

# **Federal Wildfire Management: Ten-Year Funding Trends and Issues (FY2011-FY2020)**

October 28, 2020

**Congressional Research Service**

<https://crsreports.congress.gov>

R46583



R46583

October 28, 2020

**Katie Hoover**  
Specialist in Natural  
Resources Policy

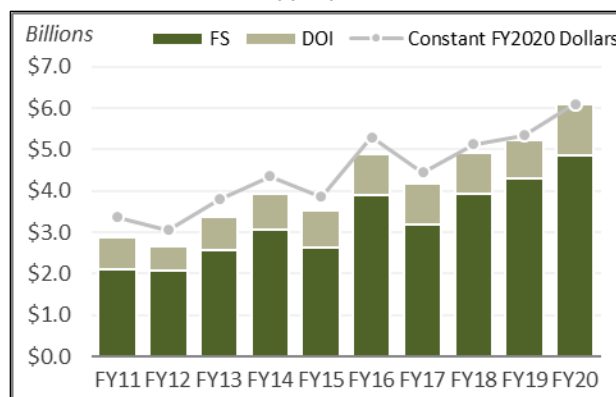
## Federal Wildfire Management: Ten-Year Funding Trends and Issues (FY2011-FY2020)

Wildfire management is a series of coordinated activities to prepare for, resolve, and recover from wildfire events. The federal agencies responsible for wildfire management include the U.S. Department of Agriculture's Forest Service (FS) and the Department of the Interior (DOI). FS carries out wildfire response and management across the 193 million acres of national forests and national grasslands; DOI carries out these activities on more than 400 million acres of national parks, wildlife refuges and preserves, Indian reservations, and other public lands. The federal agencies also coordinate wildfire response activities with state and local governments as needed.

Both FS and DOI generally receive annual discretionary appropriations for wildfire management activities through the Interior, Environment, and Related Agencies appropriations bills. Wildfire management funding for DOI is provided to the Office of Wildland Fire (a department-level office). Both FS and DOI receive wildfire appropriations through similarly structured accounts, programs, and activities, though FS's account structure changed several times between FY2011 and FY2020. The funding generally falls into four categories: suppression, preparedness, reduction of wildland fuel (e.g., biomass, vegetation), and other wildfire activities. *Suppression* is the work associated with wildfire response and includes postfire emergency stabilization measures. *Preparedness* comprises a range of tasks to ensure readiness for wildfire response, including workforce preparation, equipment and resource management, and wildfire outlook conditions forecasting. *Fuel reduction* is a wildfire prevention activity intended to mitigate the risk of catastrophic fires. *Other wildfire activities* include site rehabilitation, federal assistance programs, wildfire research, and facility maintenance, among others; the activities funded in this category varied between FS and DOI over the 10-year period.

Total combined FS and DOI wildfire appropriations fluctuated annually but increased from FY2011 to FY2020. On average, combined wildfire appropriations were \$4.48 billion annually in inflation-adjusted constant FY2020 dollars, and the appropriations nearly doubled over the 10-year period. The FY2020 wildfire appropriation was \$6.11 billion, the highest appropriation to date. Over the time period, the majority of the funding went to FS. Funding for suppression was \$2.20 billion combined annually on average from FY2011 to FY2020, in constant dollars, and the FY2020 appropriation for suppression was \$3.65 billion combined. On average, the agencies combined received \$1.52 billion annually for preparedness, \$590.7 million annually for fuel reduction, and \$174.1 million annually for other wildfire activities (in constant dollars) over the period in question.

FS and DOI Wildfire Appropriations, FY2011-FY2020



**Source:** CRS. Data are derived from annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and the detailed funding tables prepared by the House and Senate Committees on Appropriations.

**Notes:** Figures include appropriations to FS's and DOI's WFM and FLAME Act accounts, the wildfire adjustment, and any other appropriations enacted for wildfire purposes for the two agencies, and reflect supplemental and emergency-designated appropriations, sequestration, and rescissions. Figures were adjusted to estimated FY2020 constant dollars using the GDP Chained Price Index from the White House Office of Management and Budget.

The funding trends over the FY2011-FY2020 period are attributable primarily to fluctuations and increases in appropriations for suppression, which accounted for nearly half of the average annual wildfire appropriation. During this period, Congress provided suppression funding to FS and DOI through multiple accounts, including the agencies' respective Wildland Fire Management (WFM) and Federal Land Assistance, Management, and Enhancement (FLAME) Act accounts. The FLAME

accounts received funding from FY2010 through FY2018. In addition, Congress provided suppression funding pursuant to the *wildfire adjustment* (also known as the *wildfire funding fix*), a budgetary mechanism that allows for an upward adjustment of the discretionary spending limits to accommodate a specific amount of spending for wildfire suppression. This mechanism, which first became available in FY2020, is most easily thought of as providing funds that are exempt from discretionary spending limits.

In addition to regular discretionary appropriations, at times Congress provided FS and DOI with additional, or supplemental, wildfire funding for a fiscal year between FY2011 and FY2020. Congress typically provided this funding to replenish an agency's suppression accounts or to repay funds transferred from other agency accounts to cover emergency suppression costs. Congress provided supplemental appropriations in 7 of the 10 years from FY2011 through FY2020. In some years, this funding was designated as emergency spending and, as such, essentially was exempt from discretionary spending limits under a separate adjustment; in other years, the funding was not designated as emergency spending.

Debates on whether, where, and how to provide additional funding for wildfire management have persisted for decades. From FY2011 to FY2020, congressional interest focused on the adequacy of program funding and the extent to which increasing suppression costs have reduced the availability of funding for other wildfire programs (and other FS or DOI programs more generally). The wildfire adjustment was intended to alleviate some of these concerns, at least temporarily. Issues pertaining to preparedness funding involve the number and effectiveness of aircraft available for wildfire suppression and the adequacy of efforts to recruit and retain federal firefighters. Issues related to fuel reduction funding include the scope and scale of fuel reduction needs, prioritization of treatments to the highest-risk locations, and effectiveness of treatments. Other wildfire funding issues include how much funding to provide for wildfire research, assistance programs, and postfire restoration.

## Contents

|                                            |    |
|--------------------------------------------|----|
| Introduction .....                         | 1  |
| Historical Context .....                   | 2  |
| Wildfire Accounts and Activities .....     | 3  |
| Suppression .....                          | 5  |
| Wildland Fire Management Suppression ..... | 6  |
| FLAME Accounts .....                       | 6  |
| Wildfire Adjustment .....                  | 7  |
| Supplemental Appropriations .....          | 8  |
| Preparedness .....                         | 9  |
| Fuel Reduction .....                       | 10 |
| Other Wildfire Activities .....            | 11 |
| Wildfire Appropriations Data .....         | 12 |
| Issues for Congress .....                  | 18 |
| Suppression .....                          | 19 |
| Preparedness .....                         | 20 |
| Aviation .....                             | 20 |
| Workforce .....                            | 21 |
| Fuel Reduction .....                       | 22 |
| Other Wildfire Activities .....            | 22 |

## Figures

|                                                                                                                            |    |
|----------------------------------------------------------------------------------------------------------------------------|----|
| Figure 1. Forest Service (FS) and Department of the Interior (DOI) Wildfire Management Appropriations, FY1994-FY2020 ..... | 3  |
| Figure 2. FS and DOI Wildfire Appropriations, FY2011-FY2020 .....                                                          | 14 |
| Figure 3. Regular and Supplemental Wildfire Appropriations, FY2011-FY2020 .....                                            | 15 |
| Figure 4. Suppression Appropriations, FY2011-FY2020 .....                                                                  | 16 |
| Figure 5. Distribution of FS and DOI Wildfire Appropriations, FY2011-FY2020 .....                                          | 18 |

## Tables

|                                                                                                                      |    |
|----------------------------------------------------------------------------------------------------------------------|----|
| Table 1. Forest Service (FS) and Department of the Interior (DOI) Total Wildfire Appropriations, FY2011-FY2020 ..... | 13 |
| Table 2. FS and DOI Wildfire Appropriations by Category, FY2011-FY2020 .....                                         | 17 |
| Table A-1. Forest Service (FS) Wildfire Appropriations, FY2011-FY2020 .....                                          | 25 |
| Table A-2. Department of the Interior (DOI) Wildfire Appropriations, FY2011-FY2020 .....                             | 27 |
| Table A-3. Combined FS and DOI Wildfire Appropriations, FY2011-FY2020 .....                                          | 29 |
| Table B-1. Changes to the FS Wildland Fire Management Account (WFM) for <i>Other Operations</i> .....                | 31 |

## Appendixes

|                                                                                                                      |    |
|----------------------------------------------------------------------------------------------------------------------|----|
| Appendix A. Detailed Wildfire Appropriations Data .....                                                              | 24 |
| Appendix B. Structural Changes to Forest Service’s Wildland Fire Management <i>Other</i><br>Operations Program ..... | 31 |

## Contacts

|                         |    |
|-------------------------|----|
| Author Information..... | 32 |
|-------------------------|----|

## Introduction

Wildfire (or wildland fire)<sup>1</sup> can have beneficial and harmful effects on human, historical, cultural, and ecological resources. Wildfires can reduce fuel loads, increase ecosystem health and functioning, and restore fire-adapted ecosystems. At the same time, they can damage timber resources and soils, degrade water quality, and impair watershed functions. Wildfires also can damage communities, destroy homes, and lead to loss of human life.

Wildfire management is a series of coordinated activities undertaken by federal, state, and local authorities to prepare for, resolve, and recover from wildfire events. These activities generally include prevention, preparedness, suppression, and postfire site rehabilitation.<sup>2</sup> At the federal level, prevention activities primarily focus on altering the characteristics of wildland fuels (e.g., vegetation, biomass) in an effort to mitigate the risk of catastrophic fires.<sup>3</sup> These activities generally are referred to as *fuel reduction*.

A number of federal, state, and local agencies can and do respond to wildfires.<sup>4</sup> States are responsible for responding to wildfires that begin on nonfederal (state, local, and private) lands, except for lands protected by federal agencies under cooperative agreements. The federal government is responsible for responding to wildfires that begin on federal lands. The U.S. Department of Agriculture's Forest Service (FS) carries out wildfire response and management across the 193 million acres of national forests and national grasslands. The Department of the Interior (DOI) carries out wildfire management and response on more than 400 million acres of national parks, wildlife refuges and preserves, Indian reservations, and other public lands. Sometimes more than one agency may respond, depending on where the fire occurs and spreads, the potential threats, and the expertise required. In these cases, the response is coordinated regionally through Geographic Area Coordination Centers and nationally through the National Interagency Coordination Center, based at the National Interagency Fire Center in Boise, ID.<sup>5</sup>

---

<sup>1</sup> The terms *wildland fire* and *wildfire* often are used interchangeably, although each term has a distinct definition. The National Wildfire Coordinating Group (NWCG) defines *wildland fire* as any non-structure fire that occurs in vegetation or natural fuels, including prescribed fire and wildfire. NWCG defines *wildfire* as a wildland fire originating from an unplanned ignition, including unauthorized human-caused fires, escaped prescribed fire projects, and all other wildland fires where the objective is to put out the fire. See NWCG, "Glossary of Wildland Fire Terminology," September 2020, at <https://www.nwcg.gov/glossary/a-z> (hereinafter cited as NWCG, "Glossary"). This report will use the term *wildfire* for both terms.

<sup>2</sup> The federal government funds wildland fire management in similar categories: fuel reduction, preparedness, and suppression. Other prevention and site-rehabilitation activities are funded through more than one budget line item; these activities are grouped together and referred to as *other wildfire activities* for purposes of this report.

<sup>3</sup> The size, distribution, and total quantity of wildland fuels significantly affect wildfire behavior and impacts. For more information on wildland fuels, see CRS Report R40811, *Wildfire Fuels and Fuel Reduction*, by Katie Hoover. Other types of prevention efforts are needed to protect structures and other resources located adjacent to or within wildland (e.g., undeveloped, vegetated wildland) areas. For more information, see CRS Report RS21880, *Wildfire Protection in the Wildland-Urban Interface*, by Katie Hoover and Kelsi Bracmort.

<sup>4</sup> For more information on federal assistance, see CRS In Focus IF10732, *Federal Assistance for Wildfire Response and Recovery*, by Katie Hoover.

<sup>5</sup> The National Interagency Fire Center (NIFC) comprises eight agencies and organizations: the Bureau of Land Management (BLM), the Bureau of Indian Affairs, the U.S. Fish and Wildlife Service, the National Park Service, the U.S. Forest Service (FS), the National Oceanic and Atmospheric Administration, the National Business Center, and the U.S. Fire Administration. A representative from the National Association of State Foresters also is located at NIFC. For more information on coordination procedures and logistics, see the National Interagency Coordination Center, *2020 National Interagency Mobilization Guide*, at <https://www.nifc.gov/nicc/mobguide/index.html>.

