, approximately 47,000 people from federal, state, and local governments, and the responsible parties and their contractors, were conducting response operations in the Gulf. Pursuant to the NCP, an OSC from the Coast Guard directed these activities. The spill was classified as a Spill of National Significance and a National Incident Commander was appointed—both first-time events under the NCP—to facilitate collaboration and coordination among federal, state, and local emergency response officials.[197]

National Disaster Medical System (NDMS)[198]

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[196] The Internal Revenue Code directs recovered costs to be deposited back into the Hazardous Substance Superfund Trust Fund (26 U.S.C. §9507) or the Oil Spill Liability Trust Fund (26 U.S.C. §9509), respectively.

[197] For more details on this incident, see CRS Report R42942, *Deepwater Horizon Oil Spill: Recent Activities and Ongoing Developments*, by Jonathan L. Ramseur.

[198] Unless otherwise cited, information in this section is from the HHS Assistant Secretary for Preparedness and Response (ASPR) NDMS website at http://www.phe.gov/Preparedness/responders/ndms; and HHS, *Fiscal Year 2016 Justification of Estimates for Appropriations Committees, Public Health and Social Services Emergency Fund*, NDMS narrative, pp. 41 ff., at http://www.hhs.gov/budget/.

Purpose and Responsibilities

The National Disaster Medical System (NDMS) is a nationwide cadre of medical and public health personnel who can be "federalized" in pre-trained teams for the response to mass casualty incidents and/or the loss of local healthcare infrastructure. It is a partnership of HHS with the Department of Defense (DOD) and the Department of Veterans Affairs (VA). The system leverages federal and non-federal resources to support two general missions; first, to respond to requests for medical assistance from states or other federal agencies, and second, to assist the DOD medical system in the event of a large-scale wartime conflict. To date, NDMS has not been called upon to serve the latter mission. NDMS provides three capabilities:

- *Medical, mortuary, and veterinary response*, which includes needs assessment, primary and emergency medical care, equipment and supplies, victim identification, and other services. HHS is responsible for this component, which is composed of more than 5,000 members across more than 80 teams. Teams include Disaster Medical Assistance Teams (DMATs), Disaster Mortuary Operational Response Teams (DMORTs), National Veterinary Response Teams (NVRTs), and International Medical/Surgical Response Teams (IMSURTs).
- *Patient movement* from the disaster area to facilities where patients can receive definitive medical care. This includes communication with federal, state, and local authorities; medical transportation; patient tracking; and medical care during evacuation. DOD is responsible for this component, in coordination with HHS.
- *Definitive medical care*, that is, medical care provided by NDMS-affiliated federal and non-federal hospitals for conditions that result directly from the incident, or for pre-existing conditions for which care cannot be deferred. This component is managed by Federal Coordinating Centers (FCCs), a nationwide network of DOD and VA hospitals. Non-federal hospital participation is voluntary.

Authorization, Appropriations, and Contributing Departments/Agencies

NDMS was begun administratively in 1984. It was first explicitly authorized in the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (P.L. 107-188).[199] This authority was most recently revised and extended through FY2018 in the Pandemic and All-Hazards Preparedness Reauthorization Act of 2013 (PAHPRA, P.L. 113-5).

PAHPRA also extended VA's responsibility to maintain readiness to coordinate the NDMS definitive medical care component.[200] In addition, VA is allowed, during specified emergencies, to provide medical care in its facilities to NDMS patients who are not eligible veterans.[201] VA is authorized to seek reimbursement for these services.

NDMS is not explicitly mentioned in DOD's statutory authorities. However, DOD policy regarding Defense Support of Civil Authorities (DSCA), discussed elsewhere in this report, states

[199] Section 2812 of the Public Health Service Act; 42. U.S.C. §300hh-11.

[200] 38 U.S.C §8117.

[201] 38 U.S.C §1785; and 38 C.F.R. §17.86. These emergencies include major disasters declared under the Stafford Act or when the NDMS is activated by the Secretary of HHS for public health emergencies.

that DOD assets (such as vehicles for emergency medical transport) may be provided to assist in the response to emergencies. DOD normally seeks reimbursement for the costs of deployment.[202]

The Secretary of HHS has broad latitude in her authority to deploy NDMS components. No specific statutory trigger or threshold is required. Generally, NDMS operates in support of two Emergency Support Functions (ESFs) in the National Response Framework (NRF), which are ESF #8—Public Health and Medical Services, coordinated by HHS, and ESF #6—Mass Care, Emergency Assistance, Temporary Housing and Human Services, coordinated by FEMA.

While deployed, NDMS personnel are designated as intermittent federal employees, and are to be paid for their service by the federal government. They are also entitled to three statutory protections. They are protected from liability for their official actions (except in cases of negligence);[203] they are eligible for compensation for work injuries;[204] and they are protected from loss of employment and benefits.[205] The HHS Assistant Secretary for Preparedness and Response (ASPR) has testified, however, that NDMS personnel were not deployed into "harm's way" in response to the Ebola outbreak because the law does not clearly assure disability and death benefits should they get sick or injured in service.[206] Proposed language to amend the law was included in the FY2016 budget request.[207]

Administrative costs for the NDMS program are provided in HHS appropriations to the Assistant Secretary for Preparedness and Response (ASPR). **Table 3** presents recent funding levels. DOD and VA budgets do not present specific information for NDMS administrative costs.

Table 3. NDMS Administrative Funding, FY2011-FY2015

Dollars in millions. Does not include deployment costs.

