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Wildfire Management Appropriations: Data, Trends, and Issues

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Summary

The Forest Service (FS, in the U.S. Department of Agriculture) and the Department of the Interior (DOI) are the two primary federal entities tasked with wildland fire management activities. Federal wildland fire management includes activities such as preparedness, suppression, fuel reduction, and site rehabilitation, among others. Approximately 10.1 million acres burned during the 2015 wildfire season, which was more than the acreage burned in 2014 (3.6 million acres) and 2013 (4.3 million acres) combined and represents the largest acreage burned since modern record-keeping began in 1960.

There are several ongoing concerns regarding wildfire management. These concerns include the total federal costs of wildfire management, the strategies and resources used for wildfire management, and the impact of wildfire on both the quality of life and the economy of communities surrounding wildfire activity. Many of these issues are of perennial interest to Congress, with annual wildfire management appropriations being one indicator of how Congress prioritizes and addresses certain wildfire management concerns.

Annual federal funding for wildland fire management is provided in the Interior, Environment, and Related Agencies appropriations bill. Congress appropriated \$4.9 billion combined to both FS and DOI in FY2016, which included a \$700 million appropriation for FS to reimburse transfers that occurred in FY2015 to pay for wildfire costs. The combined FY2015 appropriation was \$3.5 billion. Federal wildfire spending has increased significantly over the last two decades, driven largely by the rising cost to suppress wildfires. In FY1995, FS spent just over \$500 million in constant dollars to suppress wildfires; in FY2001, FS spent \$898 million. In FY2015, FS spent \$1.7 billion on suppression operations. Appropriations for wildfire management have similarly increased. In FY1995, appropriations for wildland fire management were \$1.6 billion in constant dollars, \$3 billion less than the FY2016 appropriation.

Congress is debating several issues related to federal funding for wildfire management. Issues under debate include the level and direction of federal spending on wildland fire management as well as the effectiveness of that spending (e.g., whether the funding is allowing agencies to meet wildfire management targets and the adequacy of those targets). Congress also faces requests from the agencies for additional appropriations during severe fire activity (e.g., justification for additional funding and the impact on non-fire programs without the additional funding). Congress has provided additional funding for wildfire management above the level provided in the Interior appropriations bill—usually for wildfire suppression—for 6 of the last 10 years, including FY2013, FY2014, and FY2016. The additional funding is typically provided through a supplemental appropriation. The frequent need for additional funds raises questions about the structure of wildfire funding and how the agencies estimate wildfire suppression funding requirements, among other things.

Proposals to create alternative mechanisms for funding wildfire suppression have been introduced in the 114th Congress and proposed by the Administration. The proposals generally would create a budgetary adjustment mechanism to fund a portion of the wildfire suppression appropriation outside of statutory discretionary spending limits.

This report provides wildfire management appropriations data over the past 10 years, information on the President's FY2017 budget request, and information on FY2017 appropriations for wildland fire management.

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Wildfire (or wildland fire),¹ an unplanned and unwanted fire, can have beneficial and harmful impacts on human, historical, cultural, and ecological resources. Wildfires can damage timber resources and soils and degrade water quality and watershed functions. Wildfires can also damage communities, destroy homes,² and lead to loss of human life.³ In addition, wildfire can reduce fuel loads, increase ecosystem health and functioning, and restore fire-adapted ecosystems.

Wildfire Statistics⁴

In 2015, more than 68,000 wildfires burned approximately 10.1 million acres, 7.4 million of which were federal lands.⁵ This figure was the largest acreage burned on record and is larger than the acreage burned in the previous two years combined (4.3 million acres in 2013 and 3.6 million acres in 2014).

Although acreage burned is one indicator of the annual level of wildfire activity, it may also be misleading, since many of these fires may have occurred in areas that are large and relatively undeveloped, with very little impact on human development or communities. Acreage burned also does not indicate the severity of the wildfire or the degree of damage caused to the ecosystem. Thus, other indicators of wildfire activity should also be considered in conjunction with acreage burned, such as the severity of each wildfire or the cumulative number of severe wildfires in a year. In 2015, 1.5% (1,052) of the wildfires were classified as large or significant wildfires.⁶ Another statistic used to examine annual wildfire severity is the number of days spent at the highest national preparedness levels. The National Fire Preparedness Levels (PLs) are indicative of the level of nationwide mobilization of resources, with higher numbers indicating higher levels of response.⁷ For the six-year period of 2009 through 2014, the PL was at the highest level (PL5) for a total of 7 days; in 2015, the PL was at PL5 for 24 days.

Wildfires can have a devastating impact on those communities adjacent to or within wildfire activity. Data reflecting the level of destruction caused by a wildfire can be useful but are not

¹ The terms *wildfire* and *wildland fire* often are used interchangeably. However, 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.” *Wildland* is defined as “an area in which development is essentially non-existent, except for roads, railroads, powerlines, and similar transportation facilities, and structures, if any, are widely scattered.” NWCG defines *wildfire* as “an unplanned, unwanted wildland fire including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.” See NWCG, *Glossary of Wildland Fire Terminology*, October 2015, at <http://www.nwcg.gov/glossary-of-wildland-fire-terminology>. This report will use the term *wildfire* for both.

² For more information on wildfire damages to homes and resources, see CRS Report RL34517, *Wildfire Damages to Homes and Resources: Understanding Causes and Reducing Losses*.

³ An example is the 2013 loss of 19 firefighters of the Granite Mountain Interagency Hotshot Crew assigned to the Yarnell Hill fire. For more information, see CRS Report R43129, *Wildfire Management: Hotshot Crews*.

⁴ For more wildfire statistics, see CRS In Focus IF10244, *Wildfire Statistics*.

⁵ National Interagency Fire Center (NIFC), *2015 Year-End Statistics and Summary*, at <http://www.predictiveservices.nifc.gov/intelligence/2015-Statssumm/2015Stats&Summ.html>.