Both FS and DOI generally receive annual discretionary appropriations for wildfire management activities through the Interior, Environment, and Related Agencies appropriations bills. Wildfire management funding for DOI is provided to the Office of Wildland Fire (a department-level office), which then allocates the funding to four DOI agencies—Bureau of Land Management, Bureau of Indian Affairs, National Park Service, and U.S. Fish and Wildlife Service.<sup>6</sup>

Appropriations laws also provide funding for wildfire-related activities to agencies other than FS and DOI. For example, appropriations laws provide funding to the Federal Emergency Management Agency for emergency financial assistance for some nonfederal wildfires through Fire Management Assistance Grants and the Disaster Relief Fund; those funds and activities are discussed in other CRS products.<sup>7</sup>

This report begins with an overview of wildfire funding trends since FY1994 to provide some historical context. It focuses on data and analysis on discretionary wildfire appropriations for FS and DOI for the 10-year period from FY2011 through FY2020.<sup>8</sup> Detailed appropriations data by agency are shown in **Appendix A**, but the trends and analysis generally are based on total combined appropriations to FS and DOI. For purposes of this report, FS and DOI funding is grouped in categories related to specific wildfire management activities: suppression, preparedness, fuel reduction, and other wildfire activities. The report summarizes the funding levels for each of those categories over the time period and compares the two agencies' funding structures.

The report concludes with a discussion of selected policy issues related to the four different categories of wildfire appropriations. This discussion addresses issues related to the extent to which increasing suppression costs have come at the expense of other FS or DOI programs; the size and effectiveness of aircraft for wildfire suppression; the adequacy of efforts to recruit and retain federal firefighters; the scope and scale of fuel reduction needs and how to prioritize treatments to the highest-risk locations; and how much funding to provide for wildfire research, assistance programs, and postfire restoration activities.

## Historical Context

Wildfire management appropriations fluctuated annually from FY1994 through FY2020 but began to increase in the late 1990s and rose markedly after FY2000, beginning with a severe fire season in 2000 (see **Figure 1**). In the 20 years since FY2001, wildfire appropriations have ranged from a low of \$3.05 billion in FY2012 to a high of \$6.11 billion in FY2020 (as measured in inflation-adjusted constant FY2020 dollars).<sup>9</sup> A significant portion of the annual fluctuations and

---

<sup>6</sup> Through FY2008, wildfire funding for the Department of the Interior (DOI) was appropriated directly to BLM and then allocated among the other bureaus. Since FY2009, appropriations have been made to the DOI department-level Office of Wildland Fire for allocation among the agencies.

<sup>7</sup> For more information, see CRS Report R43738, *Fire Management Assistance Grants: Frequently Asked Questions*, by Bruce R. Lindsay and Katie Hoover, and CRS Report R43537, *FEMA's Disaster Relief Fund: Overview and Selected Issues*, by Bruce R. Lindsay.

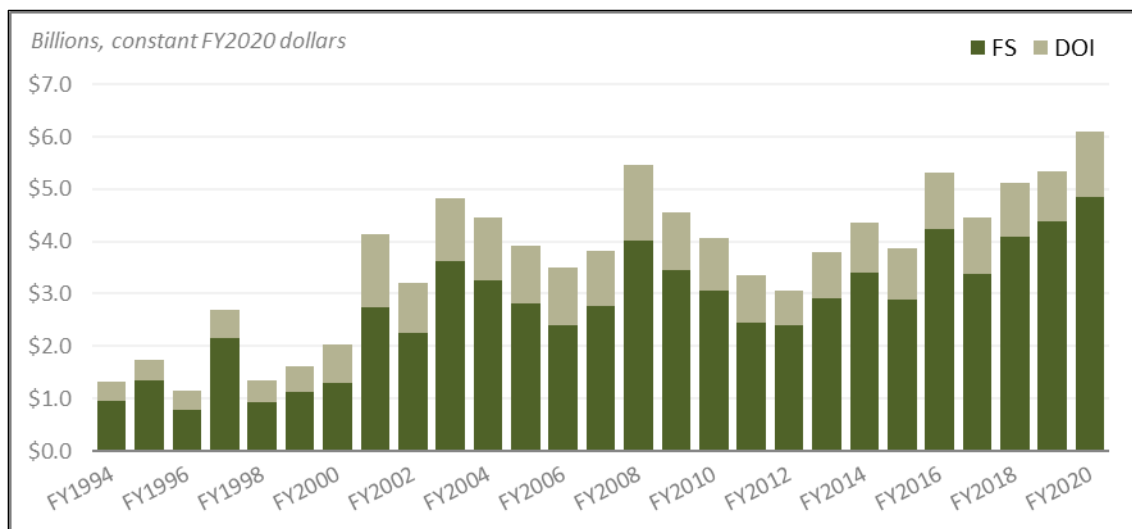
<sup>8</sup> FS and DOI also receive mandatory appropriations, some of which may be used for wildfire-related activities, specifically for fuel reduction or postfire rehabilitation and restoration. For more information on the agencies' respective mandatory appropriations accounts, see CRS Report R45994, *Federal Land Management Agencies' Mandatory Appropriations Accounts*, coordinated by Carol Hardy Vincent.

<sup>9</sup> The figures and tables in this report generally reflect applicable supplemental and emergency-designated appropriations, sequestration, and rescissions. Figures include appropriations to FS's and DOI's Wildland Fire Management (WFM) and Federal Land Assistance, Management, and Enhancement (FLAME) Act accounts, the wildfire adjustment, and any additional or other appropriations enacted for wildfire purposes for the two agencies. Top-line figures for FS, DOI, and combined total appropriations are inflated to estimated FY2020 constant dollars to enable

the overall increase in funding are related to rising suppression costs. Suppression costs vary considerably and may be high even during years of relatively mild wildfire activity, because these costs are driven in part by fire location and, in particular, by the proximity to populated areas.

Over time, most wildfire management funding has gone to FS, which received, on average, around 72% of total wildfire management appropriations annually from FY1994 to FY2020; DOI received the remaining 28%. From FY2011 to FY2020, FS received an even larger share—78% annually on average—whereas DOI’s share decreased to 22%.

**Figure 1. Forest Service (FS) and Department of the Interior (DOI) Wildfire Management Appropriations, FY1994-FY2020**



**Sources:** Congressional Research Service (CRS). Data compiled from agency budget justifications, annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and detailed funding tables prepared by the House and Senate Committees on Appropriations.

**Notes:** Figures include appropriations to FS’s and DOI’s Wildland Fire Management (WFM) accounts, the FLAME suppression reserve accounts, the wildfire adjustment, and any additional or other appropriations enacted for wildfire purposes for FS and DOI. See footnote 9 for additional information about this figure.

## Wildfire Accounts and Activities

Both FS and DOI receive funding for wildfire management through accounts, programs, projects and activities that generally correspond to different categories of wildland fire management: suppression, preparedness, fuel reduction, and other wildfire activities.<sup>10</sup> *Other wildfire activities*, for purposes of this report, refers to site rehabilitation, assistance programs, wildfire research, and

comparisons across time. Figures were adjusted to estimated FY2020 dollars using the GDP Chained Price Index from the White House Office of Management and Budget, Table 10.1, “Gross Domestic Product and Deflators Used in the Historical Tables—1940-2025,” in *Historical Tables*, at <http://www.whitehouse.gov/omb/budget/Historicals>. FY2020 appropriation figures could change, for instance, if a rescission were to be enacted for the fiscal year.

<sup>10</sup> An appropriations account is the basic unit of an appropriation, generally reflecting each unnumbered paragraph in an appropriation act, and typically includes elements such as programs, projects, or activities. A budget line item generally refers to an individual account or part of an account (e.g., program, project, or activity) for which a specific amount is available. This report may refer to some of these terms interchangeably. For more information, see U.S. Government Accountability Office (GAO), *A Glossary of Terms Used in the Federal Budget Process*, GAO-05-734SP, September 2005, <https://www.gao.gov/products/GAO-05-734SP>.



maintenance, which are funded through multiple programs and/or funded differently between the agencies.

Congress has provided funding to both agencies through three similarly structured accounts, as listed below. Over the 10 years from FY2011 to FY2020, however, the specific funding structure varied from year to year and between FS and DOI. Thus, this report endeavors to describe and analyze the funding both by purpose and by account.

- **Wildland Fire Management (WFM) account.** The WFM account is the primary wildfire account for both FS and DOI. Between FY2011 and FY2020, in both agencies, the bulk of WFM appropriations went to the FS and DOI Fire Operations programs, which funded preparedness and suppression activities. In some years, each agency's respective WFM accounts also included an Other Operations program, which funded fuel reduction activities, wildfire science and research, and assistance programs. The activities funded through the Other Operations program varied, however, both between FS and DOI and during FY2011 through FY2020.
- **Wildfire Suppression Operations Reserve Fund** (referred to as the *wildfire adjustment account* in this report). The funds appropriated to FS's and DOI's respective accounts were permitted to use the *wildfire adjustment*, a budgetary mechanism that became available in FY2020 and allows for certain funds to be essentially exempt from the discretionary spending limit under specified circumstances.<sup>11</sup> These funds may be transferred to the WFM account for emergency suppression purposes. (See the "Discretionary Spending Limits" text box below and the "Wildfire Adjustment" section for additional discussion.)
- **Federal Land Assistance, Management, and Enhancement (FLAME) Act Wildfire Suppression Reserve Fund** (referred to as the *FLAME account* in this report).<sup>12</sup> This account was established for both FS and DOI in FY2010; the DOI FLAME account last received appropriations in FY2017, and the FS FLAME account last received appropriations in FY2018. Funds from an agency's FLAME account may be transferred under specified conditions to its WFM account for emergency suppression purposes. (See the "FLAME Accounts" section for additional discussion.)

From FY2011 to FY2020, Congress made three major changes to the availability and structure of wildfire funding, two of which applied only to FS.

First, starting in the FY2017 appropriations law (and continuing through FY2020), Congress specified that funds in many FS accounts—including the WFM account—were to remain available for four years.<sup>13</sup> Prior to FY2017, appropriations to FS (and DOI) wildfire accounts typically were designated to remain available until expended, meaning those funds were "no-year" appropriations (i.e., appropriations without fiscal-year limitations) available in future years.

---

<sup>11</sup> P.L. 115-141, Division O, §102(a), 2 U.S.C. §901(b)(2)(F).

<sup>12</sup> The Federal Land Assistance, Management, and Enhancement (FLAME) Act, P.L. 111-88 Division A, Title V (43 U.S.C. §§1748a et seq.).

<sup>13</sup> The FY2017 appropriations law (P.L. 115-31) provided no-year funds to the FLAME account, but the FY2018 appropriations law (P.L. 115-141)—the last year in which FS received a FLAME appropriation—provided the funds through the end of FY2021. These changes started prior to the establishment of the wildfire adjustment. Appropriations to the wildfire adjustment are no-year funds.

Second, starting in the FY2018 appropriations law (and continuing through FY2020), Congress eliminated FS's Other Operations program (within the WFM account) and funded most of those activities through other FS accounts.<sup>14</sup> For example, starting in FY2018, Congress provided funding for fuel reduction activities in FS's National Forest System (NFS) account and funding for wildfire assistance programs in FS's State and Private Forestry (SPF) account.<sup>15</sup> In addition, Congress did not provide specific funding allocations for various research activities (e.g., the National Fire Plan) but directed that some of the associated activities be conducted using funds appropriated to FS's Forest and Rangeland Research (FRR) account. For more information on these changes—and other changes enacted to FS's Other Operations program prior to FY2018—see **Appendix B**.

Third, for both DOI and FS, Congress authorized the wildfire adjustment to become available starting in FY2020. Congress also stopped appropriating to DOI's FLAME account in FY2017 and to FS's FLAME account in FY2018. (These changes are discussed in more detail in the "Suppression" section, below.)

The following sections provide more information on funding to FS and DOI for suppression, preparedness, fuel reduction, and other wildfire activities. The information includes an overview of the activities covered by each funding category, the accounts and programs through which Congress provides funding to each agency, and any changes that occurred to the funding structure between FY2011 and FY2020. In addition to regular discretionary appropriations, at times appropriations laws have provided FS and DOI with additional—or supplemental—wildfire funding, generally for suppression purposes; the suppression section includes an overview of these additional appropriations (see "Supplemental Appropriations," below).

### Discretionary Spending Limits

The Budget Control Act of 2011 (BCA; P.L. 112-25) established statutory limits on discretionary spending for FY2012-FY2021 (sometimes referred to as *spending caps*) and processes to enforce those limits. The Balanced Budget and Emergency Deficit Control Act (Title II of P.L. 99-177, 2 U.S.C. §§900-922, as amended by the BCA) specified that spending for certain activities would receive special budgetary treatment. This spending is most easily thought of as being effectively exempt from the discretionary spending limits. Formally, however, the law states that the enactment of such spending allows for a subsequent upward adjustment of the discretionary limits to accommodate the spending; as a result, these types of spending are referred to as *adjustments*. The wildfire adjustment is one example of such spending (2 U.S.C. §901(b)(2)(F)). Another example is spending that is designated as an *emergency requirement* (2 U.S.C. §901(b)(2)(A)(i)). (This spending is sometimes referred to as *emergency* or *emergency-designated* in this report.) For more information on discretionary spending limits, see CRS Report R45778, *Exceptions to the Budget Control Act's Discretionary Spending Limits*, by Megan S. Lynch, or CRS Report R44874, *The Budget Control Act: Frequently Asked Questions*, by Grant A. Driessen and Megan S. Lynch.

