



United States Department of Agriculture  
Office of Inspector General





## FS Firefighting Cost Share Agreements with Non-Federal Entities

Audit Report 08601-0002-41

### What Were OIG's Objectives

Our objective was to evaluate FS' controls surrounding the administration of cost-share agreements and to determine if fire suppression costs were equitably shared.

### What OIG Reviewed

We reviewed FS' fire protection agreements in three FS regions during fiscal years (FY) 2008 through 2011. We also reviewed the indirect cost rates that FS used to reimburse 10 cooperators on 5 fire incidents in California (Region 5). Further, we reviewed the cost-share agreements between FS and non-Federal entities related to two fire incidents in Region 5 during FY 2010.

### What OIG Recommends

We recommend that FS reassess its fire protection responsibilities with the California fire management agency. We also recommend that FS establish procedures to monitor the indirect cost rates used to reimburse local fire cooperators, and determine any unallowable overpayments and recover the amounts overpaid to the cooperators.

## OIG audited FS' administration of fire protection and cost share agreements to determine if fire suppression costs were equitably shared.

### What OIG Found

Along with local and State authorities, Forest Service (FS) is responsible for helping to protect forests nationwide from wildfire. Since 1991, FS' average yearly fire suppression costs have nearly doubled from an average of about \$580 million (FYs 1991 to 2000) to \$1.2 billion (FYs 2001 to 2010). In California, FS has taken responsibility for protecting almost 2.8 million acres of private land, exchanging the protection of land that is inexpensive for land that is more difficult, and therefore more expensive (such as residential areas near forests). In the process, FS costs and responsibilities have multiplied. OIG found that FS had not comprehensively reviewed fire protection boundaries to determine if such exchanges distribute costs equitably to all parties, and if any lands exchanged share similar risks and costs to protect, as mandated by the fire protection agreement. FS began taking corrective action during our audit.

OIG also found that local cooperators used indirect cost rates for firefighting activities that may have been excessive and unreasonable. FS did not safeguard its assets by establishing policies and procedures to review indirect cost rates charged by local cooperators. As a result, we questioned over \$4.5 million in administrative costs paid to nine cooperators in California. In addition, FS overpaid \$6.5 million to Colorado State University for unallowable administrative costs during a 4-year period. Although FS identified this issue and ceased future overpayments, it has not recovered the overpayments.

The agency agreed with our recommendations, and we reached management decision on seven of the eight recommendations.





United States Department of Agriculture  
Office of Inspector General  
Washington, D.C. 20250



DATE: December 24, 2015

AUDIT  
NUMBER: 08601-0002-41

TO: Thomas L. Tidwell  
Chief  
Forest Service

ATTN: Thelma Strong  
Chief Financial Officer

FROM: Gil H. Harden  
Assistant Inspector General for Audit

SUBJECT: FS Firefighting Cost Share Agreements with Non-Federal Entities

This report presents the results of the subject audit. Your written response, dated November 13, 2015, is included in its entirety at the end of the report. Excerpts from your response and the Office of Inspector General's (OIG) position are incorporated in the relevant sections of the report. Based on your response, we accept management decision on Recommendations 1, 2, 3, 4, 5, 6, and 7. Management decision has not been reached on Recommendation 8. To reach management decision on this recommendation, please see the relevant OIG Position section in the audit report.

In accordance with Departmental Regulation 1720-1, please furnish a reply within 60 days describing the corrective actions taken or planned, and timeframe for implementing the recommendation for which management decision has not been reached. Please note that the regulation requires management decision to be reached on all recommendations within 6 months from report issuance, and final action to be taken within 1 year of each management decision to prevent being listed in the Department's annual Agency Financial Report. Please follow your internal agency procedures in forwarding final action correspondence to the Office of the Chief Financial Officer.

We appreciate the courtesies and cooperation extended to us by members of your staff during our audit fieldwork and subsequent discussions. This report contains publically available information and will be posted in its entirety to our website (<http://www.usda.gov/oig>) in the near future.