⁶ *Ibid.*, p.12. Large or significant wildfires are defined as larger than 100 acres in timber fuel types, 300 acres in grass or brush fuel types, or requiring a national-level response team (Type 1 or Type 2 Interagency Incident Management Team, Wildland Fire Module Team, or National Incident Management Organization Team). See NWCG, *Glossary of Wildland Fire Terminology*, October 2015.

⁷ *Preparedness level* is defined as “increments of planning and organizational readiness dictated by burning conditions, fire activity, and resource conditions.” NWCG, *Glossary of Wildland Fire Terminology*, October 2015.

consistently collected on a nationwide scale. In 2015, 4,636 structures were destroyed by wildfires. Wildfires also pose safety risks; in 2015, 13 firefighter fatalities were reported.⁸

Wildfire Management Activities and Responsibilities

Wildfire management is a series of coordinated activities undertaken by federal, state, and local authorities to prepare for, resolve, and recover from wildfire events. Resolution of an active wildfire may involve immediate and aggressive measures to suppress a wildfire (e.g., personnel and large air tanker response for a wildfire moving quickly toward a populated area), or it may involve immediate but less intense measures (e.g., monitoring a grassland wildfire where there is no immediate threat to humans).

Wildfire management activities are generally categorized as fuel reduction, preparedness, suppression, or site rehabilitation.

- *Fuel reduction* is manipulation (including combustion) or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control.⁹
- *Preparedness* is any activity that leads to safe, efficient, and cost-effective fire management. Preparedness includes the range of tasks necessary to build, sustain, and improve the capability to protect against, respond to, and recover from incidents.¹⁰
- *Suppression* is the work associated with extinguishing or confining a fire.¹¹
- *Site rehabilitation* includes efforts undertaken, generally within three years of a wildfire, to repair or improve fire-damaged lands unlikely to recover to a management-approved condition within a specified time frame or actions taken to repair or replace minor facilities damaged by fire.¹²

A number of federal, state, and local agencies can and do respond to wildfires.¹³ States are responsible for responding to wildfires that begin on nonfederal (state, local, and private) lands, except for lands protected by the 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 for 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, the potential

⁸ NIFC, *2015 Year-End Statistics and Summary*, p.9. Information on annual fire-fighter fatalities is available at NIFC, "Wildland Fire Fatalities Reports," at https://www.nifc.gov/safety/safety_HistFatality_report.html, but other wildfire-related fatalities are not reported annually nationwide.

⁹ NWCG, *Glossary of Wildland Fire Terminology*, October 2015.

¹⁰ Ibid.

¹¹ Ibid.

¹² U.S. Department of the Interior (DOI), *Interagency Burned Area Emergency Response Guidebook*, February 2006.

¹³ For more information on federal assistance, see CRS Report R41858, *Federal Assistance for Wildfire Response and Recovery*.

threats, and the expertise required. In these cases, the National Interagency Fire Center (NIFC)¹⁴ coordinates the national mobilization of resources for wildfire and other incidents throughout the United States.¹⁵

Wildfire Management Appropriations

Both DOI and FS 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, which then allocates the funding to four DOI agencies—Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), National Park Service (NPS), and the U.S. Fish and Wildlife Service (FWS).¹⁶ Congress also provides funding for wildfire-related activities through the Federal Emergency Management Agency, such as 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.¹⁷

DOI and FS each have two accounts for wildfire: a Wildland Fire Management (WFM) account and a Federal Land Assistance, Management, and Enhancement Act (FLAME)¹⁸ account. FLAME is a reserve fund for wildfire suppression that requires certain conditions be met to transfer funding from FLAME to the WFM account. The WFM appropriation is distributed among two programs: *Fire Operations* and *Other Fire Operations*. The Fire Operations program receives the bulk of the WFM appropriation and funds two activities: preparedness and suppression. Appropriations for preparedness are used to support efforts that assist with fire prevention and detection, equipment, training, and baseline personnel. Suppression appropriations are used primarily for wildfire response. The Other Fire Operations program funds hazardous fuels reduction activities, such as restoring forest vegetation type and structure to improve a forest's resilience and resistance to catastrophic wildfires. The Other Fire Operations program also funds joint fire research and science programs (e.g., NIFC operations) and programs to provide financial and technical assistance for state and volunteer wildfire management. **Table 1** contains annual total wildfire management appropriations from FY2007 to FY2016. Appropriations for preparedness, suppression, hazardous fuels reduction, FLAME, and additional suppression appropriations are discussed in more detail below.

Wildfire management appropriations began to increase in the late 1990s and increased significantly after FY2000, partly in response to the severe 2000 fire season (**Figure 1**).¹⁹ As

¹⁴ NIFC comprises eight agencies and organizations: the Bureau of Land Management (BLM), the Bureau of Indian Affairs, the U.S. Fish and Wildlife Service (FWS), the National Park Service (NPS), the U.S. Forest Service (FS), the National Oceanic and Atmospheric Administration, the National Business Center, and the U.S. Fire Administration. Also, a National Association of State Foresters representative is located at NIFC. Additional information about the role of each agency is available in the NWCG *Communicator's Guide for Wildland Fire Management: Fire Education, Prevention, and Mitigation Practices*.

¹⁵ The National Interagency Mobilization Guide identifies standard procedures that guide the operations of multiagency logistical support activity.

¹⁶ Until FY2009, wildfire appropriations to DOI used to go directly to BLM and were then allocated among the other bureaus. Since FY2009, appropriations have gone to the DOI department-level Office of Wildland Fire for allocation.

¹⁷ For more information, see CRS Report R43738, *Fire Management Assistance Grants: Frequently Asked Questions* and CRS Report R43537, *FEMA's Disaster Relief Fund: Overview and Selected Issues*.

¹⁸ P.L. 111-88, Division A, Title V (43 U.S.C. §1748a).

¹⁹ For more information on wildfire management appropriations prior to FY2005, see CRS Report RL33990, *Federal Funding for Wildfire Control and Management*.

measured in constant 2015 dollars, wildfire appropriations have varied between \$3.8 billion in FY2001 and nearly \$5.0 billion in FY2008 and in FY2016 (to date). From FY2007 to FY2016, combined FS and DOI wildfire management appropriations have averaged \$3.8 billion.²⁰

²⁰ This figure includes emergency funds (e.g., supplemental appropriations) and, until FY2014, appropriations for wildfire assistance activities provided through FS's State and Private Forestry account.