From FY2011 through FY2020, the Forest Service and the Department of the Interior received funding that had been designated as an emergency requirement and funding provided pursuant to the wildfire adjustment. This report generally refers to the funding provided through those adjustments as exempt from or not subject to discretionary spending limits.

## Suppression

*Suppression* is the work associated with extinguishing or confining a fire. Resolution of a wildfire incident may include activities ranging from immediate and aggressive measures to suppress a wildfire (e.g., personnel and large air tanker response for a wildfire moving quickly toward a

<sup>14</sup> P.L. 115-141 Division G.

<sup>15</sup> For more information on these changes, see CRS Report R46557, *Forest Service Appropriations: Ten-Year Data and Trends (FY2011-FY2020)*, by Katie Hoover.

populated area) to immediate but less intense measures (e.g., monitoring a grassland wildfire where there is no immediate threat to humans or other resource values).

From FY2011 through FY2020, FS's and DOI's suppression activities were funded through multiple accounts: each agency's respective WFM, FLAME, and wildfire adjustment accounts. The DOI FLAME account was active through FY2017, the FS FLAME account was active through FY2018, and the wildfire adjustment first became available in FY2020. The following sections describe each of these accounts. In addition, one section describes supplemental appropriations provided between FY2011 and FY2020; Congress generally provided these additional appropriations for suppression purposes.

## **Wildland Fire Management Suppression**

FS and DOI primarily use WFM suppression appropriations for wildfire response. These appropriations fund firefighter salaries (above the baseline funded through preparedness), aviation asset operations, other functions in direct support of wildfire incidents, and postfire emergency stabilization activities. FS and DOI also may assist each other with suppression activities, on a reciprocal nonreimbursement basis up to \$50 million annually.<sup>16</sup> If the funding in an agency's WFM suppression account (and, when active, FLAME account) is exhausted during any given fiscal year, FS and DOI are authorized to transfer funds from their other accounts to pay for continued suppression activities.<sup>17</sup> This practice is sometimes referred to as *fire borrowing* or *fire transfers*. When such transfers occurred between FY2011 and FY2020, Congress typically enacted supplemental appropriations to repay the transferred funds and/or replenish the agency's suppression accounts.<sup>18</sup>

Whereas FS and DOI currently use suppression funding similarly, the two agencies used this funding in different ways prior to FY2018. These differences primarily related to FS using suppression funds to cover certain costs that DOI funded through preparedness. In FY2012, FS shifted some aviation costs from suppression to preparedness. In addition, in FY2018, FS made further changes and shifted certain personnel charges from suppression to preparedness in an effort to conform to DOI's budget practices.<sup>19</sup>

## **FLAME Accounts**

FS's and DOI's FLAME accounts, both established in FY2010, fund emergency wildfire suppression activities under specified circumstances.<sup>20</sup> Funds in an agency's FLAME account may be used to cover the costs of large or complex fires and are to be used when amounts provided for suppression in the WFM account are exhausted. Upon a secretarial declaration, the

---

<sup>16</sup> This means FS and DOI may assist each other, as needed, without requiring the other agency to reimburse the cost of such services. See, for example, provisions of the FY2020 Interior appropriations law (P.L. 116-94, Division D) included in the appropriation for DOI's WFM account and the administrative provisions for FS.

<sup>17</sup> The transfer authority has been granted annually in the Interior, Environment, and Related Agencies appropriations act. See, for example, provisions of the FY2020 Interior appropriations law (P.L. 116-94, Division D) included in §102 (DOI) and administrative provisions (FS).

<sup>18</sup> Appropriations laws have specified that such transferred funds "must be replenished by a supplemental appropriation." See, for example, provisions of the FY2020 Interior appropriations law (P.L. 116-94, Division D) included in §102 (DOI) and administrative provisions (FS).

<sup>19</sup> FS, *FY2018 Budget Justification*, May 2017, p. 146, at <https://www.fs.usda.gov/about-agency/budget-performance>.

<sup>20</sup> FLAME Act, P.L. 111-88 Division A, Title V (43 U.S.C. §§1748a et seq.).

appropriate secretary (i.e., the Secretary of Agriculture or the Secretary of the Interior) may transfer funds from an agency's FLAME account to its WFM account for suppression activities.

The two agencies received appropriations to their respective FLAME accounts starting in FY2010. DOI's FLAME account last received appropriations in FY2017, and FS's FLAME account last received appropriations in FY2018. Under law, a FLAME account is to be terminated after three consecutive years without an appropriation or withdrawal.<sup>21</sup> DOI's FLAME account was eligible for termination at the end of FY2020, and DOI indicated its intention to close out the account in its FY2019 budget justification.<sup>22</sup> The FS FLAME account is to be terminated if no appropriations or withdrawals are made through the end of FY2021.<sup>23</sup>

## Wildfire Adjustment

The wildfire adjustment is a budgetary mechanism that gives special budgetary treatment to certain funding for wildfire suppression. The mechanism allows such funds to be effectively exempt from the discretionary spending limits.<sup>24</sup> (Formally, the law states that the enactment of such spending allows for a subsequent upward adjustment of the discretionary limits to accommodate the spending. As a result, these types of spending are referred to as *adjustments*.) The wildfire adjustment is also sometimes referred to as the *wildfire funding fix* or the *suppression cap adjustment*.

There is a precondition for using the wildfire adjustment—that a baseline amount of funding must be appropriated subject to the discretionary spending limits. For the purposes of the wildfire adjustment, the baseline is the 10-year suppression obligation average, as reported in FY2015 (\$1.39 billion combined).<sup>25</sup> Once the precondition is met, the law also places restrictions on the level of funding that can be provided under the adjustment and therefore can be exempt from the discretionary spending limits. The maximum amount available pursuant to the wildfire adjustment starts at \$2.25 billion combined in FY2020 and increases annually to \$2.95 billion in FY2027.<sup>26</sup> Up to the specified annual maximum, any amount that is enacted for a fiscal year that is over the FY2015 baseline would cause the discretionary spending limit to be adjusted upward by that amount. This mechanism allows Congress to effectively provide additional funding for wildfire suppression for the same discretionary budget score as was provided in the FY2015 baseline year. The wildfire adjustment is available annually from FY2020 through FY2027, although the statutory limits for discretionary spending currently are in effect only through FY2021.<sup>27</sup>

---

<sup>21</sup> 43 U.S.C. §§1748a(i).

<sup>22</sup> DOI, *FY2019 Budget Justification for Wildland Fire Management*, p. 34.

<sup>23</sup> FS reports the last withdrawal from the FLAME account occurred in FY2018 (FS, *FY2021 Budget Justification*, February 2020, p. 103, at <https://www.fs.usda.gov/sites/default/files/2020-02/usfs-fy-2021-budget-justification.pdf>).

<sup>24</sup> The discretionary spending limit refers to certain procedural and budgetary controls over discretionary spending for each of the fiscal years between FY2012 and FY2021, as established by the Budget Control Act of 2011 (BCA; P.L. 112-25). The Balanced Budget and Emergency Deficit Control Act (BBEDCA; Title II of P.L. 99-177, 2 U.S.C. §§900-922, as amended by the BCA) provides for certain types of spending to be effectively exempt from those limits. The wildfire adjustment was established through an amendment to the BBEDCA (P.L. 115-141, Division O, §102(a), 2 U.S.C. §901(b)(2)(F)). For more information on discretionary spending limits, see CRS Report R44874, *The Budget Control Act: Frequently Asked Questions*, by Grant A. Driessen and Megan S. Lynch.

<sup>25</sup> The \$1.39 billion figure reflects the 10-year suppression obligation averages for FY2015 as reported by FS (\$1.01 billion) and DOI (\$383.7 million).

<sup>26</sup> 2 U.S.C. §901(b)(2)(F)(i).

<sup>27</sup> For more information on discretionary spending limits, see CRS Report R44874, *The Budget Control Act: Frequently*

In FY2020, the funds appropriated pursuant to the wildfire adjustment were appropriated to FS's and DOI's respective Wildfire Suppression Operations Reserve Fund accounts. The FY2020 appropriations law specified that the funds appropriated pursuant to the wildfire adjustment may be transferred to each agency's respective WFM account for wildfire suppression operations.<sup>28</sup>

Wildfire suppression operations include spending for the purposes of "the emergency and unpredictable aspects of wildland firefighting, including support, response, and emergency stabilization activities; other emergency management activities; and funds necessary to repay any transfers needed" for these costs.<sup>29</sup>

### Suppression Ten-Year Obligation Average

Prior to FY2020, both the Forest Service (FS) and the Department of the Interior (DOI) typically would request and receive appropriations for suppression funds based on the average of the previous 10 years of suppression obligations. For many of the years when the FLAME account was used (FY2010-FY2018), Congress would appropriate about 70% of the 10-year obligation average to each agency's Wildland Fire Management (WFM) suppression activity and the remaining 30% to each agency's FLAME account.

Due to the timing of the budget process, the suppression budget request for any given year was based on the suppression obligation average for a 10-year period ending 2 years earlier. For example, the FY2018 suppression budget request was formulated using the 10-year rolling obligation average calculated from FY2007 through FY2016. Because it is based on past spending, the rolling 10-year suppression obligation average is a lagging indicator of future suppression spending. Lagging indicators, in general, demonstrate patterns across previous years but do not necessarily signal future trends. As such, the rolling 10-year suppression obligation average may not be the most accurate method to predict future suppression spending needs during the budget formulation process.

The wildfire adjustment, however, essentially froze WFM suppression funding at a baseline equal to the 10-year suppression obligation average for FY2015 (\$1.39 billion combined; \$1.01 billion for FS, \$383.7 million for DOI). Any amount appropriated above the FY2015 baseline is provided pursuant to the wildfire adjustment. FS did not report its 10-year suppression obligation for FY2020 or FY2021, since suppression appropriations are now tied to the FY2015 baseline. DOI reported its 10-year obligation average to be \$402.8 million for FY2020 and \$430.1 million for FY2021.

## Supplemental Appropriations

In addition to regular discretionary appropriations, at times Congress has provided FS and DOI with supplemental or additional wildfire funding. Congress frequently has provided these funds for suppression purposes or to repay accounts from which funds were subject to fire borrowing.<sup>30</sup> The funds often—though not always—have been provided in an appropriations law enacted after the regular annual law. In some cases, however, Congress has provided funds in the regular annual appropriations law that were designated as *additional*. Further, Congress sometimes has designated supplemental appropriations—regardless of the legislative vehicle—as being an *emergency requirement*; funds designated as such are not subject to discretionary spending limits.<sup>31</sup>

*Asked Questions*, by Grant A. Driessen and Megan S. Lynch.

<sup>28</sup> P.L. 116-94, Division D.

<sup>29</sup> 2 U.S.C. §901(b)(2)(F)(ii)(II).

<sup>30</sup> In some cases, due to the timing of the fire season in relation to the fiscal year calendar, supplemental funding provided in one fiscal year may be designated to repay accounts that were borrowed from in the previous fiscal year.

<sup>31</sup> The emergency requirements designation under BBEDCA, similar to the wildfire adjustment, allows for the discretionary spending limits to be adjusted upward to accommodate the designated spending (2 U.S.C. §901(b)(2)(A)(i)).



This report distinguishes between three types of supplemental funding:

- **Additional**, which reflects appropriations designated as *additional* or *supplemental* in the appropriations law that were not designated as *emergency* and otherwise were subject to discretionary spending limits.
- **Emergency supplemental**, which reflects appropriations designated as an *emergency requirement* and not subject to discretionary spending limits.
- **Wildfire adjustment**, which reflects appropriations provided pursuant to the wildfire adjustment and, as such, not subject to discretionary spending limits.

The primary distinction between additional and emergency supplemental appropriations is how the funds are treated for budget enforcement purposes. In some cases, the emergency designation has meant a lower budgetary score for a total appropriation that is higher in nominal dollars than another total appropriation. For instance, FS and DOI received total wildfire appropriations for FY2014 of \$3.94 billion and for FY2017 of \$4.18 billion (in nominal dollars). These totals included additional appropriations of \$636.0 million in FY2014 and emergency supplemental appropriations of \$407.0 million in FY2017 (see detailed tables in **Appendix A**). The FY2014 additional funding was subject to budget enforcement, but the FY2017 emergency supplemental funding was not. Thus, the budgetary score of \$3.78 billion for FY2017 was lower than the budgetary score of \$3.94 billion for FY2014.

Although funds provided pursuant to the wildfire adjustment are not emergency designated, they are treated similarly to emergency-designated funding in terms of budgetary scoring—albeit under a different budgetary mechanism. Thus, although the total discretionary appropriation for FY2020 was \$6.11 billion, the budgetary score was \$3.85 billion, because the \$2.25 billion wildfire adjustment and \$7.0 million in emergency supplemental appropriations were not counted toward the discretionary spending limit for that year.

## Preparedness

*Preparedness* is defined to include any activity that leads to safe, efficient, and cost-effective fire management. It includes the range of tasks necessary to protect against, respond to, and recover from incidents.<sup>32</sup> Preparedness activities are funded within FS's and DOI's Fire Operations programs within their respective WFM accounts.