## **Table of Contents**

---

<b>Background and Objectives</b> .....	<b>1</b>
<b>Section 1: Wildland Fire Protection Agreements</b> .....	<b>5</b>
<b>Finding 1: Fire Protection Agreements in California Were Inequitable</b> .....	<b>5</b>
<b>Recommendation 1</b> .....	<b>8</b>
<b>Recommendation 2</b> .....	<b>8</b>
<b>Recommendation 3</b> .....	<b>9</b>
<b>Recommendation 4</b> .....	<b>9</b>
<b>Recommendation 5</b> .....	<b>10</b>
<b>Section 2: FS' Administration of Indirect Cost Rates</b> .....	<b>11</b>
<b>Finding 2: Indirect Cost Rates for Local Fire Cooperators in California Were Not Reviewed</b> .....	<b>11</b>
<b>Recommendation 6</b> .....	<b>13</b>
<b>Recommendation 7</b> .....	<b>14</b>
<b>Finding 3: FS Region 2 Staff Did Not Recover Unallowable Administrative Costs</b> .....	<b>16</b>
<b>Recommendation 8</b> .....	<b>17</b>
<b>Scope and Methodology</b> .....	<b>19</b>
<b>Exhibit A: Summary of Monetary Results</b> .....	<b>22</b>
<b>Exhibit B: Audit Sites</b> .....	<b>23</b>
<b>Exhibit C: Estimated Overpayments of Administrative Costs to Local Cooperators</b> .....	<b>24</b>
<b>Exhibit D: Summary of OIG Assessment of the Prior Audit Recommendations (08601-44-SF)</b> .....	<b>25</b>
<b>Abbreviations</b> .....	<b>26</b>
<b>Agency's Response</b> .....	<b>27</b>



# Background and Objectives

---

## Background

The Forest Service's (FS) mission is to sustain the health, diversity, and productivity of the nation's forests and grasslands, which span 193 million acres. As part of this mission, FS is responsible for protecting natural resources from unwarranted wildland fire. FS is recognized as a leading wildland firefighting organization, as it accounts for two-thirds of all Federal firefighting resources in the United States.<sup>1</sup> There are many factors—such as warmer and drier weather conditions and a steady rise in the number of people living in or adjacent to forests, grasslands, and other natural areas—that make controlling wildland fires increasingly difficult for FS.

For the decade encompassing fiscal years (FYs) 1991 to 2000, there were almost 812,000 wildland fires that affected roughly 36 million acres. While the number of wildland fires dropped to just over 765,000 from FYs 2001 to 2010, the total acres burned significantly increased to approximately 65 million acres during this decade. Similarly, FS' average yearly fire suppression costs more than doubled from FYs 1991 to 2010 (average annual costs were \$580 million during FYs 1991 to 2000, and \$1.2 billion during FYs 2001 to 2010). Studies have concluded that the wildland urban interface (WUI) areas<sup>2</sup>—the line or zone where structures and human development meet or intermingle with undeveloped wildland—can influence fire suppression costs. The FS Chief testified in June 2013 that more than 70,000 communities were at risk from wildfire at that time, and the agency anticipates a substantial increase in housing growth on 44 million acres of private forest land nationwide from FYs 2000 to 2030.<sup>3</sup>

Several statutes grant FS broad discretion in cooperating with other entities (e.g., States, other Federal agencies, local and tribal governments, etc.) to manage and suppress wildland fire on and off National Forest System land.<sup>4</sup> Also, FS' policies promote collaboration among cooperating Federal and non-Federal fire management agencies. For example, FS, through an approved cooperative fire agreement,<sup>5</sup> may assist State, county, and local fire departments with exterior structure protection activities.<sup>6</sup>

---

<sup>1</sup> Some examples of Federal firefighting resources include smoke jumpers, hot shot crews, helicopters, air tankers, national interagency dispatching and mobilization, and equipment and supplies for fire incident management.

<sup>2</sup> WUI is the area where structures and other human development meet or intermingle with undeveloped wildland. WUI is any area containing human development, such as a rural subdivision, that may be threatened by wildland fires. Wildland intermix is an interspersing of developed land with wildland where there are no easily discernible boundaries between the two systems, such as an isolated cabin surrounded by forest. In this report, references to "WUI" will connote both wildland urban interface and wildland intermix.

