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BUDGET SPOTLIGHT

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FEMA's Disaster Relief Fund: Budgetary History and Projections

To help households as well as state, local, and tribal governments respond to and recover from disasters, the federal government provides financial assistance through the Disaster Relief Fund (DRF), the largest source of federal financial assistance after disasters. The Federal Emergency Management Agency (FEMA) administers the fund through a single federal spending account under the Robert T. Stafford Disaster Relief and Emergency Assistance Act. The money is used for the following activities:

- Repair, replace, and improve the resiliency of damaged infrastructure;
- Clear debris;
- Provide critical services;
- Cover the costs of home repairs, property replacement, and other needs for affected households; and
- Implement projects designed to mitigate the effects of future disasters.

Two types of legislation specifically address FEMA's activities: Authorization legislation establishes priorities for DRF-funded programs, defines the types of assistance households and governments can receive, and specifies the terms under which it is available. Appropriation laws provide the funds needed to carry out those activities.

Notes: All years referred to in this report are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end. All amounts are in nominal dollars (in other words, not adjusted for inflation) except those labeled as 2022 dollars; those amounts have been adjusted using the gross domestic product price index. The period of analysis covered in this report is 1992 through 2021.

This brief is one of a series of reports examining trends in funding and spending for particular federal programs. The Budget Spotlight series initially focuses on programs that could be directly affected by the consequences of climate change—which include increases in average temperatures, sea levels, and the severity of storms—and provides information about how the Congressional Budget Office treats those programs in its baseline and cost estimates. For a list of CBO's publications that address the topic of climate change, see www.cbo.gov/topics/climate-and-environment/climate-change.

How Is the DRF Funded?

Although the DRF receives some funding through the regular appropriation process each year, most is furnished through supplemental appropriations, which the Congress provides in response to particularly large or widespread disasters. Over the 1992–2021 period, budget authority appropriated for the DRF totaled $381 billion (or $469 billion in 2022 dollars).[1] Nearly three-quarters of that amount was provided through supplemental appropriations, and the rest was provided through annual discretionary appropriations.

The practice of providing funding via supplemental appropriations became pronounced in 2005, when damage from three costly disasters (Hurricanes Katrina, Rita, and Wilma) led lawmakers to provide an unprecedented amount of funding (see Figure 1, top panel). In that year, the Congress appropriated a total of $68 billion (or $97 billion in 2022 dollars) to the DRF; 97 percent of that amount was in the form of supplemental appropriations.

How Has Spending From the DRF Varied Over Time?

Because the frequency and severity of disasters often differ greatly from one year to another, appropriations for the DRF and spending from the fund (labeled outlays in the budget) can vary significantly as well. Over the past three decades, FEMA spent a total of $347 billion (in 2022 dollars) from the DRF to respond to disasters. (In this section of the report, all amounts are in 2022 dollars and all percentages were calculated using 2022 dollars.) The smallest annual amount FEMA spent was $2 billion (in 1992), and the largest was $47 billion (in 2020). On average over the 30-year period, spending was roughly $12 billion a year.

Spending has been driven less by the number of disasters declared and more by the size and severity of individual disasters. Although Presidents have made more than 1,700 declarations of major disasters over the past 30 years, a small number of those disasters account for a disproportionate share of total spending.[2] For example, of the more than 30 major hurricanes since 1992 that resulted in spending for disaster relief, a handful were responsible for nearly one-third of all spending: Hurricanes Katrina, Rita, and Wilma (in 2005) accounted for 18 percent; Hurricanes Harvey, Irma, and Maria (in 2017) accounted for 9 percent; and Hurricane Sandy (in 2012) accounted for 5 percent. By themselves, through 2021, the 2005 hurricanes have resulted in $64 billion in spending.

Hurricanes constitute the largest category of DRF spending, accounting for about 44 percent of total spending over the 1992–2021 period. After hurricanes, other natural disasters that have led to substantial assistance through the DRF include flooding not related to hurricanes, severe storms, wildfires, tornadoes, and earthquakes.[3]

The second-largest category of DRF spending over the 1992–2021 period was spending in response to the coronavirus pandemic. That spending accounted for 20 percent of all DRF spending over the period and was the largest amount spent for a single event.[4] DRF spending totaled $47 billion in 2020 and $43 billion in 2021, the two highest annual totals in the DRF's history (see Figure 1, bottom panel). About 75 percent of those amounts, roughly $67 billion in total, was provided for pandemic-related purposes—mainly for unemployment compensation, an uncharacteristic use of

1. Those amounts are net of rescissions. The American Rescue Plan Act of 2021 (Public Law 117-2), enacted in March 2021, provided $50 billion to the DRF as a mandatory appropriation. That $50 billion is included in those amounts and others discussed in this report.