Table I. Wildfire Enacted Appropriations, FY2007-FY2016

(millions of dollars)

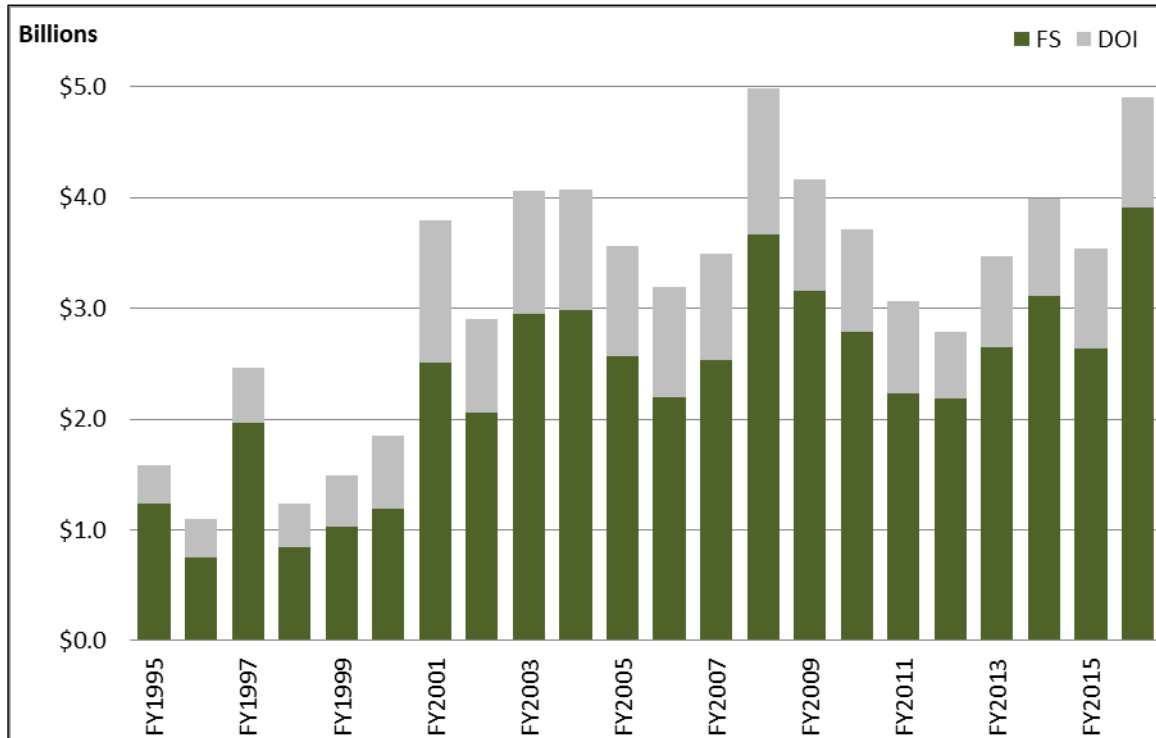
Agency/Account/Activity	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013^a	FY2014	FY2015	FY2016
Forest Service (FS)										
WFM Account ^b	1,823.6	1,943.5	2,131.6	2,178.7	2,168.0	1,734.9	1,868.9	2,162.3	2,333.3	2,386.3
<i>Preparedness</i>	665.4	665.8	675.0	675.0	673.7	1,004.4	948.7	1,057.6	1,145.8	1,082.6
<i>Suppression</i>	741.5	845.6	993.9	997.5	995.5	538.2	509.8	680.5	708.0	811.0
<i>Hazardous Fuels</i>	301.3	310.1	328.1	350.3	349.6	317.1	301.1	306.5	361.7	375.0
FLAME Account	—	—	—	413.0	290.4	315.4	299.0	315.0	303.1	823.0
Additional Appropriations	370.0	1,326.0	700.0	—	—	—	379.9	600.0	—	700.0
FS Total Wildfire Appropriations ^c	2,232.4	3,308.0	2,872.6	2,562.9	2,097.5	2,087.4	2,579.8	3,077.3	2,636.4	3,909.3
Department of the Interior (DOI)										
WFM Account ^d	758.4	808.1	859.5	919.9	918.1	755.2	687.5	741.0	804.8	816.7
<i>Preparedness</i>	274.9	276.5	281.8	290.5	290.5	276.5	264.8	281.9	319.0	323.7
<i>Suppression</i>	249.2	289.8	335.2	383.8	399.0	270.5	261.2	285.9	291.7	291.7
<i>Hazardous Fuels</i>	199.8	199.6	203.1	206.2	183.3	183.0	137.7	145.0	164.0	170.0
FLAME Account	—	—	—	61.0	60.9	91.9	91.7	92.0	92.0	177.0
Additional Appropriations	95.0	384.0	65.0	—	—	—	23.0	36.0	—	—
DOI Total Wildfire Appropriations	853.4	1,192.1	924.5	855.9	778.9	575.4	794.7	861.5	896.8	993.7
Total (FS & DOI)										
Total, WFM Account	2,596.1.0	2,751.5	2,991.1	3,086.1	2,886.1	2,490.0	2,556.4	2,903.3	3,138.1	3,203.1
Total, FLAME Account	—	—	—	474.0	351.3	407.2	390.6	407.0	395.1	1,000.0
Total, Additional Appropriations ^e	465.0	1,710.0	765.0	—	—	—	402.9	628.5	—	700.0
Total FS & DOI Wildfire Appropriations ^f	3,085.8	4,500.1	3,797.1	3,418.8	2,876.4	2,662.8	3,374.5	3,938.8	3,533.1	4,903.1

Source: Information in this table is derived from detailed funding tables prepared by the House Committee on Appropriations.

Notes: Figures generally reflect supplemental appropriations and rescissions but do not reflect scorekeeping adjustments. Prior to FY2009, wildfire appropriations to DOI went directly to the Bureau of Land Management (BLM), which allocated the funds among the other agencies; since FY2009, appropriations have gone to DOI Office of Wildland Fire Management.