<sup>3</sup> *Forest Service Budget for FY 2014: Hearing Before the S. Comm. on Energy and Natural Res.*, 113th Cong. 9 (2013) (statement of Tom Tidwell, Chief, FS, USDA).

<sup>4</sup> See, e.g., 16 U.S.C. §§ 551, 565a-1 (protection of national forests, cooperative agreements); 42 U.S.C. §§ 1856a, 1856a-1, 1856b (reciprocal fire protection agreements, contracts, emergency assistance).

<sup>5</sup> A mutual aid agreement between Federal and non-Federal fire management agencies to facilitate the coordination and exchange of firefighting resources.

<sup>6</sup> *Forest Service Wildland Fire Suppression Policy for Structure Protection*, dated May 5, 2009.

FS collaboration with other Federal, State, local, and tribal governments is essential to effectively control fires on the nation's wildlands. For example, the *California Master Cooperative Wildland Fire Management and Stafford Act Response Agreement* (California Fire Master Agreement (CFMA)) establishes a commitment between the Federal wildland fire agencies and the State of California to improve efficiency and facilitate the coordination and exchange of resources (i.e., personnel, equipment, supplies, services, and information) for wildland fire management purposes.<sup>7</sup> FS establishes fire protection agreements between national forests and county fire departments to facilitate the coordination and exchange of resources at the local level. In addition to the fire protection agreements, FS and fire management agencies agree upon an annual operating plan, which establishes the level of agreed-upon participation and includes maps of protection boundaries and operating and billing procedures. When wildfire affects or threatens the jurisdictional boundaries of different fire management agencies, a cost-share agreement is developed jointly to stipulate the method to allocate costs between the parties.<sup>8</sup>

FS and other fire management agencies may delineate protection areas on the basis of jurisdictional boundaries or through the negotiation of direct protection areas (DPAs).<sup>9</sup> The fire management agencies typically negotiate DPAs based on boundaries and logical protection responsibilities. The protecting agency is the agency responsible for providing fire protection and incident management within its assigned protection area. Under CFMA, the closest resources concept is the framework for tactical response to fires in California.<sup>10</sup> This concept allows the fire management agency in the closest proximity to provide the initial resources to combat a fire. However, beyond the initial response, the protecting agency has the option to call in more resources, as appropriate, for suppression.

CFMA allows agencies to negotiate and exchange fire protection responsibilities and establish protection areas that do not follow jurisdictional boundaries. The fire management agencies consider many factors when establishing protection boundary areas. Such factors include, for example, the response time to a specific location for each agency, the landownership patterns in a geographic area, the land values to be protected in a geographic area, and the pertinent statutes and regulations that govern the agencies. However, one guiding factor in establishing the protection boundaries is the closest resources concept. Once fire management agencies, including FS, have established the fire protection boundaries, CFMA states that "all costs incurred to meet the [wildfire] protection responsibility within each agency's DPA will be the [financial] responsibility of that protecting agency."<sup>11</sup>

---

<sup>7</sup> Federal wildland fire management agencies include the Bureau of Land Management, the National Park Service, the Bureau of Indian Affairs, and the Fish and Wildlife Service of the Department of Interior, and the Forest Service.

<sup>8</sup> Cost share agreements are established when there is a multi-jurisdictional fire incident and the jurisdictional agencies agree to share the cost for the fire suppression.

<sup>9</sup> A direct protection area is an area that an agency protects, which is defined by boundaries and documented in the annual operating plan.

<sup>10</sup> CFMA uses the term "closest forces" concept; however, it is commonly known in the fire management community as the "closest resources" concept.

<sup>11</sup> *2013-2018 California Master Cooperative Wildland Fire Management and Stafford Act Response Agreement*, page 11 (Mar. 20, 2013).