FS and DOI use preparedness funds for various activities. The agencies use these funds to maintain baseline personnel and provide training and education; manage infrastructure, equipment, and resources (e.g., aviation assets, engines, communication equipment); develop, maintain, and advance technological tools to enhance decisionmaking capacity; and prepare and execute fire management plans, cooperative agreements, and interagency coordination. Preparedness also includes predictive services, the ongoing evaluation of fire weather conditions, burn probabilities, and resource status to anticipate fire activity and resource allocation needs.<sup>33</sup>

Since FY2018, FS and DOI have used their respective preparedness funds for generally equivalent purposes. Prior to FY2018, however, the agencies used their preparedness funds for different activities. These differences primarily relate to FS using suppression funds to cover

---

<sup>32</sup> *Preparedness* is also defined as the mental readiness to recognize changes in fire danger and act promptly when action is appropriate (NWCG, "Glossary").

<sup>33</sup> For more information on Predictive Services, see National Interagency Coordination Center, "Predictive Services Program Overview," at <https://www.predictiveservices.nifc.gov/predictive.htm>.

various aviation and personnel charges that the agency now funds through the preparedness activity.<sup>34</sup>

## Fuel Reduction

The size, distribution, and total quantity of wildland fuels (e.g., vegetation, biomass) significantly affect wildfire behavior and impacts.<sup>35</sup> Fuel reduction is the manipulation (including combustion) or removal of fuels to reduce the likelihood of igniting a wildfire and/or to lessen a wildfire's potential damage and resistance to control efforts.<sup>36</sup> Fuel reduction projects, or *treatments*, include activities such as prescribed burning and forest thinning. *Prescribed burning* is the deliberate use of fire in specific areas within specified fuel and weather conditions. *Thinning* is the mechanical cutting and removing of some trees in a stand and sometimes is done for purposes such as enhancing timber production. Fuel reduction also may be accomplished through various other mechanical, biological, or chemical treatments.

Fuel reduction projects on federal lands are funded through FS's Hazardous Fuels appropriation and DOI's Fuels Management appropriation. These funds also may be used for fuel reduction projects in high-priority areas in the wildland-urban interface (WUI); the WUI is the area where structures are intermingled with—or adjacent to—vegetated wildlands, such as forests or rangelands.<sup>37</sup> Fuel reduction funding also may be used to provide financial or technical assistance for treatments on nonfederal lands or to develop, promote, and market innovative uses of wood products in an effort to accelerate the removal of hazardous fuels. For example, a portion of FS's Hazardous Fuels funding is allocated to the agency's Wood Technology and Innovation program, which provide grants for the development of wood energy facilities, among other activities.<sup>38</sup>

Prior to FY2018, Congress funded FS's Hazardous Fuels activity through the Other Operations program within FS's WFM account. Since FY2018, however, Congress has funded the activity through FS's NFS account. Appropriations laws have continued to fund DOI's Fuels Management activity through DOI's Other Operations program (within the WFM account).

FS and DOI receive funding through other accounts and programs that may be used for activities that have a fuel reduction component, improve forest conditions, or otherwise reduce wildfire risk. For example, FS's Vegetation and Watershed Management program (within FS's NFS account) funds a range of restoration activities in national forests.<sup>39</sup> Each of DOI's land management agencies has a general resource management account that also may fund activities that have a fuel reduction benefit. Thus, funding provided to each agency's fuels program does not reflect all funding available for these activities.

---

<sup>34</sup> FS, *FY2018 Budget Justification*, May 2017, p. 146, at <https://www.fs.usda.gov/about-agency/budget-performance>.

<sup>35</sup> For more information on wildland fuels, see CRS Report R40811, *Wildfire Fuels and Fuel Reduction*, by Katie Hoover.

<sup>36</sup> NWCG, "Glossary."

<sup>37</sup> V. C. Radeloff et al., "The Wildland-Urban Interface in the United States," *Ecological Applications*, vol. 15, no. 3 (2005), pp. 799-805. For more information on the wildland-urban interface, see CRS Report RS21880, *Wildfire Protection in the Wildland-Urban Interface*, by Katie Hoover and Kelsi Bracmort.

<sup>38</sup> For more information on wood technology and innovation programs, see CRS Report R45219, *Forest Service Assistance Programs*, by Anne A. Riddle and Katie Hoover.

<sup>39</sup> For more information on FS's vegetation management program, see CRS Report R43872, *National Forest System Management: Overview, Appropriations, and Issues for Congress*, by Katie Hoover and Anne A. Riddle.

## Other Wildfire Activities

FS and DOI both received appropriations for several other wildfire-related activities from FY2011 to FY2020. These appropriations included funding for wildfire assistance programs, site rehabilitation, science and research, and general maintenance. Congress provided funding for some of these activities to both FS and DOI (e.g., the Joint Fire Science Program), but it provided funding for some activities to one agency or the other. Congress provided such funding to DOI through the agency's Other Operations program, within the WFM account. At some times, Congress provided such funding to FS through its WFM Other Operations program; at other times, Congress provided this funding to different FS programs and accounts, which varied across the time period. (For more information on these changes—and other changes enacted to the FS's Other Operations program prior to FY2018—see **Appendix B**.) The list below includes any activity that received funding through either FS's or DOI's Other Operations program between FY2011 and FY2020.

- **Fire Plan Research and Development (R&D).** This activity is specific to FS and contributes funding for wildfire-related research activities within the agency.<sup>40</sup> Congress funded Fire Plan R&D as a specific allocation within FS's Other Operations account until FY2017. Starting in FY2018, however, Congress no longer specifically allocated funding for Fire Plan R&D but indicated that funding for this program should come from funds appropriated to FS's FRR account.
- **Fire Facilities.** This activity is specific to DOI. It funds construction and maintenance of DOI fire facilities,<sup>41</sup> including facilities administered by individual bureaus and facilities jointly administered by multiple bureaus.
- **Forest Health Management.**<sup>42</sup> This program is specific to FS. Forest Health Management consists of two subprograms: a *federal lands* program funds forest health monitoring activities on federal lands, and a *cooperative lands* program provides financial or technical assistance to states to assess forest health conditions on nonfederal lands. Prior to FY2014, Forest Health Management was funded jointly by FS's WFM Other Operations and SPF accounts. From FY2014 to FY2020, Congress fully funded the program in the SPF account.
- **Joint Fire Science Program (JFSP).** This program is an interagency partnership between FS and DOI that provides funding for basic and applied wildfire science research programs.<sup>43</sup> From FY2011 to FY2020, Congress funded this program for DOI as a specific allocation within the DOI WFM Other Operations program. For FS, Congress funded the program as a specific allocation within the agency's WFM Other Operations program until FY2016; starting in FY2017, Congress

<sup>40</sup> Other than funding for the Joint Fire Science Program, DOI does not have a department-level program specifically for wildfire research, though DOI's bureaus may fund such activities from other funding sources.

<sup>41</sup> FS no longer has a specific budget line item for fire facilities, although funds from several FS accounts or programs may be used for such activities as needed. FS last received appropriations for fire facilities in FY2003.

<sup>42</sup> Forest Health Management is sometimes referred to as Forest Health Protection. For more information on this program and FS's State and Private Forestry account, see CRS Report R45219, *Forest Service Assistance Programs*, by Anne A. Riddle and Katie Hoover.

<sup>43</sup> More information on the Joint Fire Science program is available at <https://www.firescience.gov/index.cfm>.



indicated that funding for JFSP should come from funds appropriated to FS's FRR account.<sup>44</sup>

- **Rehabilitation.** This activity refers to the long-term restoration of landscapes damaged by wildfires and is separate from the funding provided to FS's and DOI's respective suppression programs for postfire emergency stabilization activities. For DOI, the rehabilitation activity is referred to as *Burned Area Rehabilitation* (BAR) and is funded as a specific allocation within the WFM Other Operations program. For FS, long-term restoration activities were last funded as *Rehabilitation and Site Restoration* in FY2011. Since then, FS has not received a specific allocation for long-term site restoration. Instead, the agency generally funds such activities through its NFS account or other relevant funding sources.
- **State Fire Assistance/Volunteer Fire Assistance Programs.** These programs are specific to FS. These programs provide financial assistance, technical assistance, and equipment to encourage effective, coordinated, and uniform wildfire response across different levels of government.<sup>45</sup> Prior to FY2014, these programs were funded jointly between FS's WFM Other Operations program and FS's SPF account. From FY2014 through FY2017, these programs were funded exclusively within FS's WFM Other Operations program. From FY2018 to FY2020, these programs were funded exclusively in FS's SPF account.

## Wildfire Appropriations Data

### Reporting Caveats

Because the funding structure for some FS wildfire programs varied between FY2011 and FY2020, it is challenging to report and analyze the funding trends over that period. As such, the figures in this report reflect different activities in some years. For example, figures from FY2011 through FY2013 include funding appropriated to FS's Wildland Fire Management account for Forest Health Management programs. Starting in FY2014, funding for these programs was appropriated to FS's State and Private Forestry account and thus is no longer reflected as wildfire funding in this report. In addition, some FS activities did not receive funding allocations in appropriations laws in some years and FS did not report funding levels (e.g., Joint Fire Science Program, Fire Plan Research and Development). As a result, the figures in this report reflect no funding for those programs in those years, although it is possible some funding was allocated administratively. Overall, the funding for programs not reflected herein represented a relatively small portion of FS's total annual wildfire appropriations. For example, the cumulative funding for these programs ranged from 1% to 3% of the agency's wildfire appropriation for the year.

In some cases, however, funding that is provided to a different FS account is included as wildfire funding in the figures reported herein. For example, funding for FS's Hazardous Fuels and wildfire assistance programs is included for all 10 fiscal years.

For the 10-year period from FY2011 to FY2020, total appropriations to FS and DOI for wildfire management were \$4.48 billion annually on average in constant FY2020 dollars, which are adjusted for inflation (and \$4.17 billion annually on average in nominal dollars).<sup>46</sup> As shown in

<sup>44</sup> U.S. Congress, House Committee on Appropriations, *Legislative Text and Explanatory Statement for the Consolidated Appropriations Act, 2017*, committee print, 115<sup>th</sup> Cong., 1<sup>st</sup> sess., 2017, H.Prt.25-289 (Washington: GPO, 2017), p. 1130.

<sup>45</sup> FS and DOI assistance programs funded through FS's Hazardous Fuels program or DOI's Fuels Management programs are not included. In addition, DOI received funding for various assistance programs prior to FY2011. For more information on the FS programs, see CRS Report R45219, *Forest Service Assistance Programs*, by Anne A. Riddle and Katie Hoover.

<sup>46</sup> See footnote 9 for additional information about these figures.

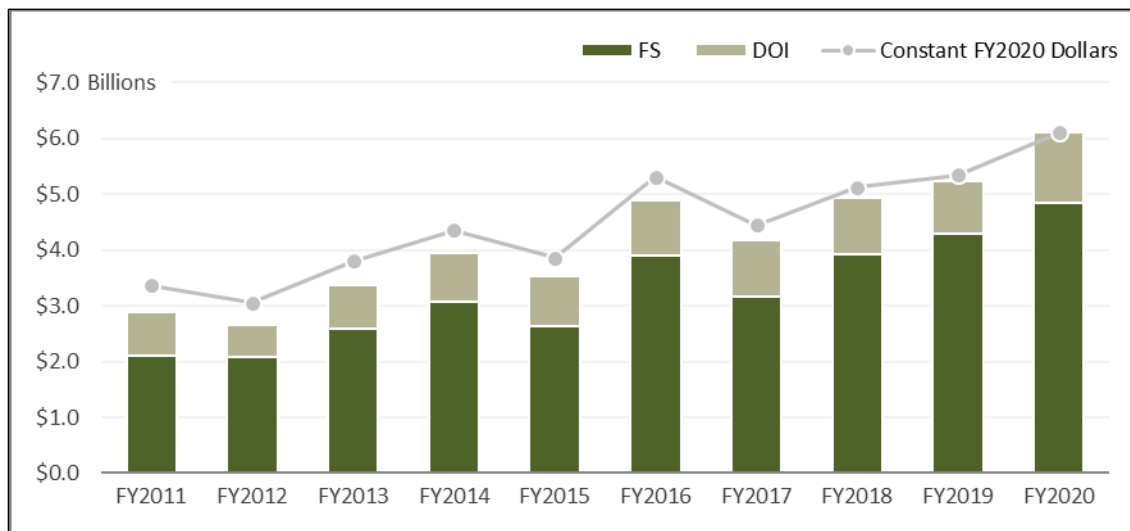
**Table 1** and **Figure 2**, total wildfire appropriations fluctuated annually but increased over the 10-year period, in terms of both constant and nominal dollars. In constant dollars, total combined appropriations increased by 82% from FY2011 to FY2020. Over the 10 years, FS and DOI combined received the lowest appropriation in FY2012 (\$3.05 billion in constant dollars) and the highest appropriation in FY2020 (\$6.11 billion). The FY2020 appropriation was \$633.2 million (12%) more than the next-highest appropriation, \$5.47 billion in constant dollars, provided in FY2008. (The FY2020 appropriation also was 14% more than the \$5.34 billion provided in FY2019, the previous fiscal year.) The average annual appropriation in the latter half of the decade (FY2016 through FY2020) was \$5.27 billion, 43% higher than the \$3.69 billion average annual appropriation in the first half of the decade (FY2011 through FY2015). **Appendix A** contains detailed appropriations data tables for FS (**Table A-1**), DOI (**Table A-2**), and the two agencies combined (**Table A-3**).