2. In the event of a disaster, the governor of an affected state may request that the President declare a major disaster or emergency. Then, if FEMA concludes that the resulting damage is likely to exceed certain per capita thresholds, the agency can recommend that the President declare a major disaster or emergency. After such a declaration, assistance under several programs funded by the DRF becomes available. Although the number of declarations made generally indicates the frequency of disasters, each declaration may not correlate with a separate disaster. Some disasters receive multiple declarations if they affect more than one state or tribal government. For example, there were 13 separate declarations for Hurricane Sandy—one for each state affected by the hurricane. Most recently, there were two declarations for Hurricane Ian.

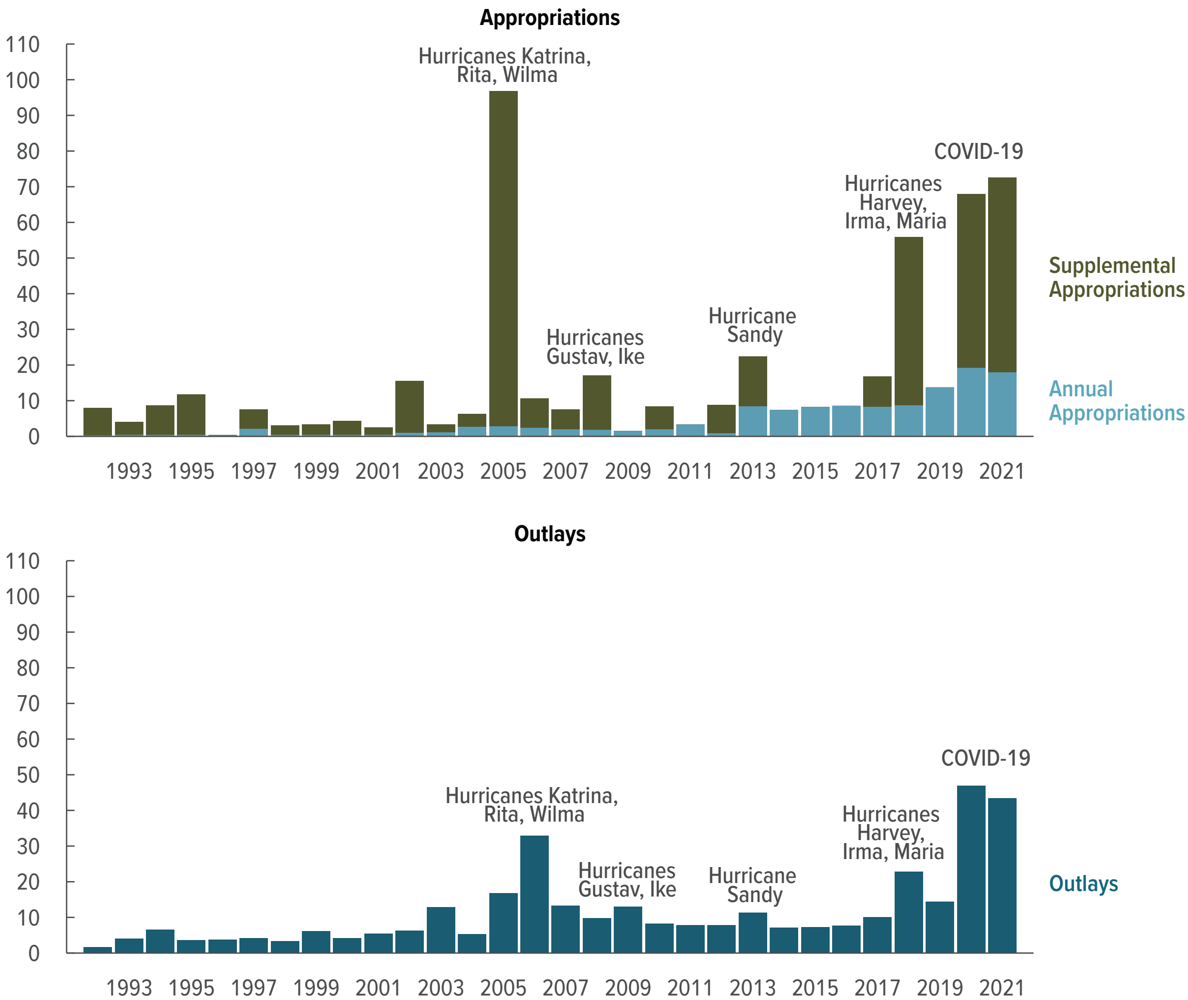
3. For more information about hurricane damage and federal spending in response, see Congressional Budget Office, *Potential Increases in Hurricane Damage in the United States: Implications for the Federal Budget* (June 2016), www.cbo.gov/publication/51518.