- a. FY2013 reflects post-sequester appropriations.
- b. Activity values provided in this table for the FS Wildland Fire Management (WFM) account when combined do not equal the total WFM account value because the WFM total includes funds provided for activities within the Other Fire Operations program that are not listed in the table and also may reflect rescissions or use of prior-year funds for some years.
- c. Total includes funds provided for fire assistance activities appropriated to the FS State and Private Forestry (SPF) account for those years when appropriations were provided under the SPF account. Prior to FY2014, appropriations for fire assistance activities were provided to both the SPF account and the WFM account. Starting in FY2014, appropriations for fire assistance activities were provided only through the WFM account.
- d. Activity values provided in this table for the DOI WFM account when combined do not equal the total WFM account value because the WFM total includes funds provided for activities within the Other Fire Operations program that are not listed in the table and also may reflect rescissions or use of prior-year funds for some years.
- e. Total additional appropriations do not include rescissions, use of emergency suppression funds, or use of prior-year funds.
- f. Total reflects final wildfire appropriation to FS and DOI for WFM, the Federal Land Assistance, Management, and Enhancement Act (FLAME) account, additional appropriations, rescissions, use of emergency funds, use of prior-year funds, and any funds provided for wildfire activities in other accounts.

Figure I. Wildfire Management Appropriations, FY1995-FY2016
(constant FY2015 dollars)

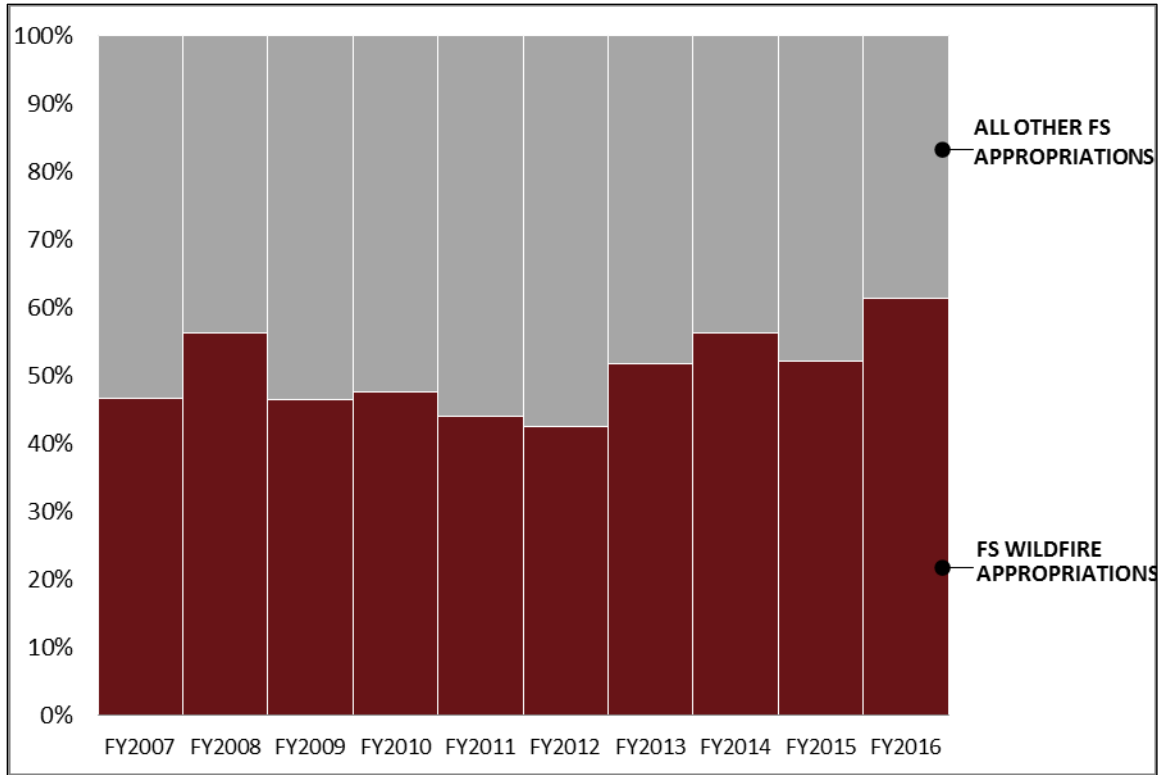


Source: CRS. Data compiled from detailed funding tables prepared by the House Committee on Appropriations for FY2000 through FY2016 and Forest Service (FS) and Department of the Interior (DOI) budget justifications for FY1995 through FY1999.

Notes: Total wildfire management appropriations include appropriations to the Wildland Fire Management (WFM) accounts, the reserve accounts established by the Federal Land Assistance, Management, and Enhancement Act (FLAME), and any additional appropriations enacted for wildfire purposes to both FS and DOI. FS data also includes appropriations to other agency accounts that are specified for wildfire purposes. Figures adjusted to FY2015 dollars using the gross domestic product (GDP) deflator price index reported by the U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Products Accounts Tables, Table I.1.9.

The majority of wildfire management appropriations go to FS. From FY2007 to FY2016, FS received on average 76% of the total wildfire management appropriations and DOI received 24%. In addition, FS wildfire management appropriations constitute a large portion of total FS discretionary funding. For example, in FY2016, FS wildfire management appropriations are approximately 61% of the agency's discretionary funds, although not all of those funds counted against discretionary spending limits. **Figure 2** reflects the proportion of FS discretionary funding between wildfire and non-wildfire activities over the past 10 years.

Figure 2. Forest Service Wildfire Appropriations Compared to Other Forest Service Appropriations, FY2007-FY2016



Source: CRS. Data compiled from detailed funding tables prepared by the House Committee on Appropriations.

Notes: “FS Wildfire Appropriations” includes all appropriations to FS for wildfire activities, including appropriations to the WFM account, the FLAME account, and additional funding for wildfire. “All Other FS Appropriations” includes all discretionary appropriations provided to FS, including appropriations to the Forest Rangeland and Research, State and Private Forestry, National Forest System, Capital Improvement and Maintenance, and Land Acquisition accounts.