**Table 1. Forest Service (FS) and Department of the Interior (DOI) Total Wildfire Appropriations, FY2011-FY2020**  
(dollars in millions)

|                 | FS      | DOI     | Total   |                         |
|-----------------|---------|---------|---------|-------------------------|
|                 |         |         | Nominal | Constant FY2020 Dollars |
| FY2011          | 2,097.5 | 778.9   | 2,876.4 | 3,361.2                 |
| FY2012          | 2,087.4 | 575.4   | 2,662.8 | 3,053.7                 |
| FY2013          | 2,579.7 | 794.7   | 3,374.  | 3,799.9                 |
| FY2014          | 3,077.3 | 861.5   | 3,938.8 | 4,351.6                 |
| FY2015          | 2,636.4 | 896.8   | 3,533.1 | 3,858.9                 |
| FY2016          | 3,909.3 | 993.7   | 4,903.1 | 5,308.1                 |
| FY2017          | 3,175.4 | 1,007.7 | 4,183.1 | 4,449.6                 |
| FY2018          | 3,932.8 | 998.1   | 4,930.9 | 5,125.8                 |
| FY2019          | 4,300.1 | 941.2   | 5,241.3 | 5,344.7                 |
| FY2020          | 4,852.9 | 1,252.3 | 6,105.3 | 6,105.3                 |
| 10-Year Average | 3,264.9 | 910.0   | 4,174.9 | 4,475.9                 |

**Sources:** Prepared by CRS using data derived from annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and detailed funding tables prepared by the House and Senate Committees on Appropriations.

**Notes:** See footnote 9 for additional information about this table.

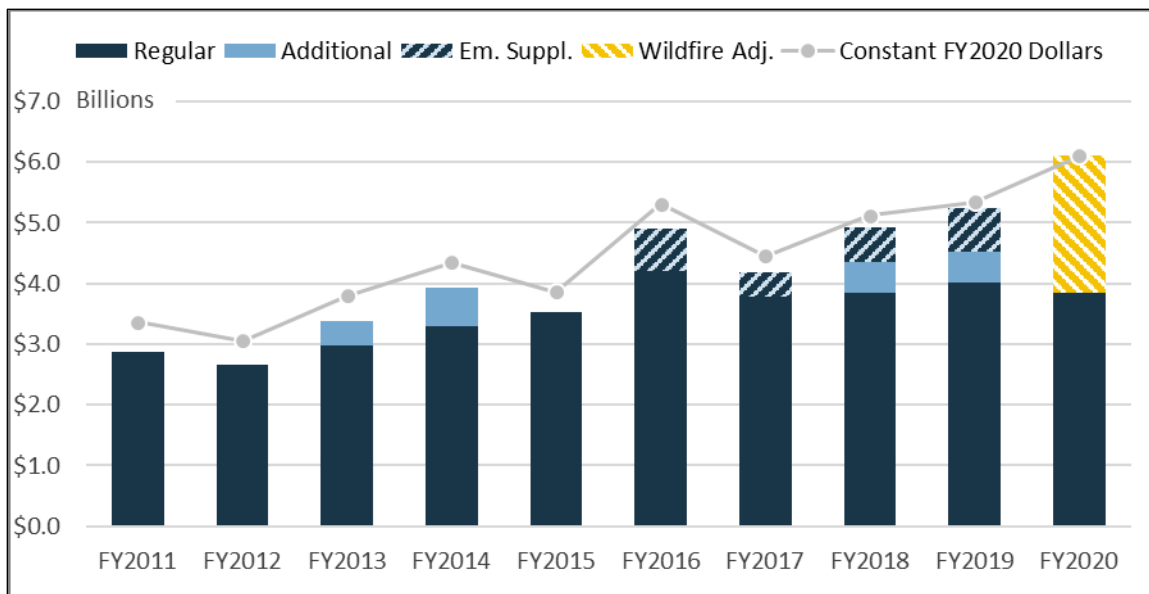
**Figure 2. FS and DOI Wildfire Appropriations, FY2011-FY2020**

**Sources:** Prepared by CRS. Data are derived from annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and the detailed funding tables prepared by the House and Senate Committees on Appropriations.

**Notes:** See footnote 9 for additional information about this figure.

The totals shown in **Table 1** and **Figure 2** include regular-enacted discretionary appropriations as well as supplemental discretionary appropriations that FS and DOI received in 7 of the 10 years from FY2011 through FY2020, as shown in **Figure 3**. This funding included additional and emergency supplemental appropriations and appropriations provided pursuant to the wildfire adjustment. Congress generally provided these supplemental appropriations for suppression purposes or to repay funds “borrowed” from other agency accounts and used for suppression purposes.<sup>47</sup>

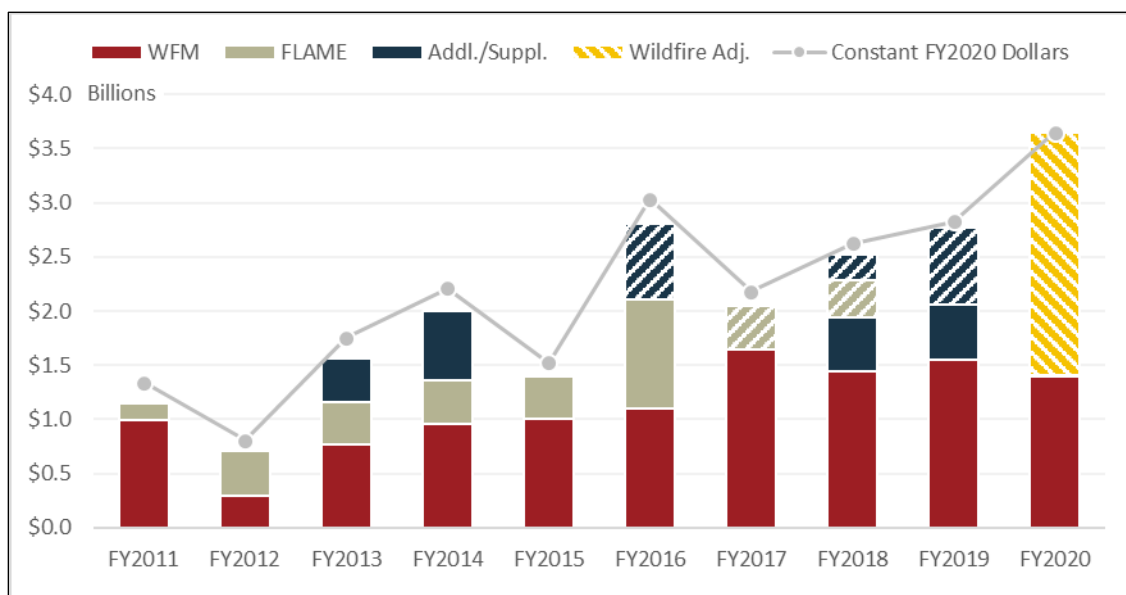
<sup>47</sup> See footnote 30.

**Figure 3. Regular and Supplemental Wildfire Appropriations, FY2011-FY2020**

**Sources:** Prepared by CRS. Data are derived from annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and the detailed funding tables prepared by the House and Senate Committees on Appropriations.

**Notes:** *Regular* reflects appropriations provided in the annual appropriations law; *Additional* reflects appropriations designated as additional or supplemental in an appropriations law but not designated as emergency; *Em. Suppl.* reflects appropriations designated pursuant to the emergency requirement adjustment; *Wildfire Adj.* reflects appropriations provided pursuant to the wildfire adjustment. Solid colors reflect appropriations provided within discretionary spending limits; diagonal hatch marks reflect appropriations that were not subject to discretionary spending limits. See footnote 9 for additional information about this figure.

The funding trends over the period FY2011-FY2020 are primarily attributable to fluctuations and increases in appropriations for wildfire suppression (see **Figure 4**). These variations occurred in part because of the largely unpredictable nature of wildfires. In constant dollars, total appropriations for suppression purposes fluctuated from a low of \$807.8 million in FY2012 to a high of \$3.65 billion in FY2020 (+352%). From FY2011 through FY2020, FS and DOI combined received \$2.20 billion annually on average in constant FY2020 dollars for suppression purposes (\$2.06 billion annually on average in nominal dollars). Not all of the suppression funding has been subject to the discretionary spending limits, however, as shown in **Figure 4**.

**Figure 4. Suppression Appropriations, FY2011-FY2020**

**Sources:** Prepared by CRS. Data are derived from annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and the detailed funding tables prepared by the House and Senate Committees on Appropriations.

**Notes:** WFM reflects appropriations to each agency's respective Wildland Fire Management suppression activity; FLAME reflects appropriations to the FLAME accounts; Addl./Suppl. reflects appropriations designated as additional or supplemental and/or funds designated as emergency; Wildfire Adj. reflects appropriations provided pursuant to the wildfire adjustment. Solid colors reflect appropriations provided within discretionary spending limits; diagonal hatch marks reflect appropriations that were not subject to discretionary spending limits. See footnote 9 for additional information about this figure.

Suppression received the largest appropriation in 8 of the 10 years between FY2011 and FY2020. On average, suppression funding accounted for about half (49%) of the annual wildfire appropriation provided to both agencies; it fluctuated from a low of 26% of the total annual appropriation in FY2011 to a high of 60% in FY2020 (see **Table 2** and **Figure 5**).

Preparedness received the largest appropriation in 2 of the 10 years between FY2011 and FY2020. On average, the agencies received \$1.52 billion in constant dollars for preparedness, which accounted for 34% of the average annual wildfire appropriation. Funding for preparedness fluctuated from a low of \$1.13 billion in FY2011 to a high of \$1.72 billion in FY2018, in constant dollars.

The average annual appropriation for fuel reduction purposes from FY2011 to FY2020 was \$590.7 million, 13% of the annual average. Across the time period, funding for fuel reduction fluctuated from a low of \$494.1 million in FY2013 to a high of \$669.5 million in FY2019 in constant dollars.

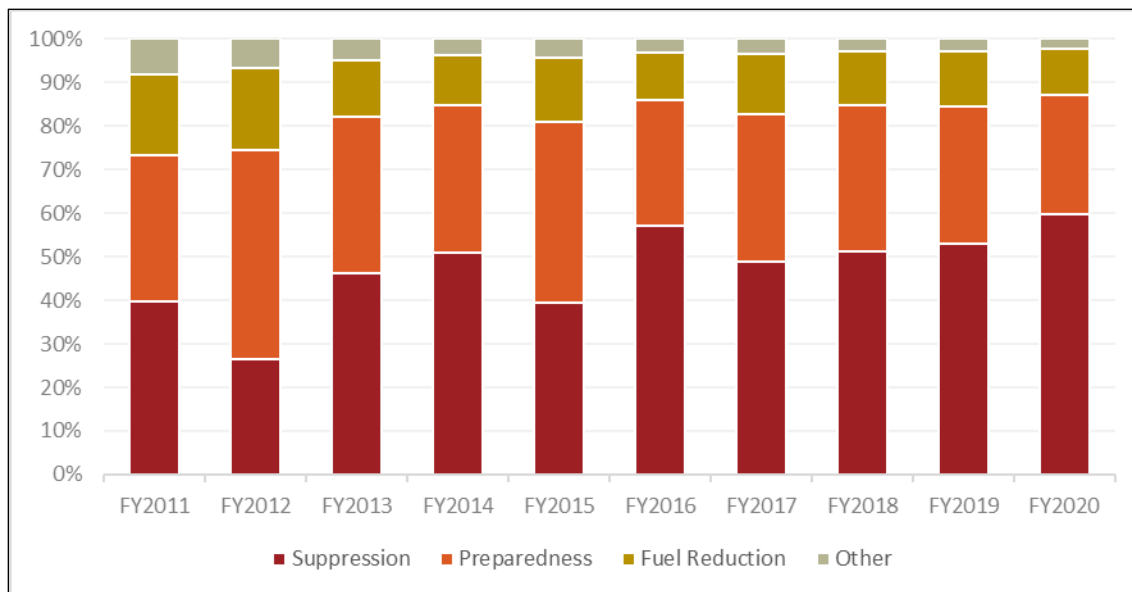
Average appropriations for other wildfire activities from FY2011 to FY2020 were \$174.1 million, 4% of the annual average funding. Funding for other wildfire activities generally decreased annually, with a high of \$273.1 million in FY2011 (in constant FY2020 dollars) and a low of \$141.9 million in FY2020. Some of the annual and overall fluctuation in the funding provided to the four different categories can be attributed to changes in FS's account structure, including shifts of some activities between suppression and preparedness and changes to FS's WFM Other Operations program.