FY2011	FY2012	FY2013[a]	FY2014	FY2015	FY2016 request
$52.4	$52.7	$49.7	$50.1	$50.1	$49.9

Source: HHS, Fiscal Year 2015 and FY2016 Justifications of Estimates for Appropriations Committees, Public Health and Social Services Emergency Fund, NDMS narratives, at http://www.hhs.gov/budget/.

a. Amount reflects across-the-board-rescission and sequestration.

Some NDMS deployment costs may be paid by the federal entity that is chiefly responsible for the costs of the federal response to the specific incident. For example, for emergencies or major disasters declared under the Stafford Act, HHS, VA, or DOD may receive reimbursement for

[202] DOD Directive 3025.18, *Defense Support of Civil Authorities*, December 29, 2010 (incorporating change 1, September 21, 2012), at http://www.dtic.mil/whs/directives/corres/pdf/302518p.pdf.

[203] By reference to such protections under the Federal Tort Claims Act or other law for employees of the U.S. Public Health Service, Section 224 of the Public Health Service Act, 42 U.S.C. §233.

[204] By reference to 5 U.S.C. Ch. 81, the Federal Employees' Compensation Act (FECA). See CRS Report R42107, *The Federal Employees' Compensation Act (FECA): Workers' Compensation for Federal Employees*, by Scott D. Szymendera.

[205] By reference to 38 U.S.C. Ch. 43, the Uniformed Services Employment and Reemployment Rights Act (USERRA). See Department of Labor, USERRA, at http://www.dol.gov/compliance/laws/comp-userra.htm.

[206] Statement of Nicole Lurie, Assistant Secretary for Preparedness and Response, HHS, hearing "Medical and Public Health Preparedness and Response: Are We Ready for Future Threats?" U.S. Congress, Senate Committee on Health, Education, Labor, and Pensions, 114th Cong., 1st sess., February 26, 2015.

[207] HHS, proposed general appropriations provisions, Sec. 519, *Fiscal Year 2016 Justification of Estimates for Appropriations Committees, General Departmental Management*, pp. 17-18 (pdf pp. 349-350), at http://www.hhs.gov/budget/.

certain deployment activities through the FEMA Disaster Relief Fund. For international deployments, HHS, VA, or DOD may receive reimbursement from the Department of State or the U.S. Agency for International Development (USAID). For some other situations, such as National Special Security Events (NSSEs) or other public health responses that do not involve a Stafford Act declaration,[208] HHS must assume the costs of deployment of NDMS response teams. The ASPR budget request for FY2016 seeks $110 million for an emergency reserve fund to cover unreimbursed incident response costs, including costs for NDMS deployment.[209] HHS has not previously had such a fund.

The NDMS definitive medical care component, which is rarely activated, relies on participating hospitals (principally non-federal) that volunteer to accept NDMS disaster evacuees on a space-available basis. Participating hospitals receive reimbursement for services they provide at 110% of the usual Medicare rate for such services. Reimbursement for specific incidents is time-limited, and does not extend beyond hospital care to longer-term services such as rehabilitation or outpatient care. FEMA policies implementing the Stafford Act do not allow assistance for medical care costs except for such care required to provide immediate emergency care, evacuation, and stabilization;[210] and no other routine federal mechanism exists to pay disaster-related hospital costs. As a result, when the NDMS definitive medical care component was activated for the responses to Hurricane Katrina in 2005 and the Haiti earthquake in 2010, Congress provided supplemental appropriations to reimburse hospitals.[211]

Examples of Use in Disaster Response Operations

NDMS has deployed one or more of its three components more than 300 times since the system's launch in 1984, for a variety of types of incidents. Deployment of the medical response component is the most common, and is often used for the response to major disasters declared pursuant to the Stafford Act. For example, approximately 2,300 NDMS personnel, representing 26 DMAT teams, were deployed for the response to Hurricane Sandy in 2012.[212] The medical response component also may be deployed for non-Stafford domestic public health incidents (e.g., the H1N1 influenza pandemic in 2009 and the Sandy Hook Elementary School shootings in Connecticut in 2012) and for international aid missions, as well as for NSSEs and other incidents for which there is a risk of a public health emergency.

The NDMS patient movement and definitive medical care components are deployed less often. All three components, including all DMAT teams (87 at the time), were deployed in response to Hurricane Katrina in 2005.[213]

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[208] The Stafford Act major disaster authority has not been invoked for infectious disease incidents (e.g., the 2001 anthrax attacks and the 2009 influenza pandemic). See CRS Report RL34724, *Would an Influenza Pandemic Qualify as a Major Disaster Under the Stafford Act?*, by Edward C. Liu.

[209] HHS, *Fiscal Year 2016 Justification of Estimates for Appropriations Committees, Public Health and Social Services Emergency Fund,* NDMS narrative, pp. 115-116 at http://www.hhs.gov/budget/.

[210] FEMA Recovery Policy 9525.4, "Emergency Medical Care and Medical Evacuations," February 3, 2014, at http://www.fema.gov/9500-series-policy-publications.

[211] For more information, see CRS Report RL33579, *The Public Health and Medical Response to Disasters: Federal Authority and Funding*, by Sarah A. Lister.

[212] HHS, Fiscal Year 2014 Justification of Estimates for Appropriations Committees, Public Health and Social Services Emergency Fund, p. 35, at http://www.hhs.gov/budget/.

[213] CRS Report RL33096, *2005 Gulf Coast Hurricanes: The Public Health and Medical Response*, by Sarah A. Lister.

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