4. If spending in response to the pandemic was excluded, hurricanes would account for 55 percent of DRF spending—in 2022 dollars—over the 30-year period.

Figure 1.

Amounts Appropriated to FEMA for the DRF and Subsequent Outlays

Billions of 2022 Dollars



Supplemental appropriations for a handful of very severe disasters have been the primary driver of the increased amounts of funding for and spending from the DRF over the past 30 years.

Data source: Congressional Budget Office. See www.cbo.gov/publication/58420#data.

Appropriations exclude a rescission that occurred in 2006 of some budget authority that was originally appropriated in 2005. If that rescission had been included, the net appropriation in 2006 would have been -$23 billion (in 2022 dollars).

DRF = Disaster Relief Fund; FEMA = Federal Emergency Management Agency.

DRF funds.[5] Funds were also provided to state and local governments to cover the costs of emergency assistance, medical treatment and facilities, vaccine outreach and distribution, and pandemic-related funeral expenses for households. During 2022, FEMA spent an additional $19 billion for pandemic-related assistance and, as of September 30, had obligated but not yet spent $24 billion. The Congressional Budget Office expects that more obligations and outlays will be made throughout 2023. (FEMA uses the budget authority provided in

5. The White House, Presidential Memoranda, "Memorandum on Authorizing the Other Needs Assistance Program for Major Disaster Declarations Related to Coronavirus Disease 2019" (August 8, 2020), https://tinyurl.com/5fmws66p.

appropriations to make obligations, which are legally binding agreements that will result in spending, immediately or in the future.)

For federal disaster spending over the past three decades, 2005 marked an inflection point. Over the 1992–2004 period (before Hurricanes Katrina, Rita, and Wilma), DRF spending averaged about $5 billion annually. Since 2005, though, spending has risen to an average of $16.5 billion annually, spurred by a handful of particularly severe events (including those three hurricanes and the pandemic) and the larger appropriations provided in response. Excluding pandemic-related spending, annual spending over the 2005–2021 period was $12.5 billion, on average.

How Does CBO's Baseline Account for Spending From the DRF?

CBO's baseline is not intended to be a forecast of budgetary outcomes; rather, it is meant to provide a benchmark that policymakers can use to assess the potential effects of policy decisions. CBO constructs its baseline in accordance with provisions of the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177) and the Congressional Budget and Impoundment Control Act of 1974 (P.L. 93-344). As required by section 257 of the Deficit Control Act, those baseline projections for discretionary programs, including the DRF, start with the amount appropriated under current law and then adjust that annual funding over the following 10 years to account for inflation. In 2022, lawmakers appropriated a total of $18.8 billion for the DRF. Following the baseline construction rules, CBO increased that 2022 amount for inflation in each year over the 2023–2032 period; as a result, total funding is projected to reach $23.5 billion in 2032.[6]

One consequence of the rules for constructing baseline projections is that the baseline is not a projection of how climate change might affect spending from the DRF. Climate change affects the DRF baseline only to the extent that it affects the amount of money that lawmakers choose to appropriate under current law. Such amounts can vary widely from year to year.[7]

To estimate the rate at which those projected funding amounts would be spent, CBO uses historical data on DRF spending and information provided by FEMA, taking into account spending rates for various activities funded through the account. Because of the outsized budgetary effects of catastrophic events, CBO also tracks and analyzes spending in response to past disasters for which large sums have been appropriated.

How Quickly Does FEMA Spend the Money Provided After Disasters?

Most spending from the DRF typically occurs in the first three years after a disaster. Sometimes, spending continues for more than a decade after a disaster occurs, though—and, in some cases, a small portion of the funds are never spent. Spending from the DRF covers a mix of response and recovery activities, both short term and long term.