**Table 2. FS and DOI Wildfire Appropriations by Category, FY2011-FY2020**  
(dollars in millions)

|              | Suppression |          | Preparedness |          | Fuel Reduction |          | Other   |          |
|--------------|-------------|----------|--------------|----------|----------------|----------|---------|----------|
|              | Nominal     | Constant | Nominal      | Constant | Nominal        | Constant | Nominal | Constant |
| FY2011       | 1,145.8     | 1,338.9  | 964.1        | 1,126.6  | 532.9          | 622.7    | 233.7   | 273.1    |
| FY2012       | 704.4       | 807.8    | 1,281.0      | 1,469.0  | 500.1          | 573.5    | 177.4   | 203.4    |
| FY2013       | 1,557.2     | 1,753.5  | 1,213.3      | 1,366.3  | 438.7          | 494.1    | 165.2   | 186.0    |
| FY2014       | 2,001.9     | 2,211.7  | 1,339.5      | 1,479.9  | 451.5          | 498.9    | 145.9   | 161.2    |
| FY2015       | 1,394.7     | 1,523.3  | 1,464.8      | 1,599.9  | 525.7          | 574.2    | 147.9   | 161.5    |
| FY2016       | 2,802.7     | 3,034.2  | 1,406.3      | 1,522.5  | 545.0          | 590.0    | 149.1   | 161.4    |
| FY2017       | 2,050.0     | 2,180.6  | 1,415.4      | 1,505.6  | 570.0          | 606.3    | 147.7   | 157.1    |
| FY2018       | 2,522.7     | 2,622.4  | 1,656.3      | 1,721.8  | 614.0          | 638.3    | 137.9   | 143.3    |
| FY2019       | 2,773.8     | 2,828.5  | 1,661.8      | 1,694.6  | 656.5          | 669.5    | 149.2   | 152.1    |
| FY2020       | 3,651.7     | 3,651.7  | 1,672.4      | 1,672.4  | 639.3          | 639.3    | 141.9   | 141.9    |
| 10-Year Avg. | 2,060.5     | 2,195.3  | 1,407.5      | 1,515.9  | 547.4          | 590.7    | 159.6   | 174.1    |

**Sources:** Prepared by CRS. Data are derived from annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and the detailed funding tables prepared by the Senate and House Committees on Appropriations.

**Notes:** *Constant* refers to constant FY2020 dollars. *Suppression* reflects appropriations provided to FS's and DOI's respective WFM and FLAME accounts and funds provided pursuant to the wildfire adjustment, and it includes supplemental appropriations. *Preparedness* reflects appropriations provided to the WFM preparedness activity. *Fuel Reduction* reflects appropriations provided to DOI's Fuels Management activity and FS's Hazardous Fuels activity. *Other* reflects wildfire appropriations provided to FS or DOI for purposes other than suppression, preparedness, or fuel reduction. See footnote 9 for additional information about this table.

**Figure 5. Distribution of FS and DOI Wildfire Appropriations, FY2011-FY2020**

**Sources:** Prepared by CRS. Data are derived from annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and the detailed funding tables prepared by the House and Senate Committees on Appropriations.

**Notes:** *Suppression* reflects appropriations provided to FS's and DOI's respective WFM, FLAME, and wildfire adjustment accounts. *Preparedness* reflects appropriations provided to the WFM preparedness activity. *Fuel Reduction* reflects appropriations provided to DOI's Fuels Management activity and FS's Hazardous Fuels activity. *Other* reflects wildfire appropriations provided to FS or DOI for purposes other than suppression, preparedness, or fuel reduction. See footnote 9 for additional information about this figure.

## Issues for Congress

Overall appropriations for wildfire-related activities have increased considerably since the 1990s. In FY2020, FS and DOI received the highest combined appropriation to date (\$6.11 billion). A sizeable portion of the increase was related to rising suppression costs, even during years of relatively mild wildfire activity, although the costs varied annually.

From FY2011 to FY2020, Congress focused primarily on addressing concerns about the cost of suppression activities, including the extent to which increasing suppression costs have reduced the availability of funding for other programs. The wildfire adjustment was intended to alleviate some of these concerns, at least temporarily. Other issues of focus related to the adequacy of funding for preparedness, fuel reduction, and other wildfire activities. Related concerns included issues related to the number and effectiveness of aircraft available for wildfire suppression and the adequacy of efforts to recruit and retain federal firefighters; the scope and scale of fuel reduction needs, prioritization of treatments to the highest-risk locations, and effectiveness of treatments; and how much funding to provide for wildfire research, assistance programs, and postfire restoration. Some of these concerns recently sparked renewed interest, largely due to the nature of the 2020 wildfire season, and may persist. These issues are discussed in more detail below by type of wildfire activity.



## Suppression

The impact of fire borrowing has been a topic of congressional focus. Due to the emergency nature of fire control activities, appropriations laws provide FS and DOI the authority to transfer money out of other accounts if suppression funds become depleted; this process is often referred to as *fire borrowing*.<sup>48</sup> When such transfers have occurred, Congress typically has enacted supplemental appropriations to repay the transferred funds and/or to replenish the agency's wildfire accounts. Sometimes these funds have been provided in subsequent fiscal years.<sup>49</sup> Congress sometimes—but not always—has provided these supplemental funds outside of discretionary budget limits. In other years, the supplemental funding was subject to discretionary budget limits and thus could be considered as having “competed” with other programs funded through the Interior appropriations bill.

The authority to access additional funds for suppression operations provides FS and DOI the flexibility to respond quickly in time-sensitive emergency situations. However, the practice has generated varied criticisms. Some critics contend the authority is too broad and could provide little incentive to manage suppression costs.<sup>50</sup> Other critics claim fire borrowing detrimentally affects agency programs; for example, FS and the Government Accountability Office (GAO) have asserted that fire borrowing disrupts FS's nonfire operations and hinders FS's ability to carry out its statutory missions.<sup>51</sup> According to FS, borrowing from other program accounts—even when the borrowed amount is repaid in subsequent appropriations—creates uncertainty about the availability of funds and affects program implementation. In addition, some programs are time sensitive (e.g., land sales) and may suffer adverse effects (e.g., changing land prices) if and when delayed by fire transfers, according to GAO.<sup>52</sup>

Some Members of Congress have expressed concern about the impact of fire borrowing on other FS or DOI activities and about the increasing portion of agency budgets used for suppression. The FLAME accounts were intended in part to address fire borrowing effects.<sup>53</sup> In establishing FLAME, the conferees on the FY2010 Interior appropriations bill stated their intent that the funding in the FLAME account, together with appropriations to the WFM account, should fully fund anticipated wildfire suppression needs and prevent future borrowing of funds from nonfire

<sup>48</sup> The transfer authority has been granted annually in the Interior, Environment, and Related Agencies Appropriations Acts. See, for example, provisions of the FY2020 Interior appropriations law (P.L. 116-94, Division D) included in §102 (DOI) and administrative provisions (FS).

<sup>49</sup> Appropriations laws have specified that such transferred funds “must be replenished by a supplemental appropriation.” See, for example, provisions of the FY2020 Interior appropriations law (P.L. 116-94, Division D) included in §102 (DOI) and administrative provisions (FS).

<sup>50</sup> National Academy of Public Administration, *Wildfire Suppression: Strategies for Containing Costs*, September 2002.

<sup>51</sup> See, for example, U.S. Government Accountability Office (GAO), *Wildfire Suppression: Funding Transfers Cause Project Cancellations and Delays, Strained Relationships, and Management Disruptions*, GAO-04-612, June 2004 (hereinafter cited as GAO-04-612); Testimony of FS Chief Tom Tidwell in U.S. Congress, Senate Committee on Energy and Natural Resources, *Hearing to Receive Testimony on the Federal Government's Role in Wildfire Management, the Impact of Fires on Communities, and Potential Improvements to Be Made in Fire Operations*, 114<sup>th</sup> Cong., 1<sup>st</sup> sess., May 5, 2015; and FS, *Fire Transfer Impact by State*, June 9, 2014, at <http://www.fs.fed.us/publications/forest-service-fire-transfer-state-impacts.pdf>.

<sup>52</sup> GAO-04-612.

<sup>53</sup> U.S. Congress, *Department of the Interior, Environment, and Related Agencies Appropriations Acts, 2010*, 111<sup>th</sup> Cong., 1<sup>st</sup> sess., October 28, 2009, H.Rept. 111-316, p. 104.

programs.<sup>54</sup> In practice, fire borrowing still occurred during the years the FLAME accounts were active (FY2010-FY2018), despite the use of this additional account for suppression operations.

The wildfire adjustment also was intended to address fire borrowing impacts. Through this mechanism, additional funds are provided for suppression operations. The wildfire adjustment, however, allows additional funding for wildfire suppression without needing to enact supplemental appropriations or borrow and then replenish other accounts. As noted, under the wildfire adjustment, any additional funding that is appropriated over the FY2015 baseline essentially would cause the discretionary spending limits to be raised, up to the specified maximum.<sup>55</sup> This adjustment may alleviate concerns that increasing suppression costs would be funded at the expense of other programs funded through the Interior bill. However, because the statutory limits for discretionary spending are in effect only through FY2021, the wildfire adjustment will no longer apply after that date unless new limits are enacted. If new limits are statutorily established for any year between FY2022 through FY2027, then the wildfire adjustment still will apply.

## Preparedness

The extent to which FS and DOI are adequately prepared for wildfire response activities has been a topic of congressional interest. Two areas of particular interest involve aviation assets and the firefighter workforce.

### Aviation

A long-standing congressional focus has been the age, extent, and effectiveness of the aviation fleet (e.g., helicopters, scoopers, air tankers). In particular, Congress has examined the availability of information to assess those issues. A 2013 GAO study, for example, recommended expanded efforts to collect information on the performance and effectiveness of firefighting aircraft.<sup>56</sup> Based on that recommendation, FS released the *Aerial Firefighting Use and Effectiveness (AFUE) Report* in 2020.<sup>57</sup> The 2020 report is intended to inform aviation strategies moving forward, including decisions related to the composition of the federal aviation fleet. The report identified patterns of aircraft use and established a methodology to measure and evaluate performance and outcome metrics. For example, the report found that helicopters and scoopers were commonly used to reduce fire intensity and that fixed-wing airtankers were more commonly used to reduce wildfire spread.

Congress also has studied the age and extent of the federal aviation fleet. According to the 2013 GAO report, the number of large airtankers available to the federal government decreased substantially from 2002 through 2013, in large part due to the retirement of aircraft because of

---

<sup>54</sup> H.Rept. 111-316, p. 104.

<sup>55</sup> For more information on budgetary adjustments, see CRS Report R45778, *Exceptions to the Budget Control Act's Discretionary Spending Limits*, by Megan S. Lynch.

<sup>56</sup> GAO identified nine studies from the 1990s through 2013 that examined issues related to aviation needs and strategies, but GAO noted that the studies were hampered by limited information and did not include performance or effectiveness information. GAO, *Wildland Fire Management: Improvements Needed in Information, Collaboration, and Planning to Enhance Federal Fire Aviation Program*, GAO-13-684, April 2013, at <https://www.gao.gov/products/GAO-13-684>. Hereinafter cited as GAO-13-684.

<sup>57</sup> FS, *Aerial Firefighting Use and Effectiveness (AFUE) Report*, March 2020, at <https://www.fs.usda.gov/managing-land/fire/aviation/afue>.

age and safety concerns.<sup>58</sup> This situation has led to debate regarding the extent to which the government should invest in owning aviation assets versus contracting with the private sector for those services. In 2013, for example, Congress authorized the transfer of several Department of Defense (DOD) aviation assets to FS to be retrofitted and modified for wildfire response purposes.<sup>59</sup> In FY2019, however, FS announced it no longer supported the acquisitions. The agency stated that its aviation needs could be best met through contracting with the private sector.<sup>60</sup>

Issues related to aviation contracts also have been of interest to Congress. The contract-award process has been controversial at times, and some are concerned that federal contracting requirements create barriers to private sector entry and could inhibit cost-efficiencies and effectiveness. For example, in discussions on FY2021 legislation, the House Appropriations Committee sought to direct FS and DOI to submit a report on aviation-contract-related concerns.<sup>61</sup> More specifically, the committee wanted the report to address questions related to extending aviation contracts from the current limit of five years. Providing for longer-duration contracts may provide more certainty for the private sector and may incentivize increased competition, but there may be other consequences, such as performance-related issues.

## **Workforce**

The federal government's ability to recruit and retain firefighters has been under examination periodically since the 1990s.<sup>62</sup> For FY2019, FS reported about 10,000 full-time equivalents (FTEs) firefighting positions annually and DOI reported approximately 4,400 FTEs.<sup>63</sup> The federal wildland firefighting workforce consists predominantly of seasonal hires. Though some seasonal positions are permanent, many are temporary positions that have to be filled annually. This situation has led to concerns about efficiency and about the recruitment and retention of firefighters, particularly when compared with employment opportunities at the state level or in the private sector. In addition, there have been concerns about succession planning, as many leadership-level employees approach retirement age.

The 2020 wildfire season exacerbated many of these concerns, as the location, severity, and extent of the wildfires exceeded interagency (federal, state, and local) firefighter capacities in many regards. For example, on September 19, 2020, over 32,700 firefighters were supporting wildfire operations throughout the country, the highest number of deployed firefighters since record-keeping began.<sup>64</sup> This figure included firefighting support from DOD as well as internationally from Canada and Mexico.

---

<sup>58</sup> GAO-13-684.

<sup>59</sup> National Defense Authorization Act for FY2014, P.L. 113-66 §1098.

<sup>60</sup> FS, *FY2019 Budget Justification*, p. 127.

<sup>61</sup> U.S. Congress, House Committee on Appropriations, *Department of the Interior, Environment, and Related Agencies Appropriations Bill, 2021*, report to accompany H.R. 7612, 116<sup>th</sup> Cong., 2<sup>nd</sup> sess., July 14, 2020, H.Rept. 116-448, p. 7.