Wildland Fire Management Account

Of the two programs funded by both agencies’ WFM accounts, Fire Operations receives the largest share of the funding, accounting for 78% of the combined WFM appropriation on average over the last five years. Whereas the Fire Operations programs are relatively similar in FS and DOI, the Other Fire Operations program funds some different activities in FS and DOI. For FS, the Other Fire Operations program includes appropriations for hazardous fuels management, as well as fire assistance and joint fire science activities. For DOI, Other Fire Operations includes appropriations for fuels management and joint fire science activities, and it also includes appropriations for burned area rehabilitation. Burned area rehabilitation for FS is funded in the suppression activity.

Fire Operations: Preparedness

Appropriations for preparedness are used to support efforts that assist with fire prevention and detection, equipment, training, and baseline personnel. FS uses preparedness funds to establish and maintain web-based decision support tools; manage and modernize aviation assets; and conduct predictive services analysis, among other things.²¹ DOI uses preparedness funds to prepare and execute fire management plans and cooperative agreements; provide infrastructure support; manage firefighting assets; support NIFC; and more.²²

Congress appropriated a total of \$1.41 billion for preparedness activities in FY2016 (\$1,082.6 million for FS; \$323.7 million for DOI), a decrease from the \$1.46 billion appropriated in FY2015. Over the past five years (FY2012-FY2016), the funding level for the DOI preparedness activity saw minor fluctuations through FY2014 but increased 10% with the FY2015 appropriation (\$319.0 million). Over the past five years (FY2012-FY2016), appropriations for FS preparedness have averaged \$1.0 billion annually, although FS preparedness funding increased by close to 50% from FY2011 (\$673.7 million) to FY2012 (\$1,004.4 million). This increase was mostly due to a restructuring of the preparedness and suppression activities, which included shifting aviation charges and other changes to the preparedness activity.²³

Fire Operations: Suppression

Funds for suppression typically are provided through two accounts in annual Interior appropriations laws: the WFM account and the FLAME account. In addition, other appropriations laws, such as supplemental appropriations laws, sometimes provide additional suppression funds for these accounts. Suppression funding data are thus presented in this report in three different sections corresponding to the three different funding sources and then collectively discussed at the end of this section. More information on wildfire suppression spending is also available in CRS Report R44082, *Wildfire Suppression Spending: Background, Issues, and Legislation in the 114th Congress*.

WFM suppression appropriations are used primarily for wildfire response. Some items covered by the FS suppression activity are firefighter salaries, aviation asset operations, incident support function, and suppression resources for DOI incidents on a reciprocal non-reimbursement basis.²⁴ The FS suppression activity also covers personnel and resources for the Burned Area Emergency Response (BAER) program.²⁵ Items covered by the DOI suppression activity include selected personnel expenses above what is covered by the preparedness subaccount, temporary emergency firefighters, and aircraft flight operations and support. Both FS and DOI typically request suppression funds based on the 10-year suppression obligation average.²⁶

²¹ FS, *Fiscal Year 2017 Budget Justification*, p. 269.

²² DOI, Office of Wildland Fire Management, *FY2017 Budget Justification*, p. 30.

²³ A similar budget restructuring did not occur for DOI.

²⁴ This means FS and DOI may assist each other, as needed, without requiring the other agency to reimburse the cost of such services.

²⁵ The objective of the Burned Area Emergency Response (BAER) program is to determine the need for and to prescribe and implement emergency treatments on federal lands to minimize threats to life or property resulting from the effects of a fire or to stabilize and prevent unacceptable degradation to natural and cultural resources.

²⁶ For more information on the 10-year suppression obligation average, see CRS Report R44082, *Wildfire Suppression Spending: Background, Issues, and Legislation in the 114th Congress*.

The suppression activity received \$1,102.7 million in FY2016 (\$811.0 million for FS; \$291.7 million for DOI), a 10% increase over FY2015 levels (\$999.7 million combined). Over the last five years (FY2012-FY2016), combined appropriations for WFM suppression have averaged \$929.7 million annually and have increased in each successive year since FY2013.

Other Operations: Hazardous Fuels

FS's hazardous fuels appropriation and DOI's hazardous fuels reduction appropriation are used to decrease fuel loads, or alter the arrangement of fuel loads, on federal lands in an effort to make fires less intense and more controllable. Appropriations for this activity are used for fuel reduction projects, or *treatments*, on federal lands and in high-priority areas in the wildland-urban interface.²⁷

In FY2016, Congress appropriated \$545.0 million for hazardous fuels reduction activities to both FS (\$375.0 million) and DOI (\$170.0 million), a 4% increase over the total FY2015 level (\$525.7 million). On average, the combined hazardous fuels reduction appropriation has been \$492.2 million annually over the last five years (FY2012-FY2016). Since becoming a stand-alone budget item in FY2001, the hazardous fuels subaccount has received the third-largest share of WFM appropriations for both agencies.

FLAME

Congress established a FLAME account—under the Federal Land Assistance, Management, and Enhancement Act of 2009²⁸—to cover the costs of large or complex fires and to be used when amounts provided in the FS and DOI WFM accounts for suppression are exhausted. Both the Secretary of Agriculture and the Secretary of the Interior may transfer funds from their agency's FLAME account into their agency's WFM account, for suppression activities, upon a secretarial declaration. The declaration may be issued if a fire covers at least 300 acres or threatens lives, property, or resources, among other criteria. The conferees of 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 non-fire programs.²⁹

DOI transferred \$105.0 million from the FLAME reserve fund in FY2016, which exhausted the entire FY2015 FLAME appropriation and any unobligated balances carried over from previous fiscal years.³⁰ FS also exhausted its FY2016 FLAME appropriation and transferred all FLAME funds in FY2016.³¹

Table 2 contains FLAME account funds for FY2007 to FY2016. Since the first appropriation in FY2010 through FY2015, Congress had appropriated \$404.2 million on average annually to both FLAME accounts. In FY2016, Congress appropriated \$1.0 billion to the FLAME accounts (\$823.0 million to FS; \$177.0 million for DOI).