- Emergency response activities, such as removing debris, distributing food and medical aid, and providing shelter and critical utilities, are typically completed *within six months.*
- Spending on recovery activities—primarily repair or reconstruction of buildings, infrastructure, and housing—can take *three years or longer*.
- Activities designed to reduce damage from future disasters, known as mitigation projects, can stretch *over a decade* after a disaster occurs and make up the tail end of spending.

In response to the 2005 hurricanes, for example, FEMA has spent about $64 billion from the DRF (in 2022 dollars). About $48 billion (or 75 percent) of that sum was spent in the first three years (see Figure 2, top panel). Small amounts of spending persist, though: In 2021, FEMA spent about $400 million, largely on projects

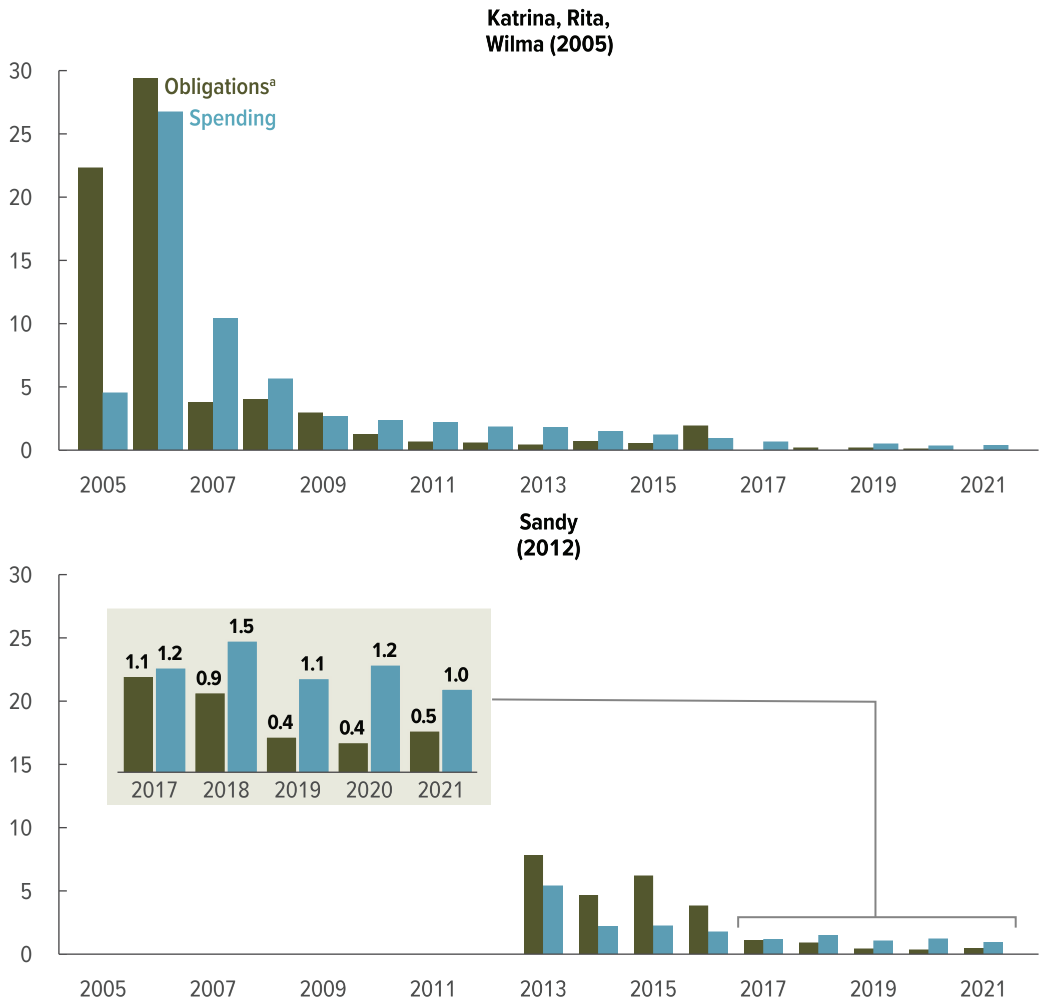
6. The only instance of mandatory funding provided to the DRF occurred in 2021 under the American Rescue Plan Act; that $50 billion was not projected into future years in CBO's baseline. Projections of mandatory appropriations follow different rules and are not made the same way as those of discretionary appropriations. For CBO's most recent baseline budget projections, see Congressional Budget Office, *The Budget and Economic Outlook: 2022 to 2032* (May 2022), www.cbo.gov/publication/57950.