<sup>62</sup> In 1999, for example, GAO identified concerns with the federal firefighting workforce, including issues with pay and attrition. GAO, *Federal Wildfire Activities: Current Strategy and Issues Needing Attention*, GAO-99-233, August 1999, at <https://www.gao.gov/products/RCED-99-233>.

<sup>63</sup> FS, *FY2021 Budget Justification*, p. 97, and DOI, *FY2021 Budget Justification*, p. 28.

<sup>64</sup> Prepared remarks from FS Deputy Chief for State and Private Forestry John Phipps in U.S. Congress, House Committee on Agriculture, Subcommittee on Conservation and Forestry, *The 2020 Wildfire Year: Response and Recovery Efforts*, 116<sup>th</sup> Cong., 2<sup>nd</sup> sess., September 24, 2020, at <https://agriculture.house.gov/calendar/eventsingle.aspx?EventID=1993>.

In part to address some of these concerns, for FY2021, DOI requested \$50.0 million to develop a year-round, permanent wildland fire workforce.<sup>65</sup> The funds would come from DOI's preparedness and fuels management appropriations and would fund approximately 600 FTEs. When not working on an active fire incident, the employees would be available to assist with fuel reduction or other vegetation management projects. DOI anticipates this change could result in long-term savings related to recruitment and training costs. FS indicated it was currently studying a similar proposal, although the agency did not include such a proposal in its FY2021 budget request.<sup>66</sup>

## Fuel Reduction

Funding for fuel reduction has raised several interrelated issues for Congress, many of which have been ongoing for decades.<sup>67</sup> These issues include the adequacy of funding, particularly in relation to the scope of the fuel reduction needs, and the allocation of funds to areas most in need of treatment. Other issues center on the effectiveness of treatments, in terms of both cost-effectiveness and ability to reduce the risks of catastrophic fires.

A 2019 GAO study examined DOI's and FS's respective fuel reduction programs from FY2009 through FY2018. GAO reported the agencies identified a combined total of 117 million acres at high or very high wildfire potential (63 million acres for FS; 54 million acres for DOI),<sup>68</sup> representing nearly one-fifth of the combined federal lands administered by the agencies. GAO reported the agencies accomplished a combined total of 2.5 million acres of fuel reduction treatments per year on average from FY2009 through FY2018.<sup>69</sup> GAO and the agencies identified several issues impeding progress toward fuel reduction goals. These issues included workforce levels, funding uncertainties, and the high cost of treatments, particularly in the wildland-urban interface (WUI) and other areas most in need of treatments. Other cost challenges related to the lack of a market for the biomass removed during treatments; development of such a market could improve cost efficiencies.

## Other Wildfire Activities

Issues related to funding for other wildfire activities generally pertain to the adequacy of funds. Such issues include the extent to which increasing suppression costs have adversely affected funding for these programs (and other FS or DOI programs). One area of debate has been the level and type of assistance the federal government provides to support state wildfire management programs. Debate centers on whether to provide more funding and/or establish more

---

<sup>65</sup> DOI, *FY2021 Budget Justification*, pp. 19-20, 23, 35-36.

<sup>66</sup> Testimony of FS Chief Vicki Christiansen in U.S. Congress, House Committee on Appropriations, Subcommittee on Interior, Environment, and Related Agencies, *U.S. Forest Service Budget Request for FY2021*, 116<sup>th</sup> Cong., 2<sup>nd</sup> sess., February 27, 2020.

<sup>67</sup> For example, in 1994, the congressionally chartered National Commission on Wildfire Disasters recommended federal land management agencies invest more in reducing hazardous fuels in high-risk ecosystems and observed that "the question is no longer if policy-makers will face disastrous wildfires and their enormous costs, but when." The commission was established by the Wildfire Disaster Recovery Act of 1989 (P.L. 101-286) after the 1988 wildfires in Yellowstone National Park. R. Neil Sampson, chair, *Report of the National Commission on Wildfire Disasters*, Washington, DC, 1994.

<sup>68</sup> GAO, *Wildland Fire: Federal Agencies' Efforts to Reduce Wildland Fuels and Lower Risk to Communities and Ecosystems*, GAO-20-52, December 2009, p. 9, at <https://www.gao.gov/products/GAO-20-52>. Hereinafter referred to as GAO-20-52.

<sup>69</sup> GAO-20-52, p. 11.

specific programs for activities such as community-level wildfire preparedness planning, fuels management on nonfederal lands (or specifically in the WUI), the retrofitting of existing structures to improve fire resistance, and postfire recovery assistance, among others. Another focus has been the level of investment in wildfire science and research. Funding for the Joint Fire Science Program (JFSP), for example, declined substantially from FY2011 to FY2020. During this period, appropriations laws did not specifically allocate FS funding for JFSP and appropriations to DOI for JFSP also declined.

Another concern relates to funding for postfire site rehabilitation or restoration, particularly on FS lands. FS has not received a specific funding allocation for those activities since FY2011 and it relies on funding from other agency program accounts. This approach is in contrast to FS's funding for site rehabilitation activities after a timber harvest, for example, where the agency is authorized to retain receipts from timber purchasers to finance reforestation or other site improvements.<sup>70</sup> FS does have access to dedicated reforestation funding, however. Specifically, mandatory appropriations from the Reforestation Trust Fund provide up to \$30 million annually for reforestation needs, funded through tariffs from the imports of specified wood products.<sup>71</sup> Though some have called for raising the \$30 million annual maximum to provide for additional resources to address postfire reforestation, among other needs, that figure has not increased since the fund's establishment in 1980.

---

<sup>70</sup> The retained receipts are deposited in the FS's Knutson-Vandenberg Fund and are available without further appropriation. For more information, see CRS Report R45688, *Timber Harvesting on Federal Lands*, by Anne A. Riddle, and CRS Report R45994, *Federal Land Management Agencies' Mandatory Appropriations Accounts*, coordinated by Carol Hardy Vincent.

<sup>71</sup> 16 U.S.C. §1606a.

## Appendix A. Detailed Wildfire Appropriations Data

The following tables detail the appropriations provided for wildfire purposes from FY2011 through FY2020 for the Forest Service (FS; **Table A-1**), the Department of the Interior (DOI; **Table A-2**), and FS and DOI combined (**Table A-3**). The tables generally distinguish regular, additional, emergency supplemental, and rescinded appropriations for each agency's Wildland Fire Maintenance (WFM) and FLAME accounts and appropriations provided pursuant to the wildfire adjustment.

**Table A-1. Forest Service (FS) Wildfire Appropriations, FY2011-FY2020**

(dollars in millions)

| Account/Activity                              | FY2011         | FY2012         | FY2013         | FY2014         | FY2015         | FY2016         | FY2017         | FY2018         | FY2019         | FY2020         |
|-----------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| WFM Account                                   | 1,968.0        | 1,734.9        | 2,248.7        | 2,762.3        | 2,333.3        | 3,086.3        | 2,833.4        | 3,064.8        | 3,725.3        | 2,357.6        |
| Fire Operations                               | 1,469.2        | 1,302.7        | 1,838.4        | 2,338.1        | 1,853.8        | 2,593.6        | 2,330.6        | 3,064.8        | 3,725.3        | 2,357.6        |
| Preparedness                                  | 673.7          | 1,004.4        | 948.5          | 1,057.6        | 1,145.8        | 1,082.6        | 1,082.6        | 1,323.5        | 1,339.6        | 1,339.6        |
| Suppression                                   | 795.5          | 298.2          | 889.9          | 1,280.5        | 708.0          | 1,511.0        | 1,248.0        | 1,741.3        | 2,385.6        | 1,018.0        |
| Regular                                       | 995.5          | 538.2          | 510.0          | 680.5          | 708.0          | 811.0          | 1,248.0        | 1,056.8        | 1,165.4        | 1,011.0        |
| Additional <sup>a</sup>                       | —              | —              | 379.9          | 600.0          | —              | —              | —              | 500.0          | 500.0          | —              |
| Emergency Supplemental <sup>b</sup>           | —              | —              | —              | —              | —              | 700.0          | —              | 184.5          | 720.3          | 7.0            |
| Rescissions <sup>c</sup>                      | -200.0         | -240.0         | —              | —              | —              | —              | —              | —              | —              | —              |
| Other Operations <sup>d</sup>                 | 498.9          | 432.2          | 410.4          | 424.2          | 479.5          | 492.7          | 502.8          | —              | —              | —              |
| Hazardous Fuels <sup>e</sup>                  | 349.6          | 317.1          | 301.1          | 306.5          | 361.7          | 375.0          | 390.0          | —              | —              | —              |
| Other Activities                              | 149.3          | 115.1          | 109.3          | 117.7          | 117.7          | 117.7          | 112.8          | —              | —              | —              |
| FLAME Account                                 | 90.4           | 315.4          | 299.0          | 315.0          | 303.1          | 823.0          | 342.0          | 342.0          | —              | —              |
| Regular                                       | 290.4          | 315.4          | 299.0          | 315.0          | 303.1          | 823.0          | —              | —              | —              | —              |
| Emergency Supplemental <sup>b</sup>           | —              | —              | —              | —              | —              | —              | 342.0          | 342.0          | —              | —              |
| Rescissions <sup>c</sup>                      | -200.0         | —              | —              | —              | —              | —              | —              | —              | —              | —              |
| Wildfire Adjustment <sup>f</sup>              | —              | —              | —              | —              | —              | —              | —              | —              | —              | 1,950.0        |
| Other FS Wildfire Appropriations <sup>g</sup> | 39.0           | 37.2           | 32.1           | —              | —              | —              | —              | 526.0          | 574.8          | 545.3          |
| NFS Hazardous Fuels <sup>e</sup>              | —              | —              | —              | —              | —              | —              | —              | 430.0          | 467.5          | 445.3          |
| <b>FS Total Wildfire Appropriations</b>       | <b>2,097.5</b> | <b>2,087.4</b> | <b>2,579.7</b> | <b>3,077.3</b> | <b>2,636.4</b> | <b>3,909.3</b> | <b>3,175.4</b> | <b>3,932.8</b> | <b>4,300.1</b> | <b>4,852.9</b> |
| <i>Constant FY2020 Dollars<sup>h</sup></i>    | <i>2,451.0</i> | <i>2,393.8</i> | <i>2,905.0</i> | <i>3,339.9</i> | <i>2,879.4</i> | <i>4,232.2</i> | <i>3,377.8</i> | <i>4,088.3</i> | <i>4,385.0</i> | <i>4,852.9</i> |

**Sources:** Prepared by CRS using data derived from annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and detailed funding tables prepared by the House and Senate Committees on Appropriations.



**Notes:** NFS = National Forest System; WFM = Wildland Fire Management. Totals may not add due to rounding. FY2020 figures may change, for instance, if additional appropriations or rescissions are enacted for the fiscal year.

- a. These funds reflect appropriations designated as *additional* or *supplemental* that were not designated as *emergency*.
- b. These funds reflect appropriations designated as *emergency requirements*.
- c. For FY2011, this reflects a rescission of budgetary authority. For FY2012, this reflects an adjustment based on the use of prior-year emergency funds.
- d. The activities funded through the WFM Other Operations program varied between FY2011 and FY2018. Some activities (e.g., Cooperative Fire Assistance) were funded fully through the Other Operations program in some years, partially through the Other Operations program and partially through the FS's State and Private Forestry (SPF) account in other years, and fully through the SPF account in still other years. Starting in FY2018, appropriations for activities funded in the Other Operations program were provided to other FS accounts. Some of these funds are reflected in Other FS Wildfire Appropriations. Some programs, however, did not receive line-item funding (e.g., Joint Fire Science) under the new accounts and are not reflected in the Other FS Wildfire Appropriations or elsewhere in this table.
- e. Prior to FY2018, appropriations for Hazardous Fuels activities were provided to FS through the WFM Other Operations program. Starting in FY2018, appropriations for Hazardous Fuels activities were provided to FS through the NFS account.
- f. In FY2020, funds provided pursuant to the wildfire adjustment were appropriated to the FS's Wildfire Suppression Operations Reserve Fund account.
- g. Other Wildfire Appropriations reflect appropriations for wildfire-related activities that were appropriated to other FS accounts, including the SPF, NFS, and Forest and Rangeland Research accounts. For example, starting in FY2018, this includes appropriations provided to the NFS account for Hazardous Fuels activities.
- h. Figures were adjusted to estimated FY2020 constant dollars using the GDP Chained Price Index from the White House Office of Management and Budget, Table 10.1, "Gross Domestic Product and Deflators Used in the Historical Tables—1940-2025," in *Historical Tables*, at <http://www.whitehouse.gov/omb/budget/Historicals>.