²⁷ For more information on the wildland-urban interface, see CRS Report RS21880, *Wildfire Protection in the Wildland-Urban Interface*.

²⁸ Title V of Division A of the FY2010 Department of the Interior, Environment, and Related Agencies Appropriations Act, P.L. 111-88.

²⁹ H.Rept. 111-316.

³⁰ DOI, *Wildland Fire Management Fiscal Year 2017 Budget Justification*, p.75.

³¹ FS, *Fiscal Year 2017 Budget Justification*, p.307.

Table 2. FS and DOI Wildfire Suppression Appropriations, FY2007-FY2016
(millions of dollars)

	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
FS Suppression	1,111.5	2,171.6	1,693.9	1,410.5	1,285.9	853.6	1,188.8	1,595.5	1,011.1	2,334.0
<i>WFM Suppression</i>	<i>741.5</i>	<i>845.6</i>	<i>993.9</i>	<i>997.5</i>	<i>995.5</i>	<i>538.2</i>	<i>509.8</i>	<i>680.5</i>	<i>708.0</i>	<i>811.0</i>
<i>Additional appropriations</i>	<i>370.0</i>	<i>1,326.0</i>	<i>700.0</i>	—	—	—	<i>379.9</i>	<i>600.0</i>	—	<i>700.0</i>
<i>FLAME</i>	—	—	—	<i>413.0</i>	<i>290.4</i>	<i>315.4</i>	<i>299.0</i>	<i>315.0</i>	<i>303.1</i>	<i>823.0</i>
DOI Suppression	344.2	673.8	400.2	444.8	459.8	362.3	375.9	413.9	383.7	468.7
<i>WFM Suppression</i>	<i>249.2</i>	<i>289.8</i>	<i>335.2</i>	<i>383.8</i>	<i>399.0</i>	<i>270.5</i>	<i>261.2</i>	<i>285.9</i>	<i>291.7</i>	<i>291.7</i>
<i>Additional appropriations</i>	<i>95.0</i>	<i>384.0</i>	<i>65.0</i>	—	—	—	<i>15.5</i>	<i>28.5</i>	—	—
<i>FLAME</i>	—	—	—	<i>61.0</i>	<i>60.9</i>	<i>91.9</i>	<i>91.7</i>	<i>92.0</i>	<i>92.0</i>	<i>177.0</i>
Total	1,455.7	2,845.4	2,094.1	1,855.3	1,745.8	1,216.0	1,564.7	2,009.4	1,394.7	2,802.7

Source: CRS. Data from annual agency budget justifications, conference agreements for selected Interior appropriations laws, and detailed funding tables prepared by the House Committee on Appropriations.

Notes: Figures reflect rescissions of \$7.5 million from DOI in FY2013 and FY2014. FY2013 reflects post-sequester appropriations. CRS identified the additional appropriations in the table through an analysis of the Appropriations Committee tables accompanying the relevant appropriations bills for FY2008-FY2016. Additional appropriations identified in the table were typically listed in the detailed committee funding tables as “supplemental,” “additional,” or “emergency.” Some of the additional appropriations over the last seven years were formally designated so as to not be subject to certain statutory or procedural budget enforcement, as “emergency requirements” or for other purposes. For further information on emergency designations, see CRS Report R41564, *Emergency Designation: Current Budget Rules and Procedures*.

Supplemental Appropriations

If the funding in the WFM suppression activity and FLAME account are exhausted during any given fiscal year, FS and DOI are authorized to transfer funds from their other accounts to pay for continued suppression activities.³² This practice is sometimes referred to as “fire borrowing” or “fire transfers.” When it occurs, the agencies must submit a request for supplemental appropriations to repay borrowed funds.³³ Congress may provide these funds through legislation that supplements the annual Interior appropriations law or in the following fiscal year’s annual appropriation law for the agencies. Bill or report language typically specifies how the additional funds are to be used (e.g., for wildfire suppression, for fire transfer reimbursement, for emergency rehabilitation), although for record-keeping purposes, these funds are generally reported in the agencies’ WFM suppression activity. Congress has, at times, designated the funds as emergency funding, not subject to certain discretionary spending limits.³⁴ For example, \$700.0 million was provided in FY2016³⁵ as additional wildfire suppression appropriations for FY2015 wildfire suppression activities. The \$700.0 million was designated as emergency spending and not subject to certain discretionary budgetary constraints, but the additional funds provided in FY2013 and FY2014 were not similarly designated.³⁶

A breakdown of additional funds since FY2007 is provided in **Table 2**. Congress has provided additional wildfire funds in 6 of the 10 fiscal years since FY2007. Since the establishment of the FLAME account in FY2010, Congress has provided additional funds during three fiscal years (FY2013, FY2014, and FY2016).

Total Suppression Appropriations

For any given fiscal year, total suppression appropriations to DOI and FS may be a combination of three sources: the WFM suppression activity, the FLAME account, and supplemental appropriations. In FY2016, the total combined suppression appropriation was \$2,802.7 million, including a \$700.0 million supplemental appropriation. This figure is more than double the FY2015 total combined suppression appropriation (\$1,394.7 million) and the second-highest suppression appropriation to date. The highest appropriation was in FY2008, when Congress provided \$2,845.4 million (\$3,154.7 million in FY2015 dollars) in total combined suppression appropriations. The FY2008 total appropriation included a total of \$1,710.0 million provided in three supplemental appropriations to cover suppression costs incurred in both FY2007 and FY2008.³⁷ Total suppression data over the last 10 years are presented in **Table 2** (nominal dollars) and displayed in **Figure 3** (constant FY2015 dollars).

³² The transfer authority is granted annually in the Interior, Environment, and Related Agencies appropriations act, specifically in the general provisions section for DOI and the administrative provisions section for FS.

³³ 43 U.S.C. 1748a(d)(2)(C)(ii).