7. In any year, the Congress could appropriate a different annual amount, provide supplemental appropriations, or rescind previously appropriated funds. For its baseline projections, CBO is required to increase the current year's appropriation by the rate of inflation; for that reason, the baseline's 10-year projections for the DRF can vary greatly from year to year depending on the frequency and size of any supplemental appropriations that have been provided in the current year.

Figure 2.

Amounts Obligated and Spent by FEMA From the DRF Following Major Hurricanes

Billions of 2022 Dollars



CBO uses historical trends of spending following past disasters to inform its projections of spending in the aftermath of subsequent disasters. Although the spending following the 2005 hurricanes was several times larger than the spending after Hurricane Sandy, the patterns have been similar: An initial spike in spending for immediate emergency response was followed by a long tail of spending for recovery and mitigation.

Data sources: Federal Emergency Management Agency; Congressional Budget Office. See www.cbo.gov/publication/58420#data.

The 2005 hurricanes occured near the end of fiscal year 2005, so a relatively small amount of spending occurred in that year. Conversely, because Hurricane Sandy occurred in the first month of fiscal year 2013, first-year spending for that storm's disaster relief was higher.

a. Obligations are legally binding agreements made by the federal government that will result in spending, immediately or in the future. An agency incurs an obligation, for example, when it places an order, signs a contract, awards a grant, purchases a service, or takes other actions that require the government to make payments to the public or from one government account to another.

DRF = Disaster Relief Fund; FEMA = Federal Emergency Management Agency.

designed to avert damage from future floods in affected areas. In response to Hurricane Sandy in 2013, FEMA spent $10 billion (in 2022 dollars) over the first three years (see Figure 2, bottom panel). Since 2016, the agency has spent an additional $8 billion, including $1 billion in 2021. (Both amounts are in 2022 dollars.)

How Does CBO Estimate the Duration of Spending?

When estimating the duration of spending for a particular disaster, CBO considers the patterns of spending following earlier disasters of similar size and scope. For example, CBO's estimates of spending in response to Hurricane Sandy were informed by spending in response to the major hurricanes in 2005. On the basis of those patterns, CBO estimates that spending for recovery from Hurricane Sandy will persist into the late 2020s and gradually shift toward mitigation projects.

The pandemic differs qualitatively from the natural disasters that have historically driven DRF spending, so its pattern of spending is unusual. Unlike a hurricane, the pandemic caused no damage to infrastructure or buildings. (Construction activities to repair damaged infrastructure and build new mitigation projects typically account for the largest share and longest duration of DRF spending.) By the end of 2021, FEMA had spent more than $63 billion in response to the pandemic. That spending is expected to wind down over the next few years as the effects of the pandemic wane. Because there have been no physical infrastructure losses, CBO estimates that pandemic-related spending will not stretch over the decade-long period seen for some hurricanes and other natural disasters.

Why Does Projected Spending for the DRF Differ in CBO's Baseline and Cost Estimates?

One of CBO's responsibilities is to estimate the effects that authorizing legislation would have on federal spending. When preparing cost estimates for legislation that authorizes funding for the DRF—or any other discretionary program—CBO estimates the potential changes in discretionary spending that would result if the legislation was enacted and if future appropriations were provided consistent with the legislation's provisions. Those estimates are measured relative to current law (that is, existing appropriations for one year, with no future appropriations assumed). They are not measured relative to CBO's baseline projections, which incorporate an assumption about future appropriations (namely, that appropriations grow with inflation) and their spending over time.

This report was prepared to enhance the transparency of the work of the Congressional Budget Office. In keeping with CBO's mandate to provide objective, impartial analysis, it makes no recommendations.

Jon Sperl wrote the report with major contributions and coordination from Robert Reese and with guidance from Theresa Gullo and Susan Willie. Christina Hawley Anthony, Nicholas Chase, Joseph Kile, and Chad Shirley provided comments. Mark Hadley, Jeffrey Kling, and Robert Sunshine reviewed the report. Christine Bogusz edited it, and Jorge Salazar created the graphics, designed the cover, and prepared the text for publication. This report is available at www.cbo.gov/publication/58420.

CBO seeks feedback to make its work as useful as possible. Please send comments to communications@cbo.gov.

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