**Table A-2. Department of the Interior (DOI) Wildfire Appropriations, FY2011-FY2020**

(dollars in millions)

| Account/Activity                           | FY2011       | FY2012       | FY2013       | FY2014       | FY2015       | FY2016         | FY2017         | FY2018         | FY2019       | FY2020         |
|--------------------------------------------|--------------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|--------------|----------------|
| WFM Account                                | 718.1        | 483.6        | 703.0        | 769.5        | 804.8        | 816.7          | 942.7          | 998.1          | 941.2        | 952.3          |
| Fire Operations                            | 489.4        | 275.4        | 541.5        | 596.3        | 610.6        | 615.4          | 727.8          | 772.2          | 710.3        | 716.4          |
| Preparedness                               | 290.5        | 276.5        | 264.8        | 281.9        | 319.0        | 323.7          | 332.8          | 332.8          | 322.2        | 332.8          |
| Suppression                                | 199.0        | -1.1         | 276.7        | 314.4        | 291.7        | 291.7          | 395.0          | 439.4          | 388.1        | 383.7          |
| Regular                                    | 399.0        | 270.5        | 261.2        | 285.9        | 291.7        | 291.7          | 395.0          | 389.4          | 388.1        | 383.7          |
| Additional <sup>a</sup>                    | —            | —            | 23.0         | 36.0         | —            | —              | —              | —              | —            | —              |
| Emergency Supplemental <sup>b</sup>        | —            | —            | —            | —            | —            | —              | —              | 50.0           | —            | —              |
| Rescissions <sup>c</sup>                   | -200.0       | -271.6       | -7.5         | -7.5         | —            | —              | —              | —              | —            | —              |
| Other Operations                           | 228.7        | 208.2        | 161.5        | 173.2        | 194.2        | 201.4          | 214.9          | 225.9          | 230.9        | 235.9          |
| Fuels Management                           | 183.3        | 183.0        | 137.7        | 145.0        | 164.0        | 170.0          | 180.0          | 184.0          | 189.0        | 194.0          |
| Other Activities                           | 45.3         | 25.1         | 23.8         | 28.2         | 30.2         | 31.4           | 34.9           | 41.9           | 41.9         | 41.9           |
| FLAME Account                              | 60.9         | 91.9         | 91.7         | 92.0         | 92.0         | 177.0          | 65.0           | —              | —            | —              |
| Regular                                    | 60.9         | 91.9         | 91.7         | 92.0         | 92.0         | 177.0          | —              | —              | —            | —              |
| Emergency Supplemental <sup>b</sup>        | —            | —            | —            | —            | —            | —              | 65.0           | —              | —            | —              |
| Rescissions <sup>c</sup>                   | —            | —            | —            | —            | —            | —              | —              | —              | —            | —              |
| Wildfire Adjustment <sup>d</sup>           | —            | —            | —            | —            | —            | —              | —              | —              | —            | 300.0          |
| <b>DOI Total Wildfire Appropriations</b>   | <b>778.9</b> | <b>575.4</b> | <b>794.7</b> | <b>861.5</b> | <b>896.8</b> | <b>993.7</b>   | <b>1,007.7</b> | <b>998.1</b>   | <b>941.2</b> | <b>1,252.3</b> |
| <i>Constant FY2020 Dollars<sup>e</sup></i> | <i>910.2</i> | <i>659.9</i> | <i>894.9</i> | <i>951.8</i> | <i>979.5</i> | <i>1,075.8</i> | <i>1,071.9</i> | <i>1,037.5</i> | <i>959.8</i> | <i>1,252.3</i> |

**Sources:** Prepared by CRS using data derived from annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and detailed funding tables prepared by the House and Senate Committees on Appropriations.

**Notes:** WFM = Wildland Fire Management. Totals may not add due to rounding. FY2020 figures may change, for example, if additional appropriations or rescissions are enacted for the fiscal year.

- a. These funds reflect appropriations designated as *additional* or *supplemental* that were not designated as *emergency*.
- b. These funds reflect appropriations designated as *emergency requirements*.

- c. For FY2011, FY2013, and FY2014, this reflects a rescission of budgetary authority. For FY2012, this reflects an adjustment based on the use of prior-year emergency funds.
- d. In FY2020, funds provided pursuant to the wildfire adjustment were appropriated to the DOI's Wildfire Suppression Operations Reserve Fund account.
- e. Figures were adjusted to estimated FY2020 constant dollars using the GDP Chained Price Index from the White House Office of Management and Budget, Table 10.1, "Gross Domestic Product and Deflators Used in the Historical Tables—1940-2025," in *Historical Tables*, at <http://www.whitehouse.gov/omb/budget/Historicals>.

**Table A-3. Combined FS and DOI Wildfire Appropriations, FY2011-FY2020**

(dollars in millions)

| Account/Activity                              | FY2011         | FY2012         | FY2013         | FY2014         | FY2015         | FY2016         | FY2017         | FY2018         | FY2019         | FY2020         |
|-----------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| WFM Account                                   | 2,686.1        | 2,218.4        | 2,951.7        | 3,531.8        | 3,138.1        | 3,903.1        | 3,776.1        | 4,062.9        | 4,666.5        | 3,310.0        |
| Fire Operations                               | 1,958.6        | 1,578.1        | 2,379.9        | 2,934.4        | 2,464.5        | 3,209.0        | 3,058.4        | 3,837.0        | 4,435.6        | 3,074.1        |
| Preparedness                                  | 964.1          | 1,281.0        | 1,213.3        | 1,339.5        | 1,464.8        | 1,406.3        | 1,415.4        | 1,656.3        | 1,661.8        | 1,672.4        |
| Suppression                                   | 994.5          | 297.1          | 1,166.6        | 1,594.9        | 999.7          | 1,802.7        | 1,643.0        | 2,180.7        | 2,773.8        | 1,401.7        |
| Regular                                       | 1,394.5        | 808.7          | 771.2          | 966.4          | 999.7          | 1,102.7        | 1,643.0        | 1,446.2        | 1,553.5        | 1,394.7        |
| Additional <sup>a</sup>                       | —              | —              | 402.9          | 636.0          | —              | —              | —              | 500.0          | 500.0          | —              |
| Emergency Supplemental <sup>b</sup>           | —              | —              | —              | —              | —              | 700.0          | —              | 234.5          | 720.3          | 7.0            |
| Rescissions <sup>c</sup>                      | -400.0         | -511.6         | -7.5           | -7.5           | —              | —              | —              | —              | —              | —              |
| Other Operations <sup>d</sup>                 | 727.5          | 640.3          | 571.8          | 597.4          | 673.6          | 694.1          | 717.7          | 225.9          | 230.9          | 235.9          |
| Hazardous Fuels/Fuels Mgmt. <sup>e</sup>      | 532.9          | 500.1          | 438.7          | 451.5          | 525.7          | 545.0          | 570.0          | 184.0          | 189.0          | 194.0          |
| Other Activities                              | 194.6          | 140.2          | 133.1          | 145.9          | 147.9          | 149.1          | 147.7          | 41.9           | 41.9           | 41.9           |
| FLAME Account                                 | 151.3          | 407.2          | 390.6          | 407.0          | 395.1          | 1,000.0        | 407.0          | 342.0          | —              | —              |
| Regular                                       | 351.3          | 407.2          | 390.6          | 407.0          | 395.1          | 1,000.0        | —              | —              | —              | —              |
| Emergency Supplemental <sup>b</sup>           | —              | —              | —              | —              | —              | —              | 407.0          | 342.0          | —              | —              |
| Rescissions <sup>c</sup>                      | -200.0         | —              | —              | —              | —              | —              | —              | —              | —              | —              |
| Wildfire Adjustment <sup>f</sup>              | —              | —              | —              | —              | —              | —              | —              | —              | —              | 2,250.0        |
| Other FS Wildfire Appropriations <sup>g</sup> | 39.0           | 37.2           | 32.1           | —              | —              | —              | —              | 526.0          | 574.8          | 545.3          |
| <b>Total FS &amp; DOI<sup>h</sup></b>         | <b>2,876.4</b> | <b>2,662.8</b> | <b>3,374.4</b> | <b>3,938.8</b> | <b>3,533.1</b> | <b>4,903.1</b> | <b>4,183.1</b> | <b>4,930.9</b> | <b>5,241.3</b> | <b>6,105.3</b> |
| <i>Constant FY2020 Dollars<sup>i</sup></i>    | <i>3,361.2</i> | <i>3,053.7</i> | <i>3,799.9</i> | <i>4,351.6</i> | <i>3,858.9</i> | <i>5,308.1</i> | <i>4,449.6</i> | <i>5,125.8</i> | <i>5,344.7</i> | <i>6,105.3</i> |

**Sources:** Prepared by CRS using data derived from annual appropriations acts, supplemental appropriations acts, committee reports, explanatory statements, and detailed funding tables prepared by the House and Senate Committees on Appropriations.

**Notes:** WFM = Wildland Fire Management. Totals may not add due to rounding. FY2020 figures may change, for example, if additional appropriations or rescissions are enacted for the fiscal year.

a. These funds reflect appropriations designated as *additional* or *supplemental* that were not designated as *emergency*.

- b. These funds reflect appropriations designated as *emergency requirements*.
- c. For FY2011, FY2013, and FY2014, this reflects a rescission of budgetary authority. For FY2012, this reflects an adjustment based on the use of prior-year emergency funds.
- d. For FS, the activities funded through the WFM Other Operations program varied between FY2011 and FY2018. Some activities (e.g., Cooperative Fire Assistance) were funded fully through the Other Operations program in some years, partially through the Other Operations program and partially through FS's State and Private Forestry (SPF) account in other years, and fully through the SPF account in still other years. Starting in FY2018, appropriations for activities funded in the Other Operations program were provided to other FS accounts. Some of these funds are reflected in Other FS Wildfire Appropriations. Some programs, however, did not receive line-item funding (e.g., Joint Fire Science) under the new accounts and are not reflected in the Other FS Wildfire Appropriations or elsewhere in this table.
- e. These funds reflect appropriations to FS's Hazardous Fuels activity and DOI's Fuels Management activity. Prior to FY2018, appropriations for Hazardous Fuels activities were provided to FS through the WFM Other Operations program. Starting in FY2018, appropriations for Hazardous Fuels activities were provided to FS through the National Forest System (NFS) account.
- f. In FY2020, funds provided pursuant to the wildfire adjustment were appropriated to FS's and DOI's respective Wildfire Suppression Operations Reserve Fund accounts.
- g. Other FS Wildfire Appropriations reflect appropriations for wildfire-related activities that were appropriated to other FS accounts, including the SPF, NFS, and Forest and Rangeland Research accounts. For example, starting in FY2018, this includes appropriations provided to the NFS account for Hazardous Fuels activities.
- h. Total reflects final wildfire appropriation to FS and DOI for WFM, the FLAME account, additional appropriations, rescissions, use of emergency funds, use of prior-year funds, and funds provided for wildfire activities in other FS accounts.
- i. Figures were adjusted to estimated FY2020 constant dollars using the GDP Chained Price Index from the White House Office of Management and Budget, Table 10.1, "Gross Domestic Product and Deflators Used in the Historical Tables—1940-2025," in *Historical Tables*, at <http://www.whitehouse.gov/omb/budget/Historicals>.

## Appendix B. Structural Changes to Forest Service's Wildland Fire Management *Other Operations* Program

The following table outlines the changes to the activities funded through Forest Service's (FS's) *Other Operations* program from FY2011 through FY2020. Starting in FY2018, funding for these activities shifted to other FS accounts. Prior to FY2018, however, other funding changes occurred across the time period. The following table lists each activity funded in the *Other Operations* program as of FY2011 and describes the changes therein.

**Table B-1. Changes to the FS Wildland Fire Management Account (WFM) for *Other Operations***

| FY2011 WFM <i>Other Operations</i>                                                                         | Enacted Change to the Appropriations Account(s)                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fire Plan Research and Development                                                                         | Starting in FY2018: funded in the Forest and Rangeland Research (FRR) account (though not as a specific allocation)                                                                                    |
| Forest Health Management <sup>a</sup><br>( <i>Federal Lands and Cooperative Lands</i> )                    | From FY2011 to FY2013: funded jointly between WFM and the State and Private Forestry (SPF) account<br>Starting in FY2014: funded entirely through the SPF account                                      |
| Hazardous Fuels                                                                                            | Starting in FY2018: funded in the National Forest System (NFS) account <sup>b</sup>                                                                                                                    |
| Joint Fire Science                                                                                         | Starting in FY2017: funded in the FRR account (though not as a specific allocation)                                                                                                                    |
| Rehabilitation and Restoration                                                                             | Starting in FY2012: program responsibilities shifted to the NFS account <sup>c</sup>                                                                                                                   |
| Cooperative Fire Assistance <sup>a</sup><br>( <i>State Fire Assistance and Volunteer Fire Assistance</i> ) | From FY2011 to FY2013: funded jointly between WFM and the SPF account<br>From FY2014 to FY2017: funded entirely through the WFM account<br>Starting in FY2018: funded entirely through the SPF account |

**Source:** CRS, using data derived from FS annual budget documents and annual appropriations acts, committee reports, explanatory statements, and detailed funding tables prepared by the House and Senate Committees on Appropriations.

**Notes:**

- For more information on these programs and the State and Private Forestry account, see CRS Report R45219, *Forest Service Assistance Programs*, by Anne A. Riddle and Katie Hoover.
- For more information on the NFS account and programs, see CRS Report R43872, *National Forest System Management: Overview, Appropriations, and Issues for Congress*, by Katie Hoover and Anne A. Riddle.
- FS, *FY2012 Budget Justification*, pp. 11-18 to 11-19, at <https://www.fs.usda.gov/about-agency/budget-performance>.

## **Author Information**

Katie Hoover  
Specialist in Natural Resources Policy

---

## **Disclaimer**

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.