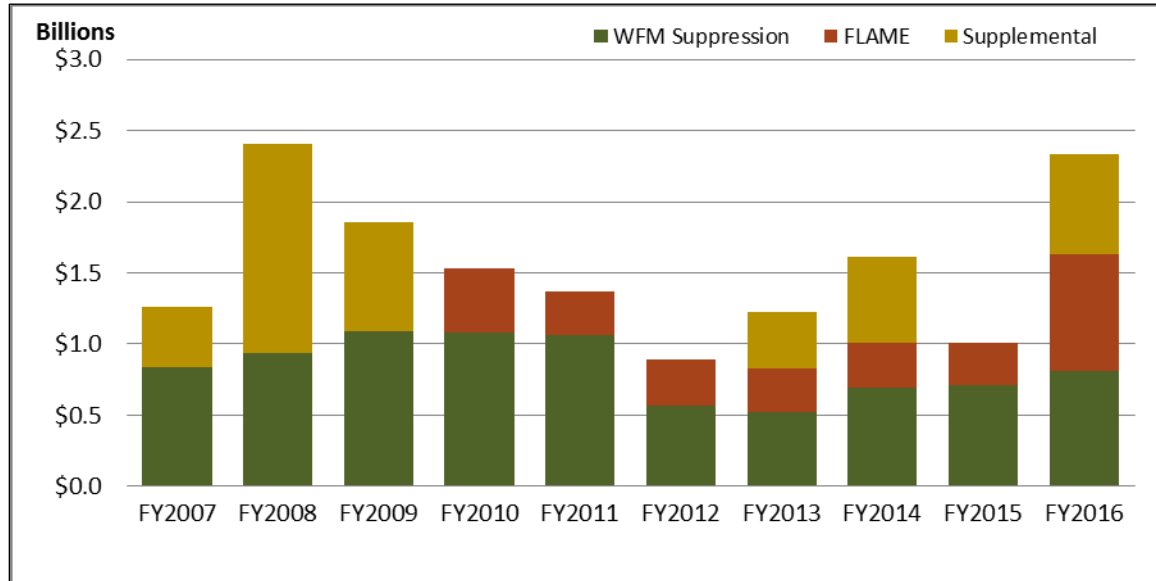
³⁴ For further information on emergency designations, see CRS Report R41564, *Emergency Designation: Current Budget Rules and Procedures*.

³⁵ P.L. 114-53, Section 137.

³⁶ P.L. 112-175 Sections 140(b) and 141(b) (FY2013) and P.L. 113-46 Sections 135 and 136 (FY2014).

³⁷ \$500.0 million was provided in P.L. 110-116 and specified to repay funds transferred from non-fire accounts to pay for suppression activities in FY2007 and for other wildfire purposes; \$300.0 million was provided for suppression purposes in P.L. 110-161; and \$910.0 million was provided in P.L. 110-329 to repay funds transferred in FY2008 to pay for suppression activities and for other wildfire purposes.

Figure 3. FS and DOI Wildfire Suppression Appropriations, FY2007-FY2016
(constant FY2015 dollars)



Source: CRS. Data compiled from detailed funding tables prepared by the House Committee on Appropriations.

Notes: “WFM Suppression” includes appropriations to the wildfire suppression activity within the FS’s and DOI’s WFM accounts. “FLAME” includes appropriations to the FLAME reserve account (established in FY2010). “Supplemental” includes any appropriations provided as an emergency or supplemental appropriations and specified for wildfire suppression purposes. Supplemental appropriations enacted for suppression purposes in any given fiscal year may have been specified for obligations incurred in the previous fiscal year. Figures adjusted to FY2015 dollars using the GDP deflator price index reported by the U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Products Accounts Tables, Table 1.1.9.

FY2017 Requested and House-Passed Wildfire Management Appropriations

The Administration requested a total of \$4.4 billion for wildfire management for FY2017 (\$3.3 billion for FS and \$1.1 billion for DOI). This figure is a decrease of \$472.9 million from the FY2016 enacted level of \$4.9 billion (see **Table 3**), which included a \$700.0 million supplemental appropriation. The Administration proposed a new funding mechanism for wildfire suppression activities, which includes eliminating the FLAME reserve account and providing a portion of the suppression appropriation outside discretionary spending limits.

On July 14, 2016, the House passed H.R. 5538, the FY2017 Interior, Environment, and Related Agencies Appropriations Act. H.R. 5538 would provide a total of \$3.9 billion for wildfire management for FY2017 (\$3.0 billion for FS and \$0.9 billion for DOI), \$505.5 million below the requested amount. This appropriation would fully fund the 10-year suppression obligation average, provide additional funds for hazardous fuel management, and include \$407.0 million for both FLAME accounts. H.R. 5538 would not adopt the Administration’s proposal to eliminate the FLAME account or provide a budgetary adjustment mechanism to fund a portion of the wildfire suppression appropriation. The House Committee on Appropriations supports such a proposal but

declines to make a recommendation in regard to the budgetary adjustment mechanism, citing lack of jurisdiction.³⁸ The House bill would make the FS WFM appropriation available for three fiscal years (through FY2019). Previously, these appropriations were provided without a fiscal year limitation, meaning that any unobligated balance could carry over indefinitely.³⁹

On June 16, 2016, the Senate Committee on Appropriations reported S. 3068, the FY2017 Interior, Environment, and Related Agencies Appropriations Act. S. 3068 would provide a total of \$4.4 billion for wildland fire management for FY2017 (\$3.3 billion for FS and \$1.1 billion for DOI), \$16.1 million above the requested amount, although \$661.3 million would be designated as emergency spending for wildfire suppression purposes and not subject to certain discretionary spending limits. The Senate committee bill would not provide any appropriations to the FLAME reserve accounts and includes a recommendation and legislative language to adopt the framework of the Administration's proposed new funding mechanism for wildfire suppression activities.⁴⁰

Administration's Wildfire Suppression Funding Proposal

Starting in FY2015, and continuing in FY2016 and FY2017, the Administration has proposed a new funding mechanism for wildfire suppression activities, which includes eliminating the FLAME reserve account. Therefore, the Administration did not request an appropriation to the FLAME reserve account for those years. Congress did not adopt the proposal in FY2015 or FY2016. Currently, wildfire suppression is funded by appropriations that are subject to the statutory discretionary spending limits established in the Balanced Budget and Emergency Deficit Control Act of 1985.⁴¹ The Administration's proposal would maintain this funding stream for most wildfire suppression operations, but it also would establish a new adjustment to the discretionary limits that could be used to fund suppression activities in emergency situations. In FY2017, the maximum amount of this adjustment would be \$1.4 billion across both FS and DOI (although the Administration is not requesting the maximum adjustment for FY2017 and is requesting an adjustment of up to \$1.2 billion). The maximum adjustment amount would increase each fiscal year until FY2022, when it would be \$2.7 billion.⁴² This adjustment would allow FS and DOI to request additional wildfire suppression funds—up to the maximum amount of the adjustment each fiscal year—that effectively would not be subject to the discretionary budget limits. Similar legislative proposals have been introduced in the 114th Congress.⁴³

³⁸ H.Rept. 114-632.

³⁹ Funds provided to the DOI WFM, DOI FLAME, and FS FLAME accounts would remain available until expended, without a fiscal year limitation.

⁴⁰ See Title V of S. 3068.

⁴¹ P.L. 99-177, Title II, 2 U.S.C. 900-922, as amended by the Budget Control Act of 2011. More information on the proposal is available as a CRS congressional distribution memorandum upon request.

⁴² Office of Management and Budget, *Analytical Perspectives, Budget of the United States Government, FY2017*, pp. 137-138, at https://www.whitehouse.gov/omb/budget/Analytical_Perspectives.

⁴³ For more information, see CRS Report R44082, *Wildfire Suppression Spending: Background, Issues, and Legislation in the 114th Congress*.

Table 3. FY2016 Enacted, FY2017 Requested, House-Passed and Senate-Reported Appropriations for FS and DOI Wildfire Management
(millions of dollars)

Agency/Account	FY2016 Appropriation	FY2017 Request	FY2017 House-Passed (H.R. 5538)	FY2017 Senate- Reported (S. 3068, S.Rept. 114-281)
Forest Service				
WFM account	2,386.3	2,451.4	2,665.8	2,842.3
FLAME account	823.0	—	315.0	—
Wildfire Suppression adjustment	—	864.1	—	—
Emergency Suppression funds	700.0	—	—	490.0
Total, FS	3,909.3	3,315.5	2,980.8	3,332.3
DOI				
WFM account	816.7	824.6	851.9	942.7
FLAME account	177.0	—	92.0	—
Wildfire Suppression adjustment	—	290.0	—	—
Emergency Suppression funds	—	—	—	171.3
Total, DOI	993.7	1,114.6	943.9	1,114.0
FS and DOI				
WFM account	3,203.1	3,276.1	3,517.7	3,785.0
FLAME account	1,000.0	—	407.0	—
Wildfire Suppression adjustment	—	1,154.1	—	—
Emergency Suppression funds	700.0	—	—	661.3
Total, FS and DOI	4,903.1	4,430.2	3,924.7	4,446.3

Source: FY2016 enacted data from detailed funding tables prepared by the House Committee on Appropriations. FY2017 budget request data from the FS and DOI budget requests.

Notes: Funds requested under the Wildfire Suppression adjustment or provided as Emergency Suppression funds in S. 3068 would effectively not be subject to the discretionary spending limits.

Issues

Congress is debating several issues related to federal funding for wildfire management. Issues under debate include the level and direction of federal spending on wildfire management as well as the effectiveness of that spending (e.g., whether the funding is allowing agencies to meet wildfire management targets and the adequacy of those targets). Wildfire spending has more than tripled since the 1990s, increasing from \$1.6 billion in FY1995 in constant dollars to \$4.9 billion in FY2016. A significant portion of that increase is related to rising suppression costs, even during years of relatively mild wildfire activity, although the costs vary and are difficult to predict in advance. Congress also is debating the level of appropriations dedicated for certain wildfire management activities, such as whether the rising cost of suppression should come at the expense of funding other activities or whether investing more funds in hazardous fuel reduction activities now may help reduce wildfire costs in the future.

When wildfire suppression funding is exhausted during a fiscal year with severe fire activity, the agencies may have to transfer funds from non-wildfire management suppression accounts, which may impact the performance of those activities. Congress then faces a decision as to whether to reimburse the accounts from which funding was transferred or to otherwise provide supplemental appropriations, sometimes outside of its regular budget. If a reimbursement decision is made after the end of the fiscal year in which transfers were made, the decision may disrupt the regular budget cycle and complicate discussions about how much suppression funding is needed for coming fiscal years during the appropriations process.

Congress has provided funding for wildfire management in addition to what was provided in the Interior appropriations bill—usually for wildfire suppression—for 6 of the last 10 years, including FY2013, FY2014, and FY2016. This fact may lead to questions regarding the structure of wildfire funding and wildfire suppression funding estimation methods, among other things.⁴⁴ Wildfire suppression funding estimates depend on multiple factors (e.g., weather, fuel load, nearby dwellings, access to wildfire site), and numerous reasons have been given as to why suppression estimates have at times not accurately forecast suppression expenses, with estimates typically underestimating suppression spending. Wildfire suppression is complicated, and both the efficiency of resources used for wildfire suppression and the federal protocol for wildfire management have an impact on wildfire suppression costs.

Analyzing trends in wildfire management could provide insights useful for Congress during these debates. However, analyzing wildfire funding trends over time—particularly prior to FY2001—is challenging for many reasons. The agencies’ account structures have changed over time, with different activities funded through different programs. Additional accounts and programs have been created. For example, the FLAME account was established in FY2010, with appropriations that previously had gone entirely to WFM suppression then being allocated between two different accounts. A further complication is that costs for one wildfire season (using a calendar year) often are covered by appropriations for two fiscal years, and sometimes appropriations are enacted in one fiscal year to cover costs incurred in previous fiscal years.

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⁴⁴ For more information, see CRS Report R44082, *Wildfire Suppression Spending: Background, Issues, and Legislation in the 114th Congress*.

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