The nation's fire management agencies have worked closely for years in an interagency environment to establish fire protection and cost share agreements. The process of developing the agreements was challenging for FS, as well as its fire partners, due to the differing statutory authorities that govern the agencies and the various agency missions. However, FS and its fire partners overcame the difficulties to negotiate efficient and effective agreements with a singular purpose of fighting wildland fires and protecting human life.

In recent years, more and more people live in and around forested areas. These locations are referred to as WUI areas. FS and its fire partners encounter many challenges when combating fire in WUI areas. According to an FS official, in the past, private lands adjacent to the national forests were relatively undeveloped; therefore, it made sense for FS to protect these areas because of the proximity of its firefighting resources and expertise in combating wildland fires. However, these lands have developed into small residential communities and are no longer considered similar to national forest lands. According to a study completed in 2005, 32 percent of U.S. housing units and one-tenth of all land with housing are in WUI areas and that number was expected to continue to grow.<sup>12</sup> The growth and expansion of WUI areas have forced fire management agencies to adopt more costly fire suppression strategies and tactics, due to social and political considerations. In addition, fire management agencies face challenges because homes are located in remote areas, and often on steep slopes with roads that are difficult for fire equipment to navigate.<sup>13</sup> Many other studies have shown a direct correlation between more costly fire suppression costs and the protection of residential homes in WUI areas.

### **Prior Audit Work**

In 2006, the Office of Inspector General (OIG) performed an audit of FS' large fire suppression costs. The audit reported that, among other things, FS had not renegotiated its agreements with State and local governments to ensure that protection areas reflected the State and local governments' added responsibility related to increasing WUI expansion on private lands. OIG concluded that because FS managers emphasized protecting private property in WUI areas over protecting its natural resources, the agency's fire protection costs had increased significantly in the years leading up to this audit.<sup>14</sup> OIG recommended that FS modify its national direction to require regions to periodically assess and renegotiate their master protection agreements for WUI protection responsibilities.

### **Objectives**

The objective of our audit was to evaluate FS' controls surrounding the administration of cost share agreements. Specifically, we were to determine whether (1) cost share agreements were established in accordance with master cooperative agreements, (2) firefighting suppression costs were equitably shared, (3) reimbursements were properly determined and consistent with

---

<sup>12</sup> Susan M. Stein et al., USDA Forest Service, *Wildfire, Wildlands, and People: Understanding and Preparing for Wildfire in the Wildland-Urban Interface—A Forest on the Edge Report*, Gen. Tech. Report RMRS-GTR-299, (Jan. 2013).

<sup>13</sup> Patricia H. Grude et al., *Evidence for the Effect of Homes on Wildfire Suppression Costs*, 22 Int'l J. Wildland Fire 537-48 (2013).

<sup>14</sup> Audit Report 08601-0044-SF, *FS Large Fire Suppression Costs*, Nov. 2006.

agreed-upon cost share agreements, and (4) FS had taken appropriate corrective actions on prior OIG audit recommendations that pertained to cost share agreements.

For objectives 1 and 3, our tests indicated that FS has established cost share agreements in accordance with the master cooperative agreements and reimbursements were properly determined and consistent with agreed-upon cost share agreements. For objectives 2 and 4, we found costs were not equitably shared and FS has not taken action on a prior OIG recommendation.

## Section 1: Wildland Fire Protection Agreements

---

### Finding 1: Fire Protection Agreements in California Were Inequitable

In the late 1980s, FS Region 5 (California) entered into a fire agreement with California's fire management agency, the California Department of Fire Prevention (CAL FIRE), which established the protection and financial responsibilities for fires that occurred within the agencies' respective boundaries and allowed fire management agencies to exchange protection areas. However, we found that the agreement between CAL FIRE and FS tended to result in the FS receiving greater responsibility for land that is more difficult to protect, and therefore more expensive to protect (residential areas near forests), while State officials took responsibility for land that was comparatively inexpensive to protect (such as grassland). This occurred because FS had not comprehensively reviewed the protection boundaries to determine if the agreements remained equitable to all parties.<sup>15</sup> As a result, FS had no assurance the fire agreement with CAL FIRE resulted in an equitable division of fire protection responsibilities.

In California, land that intermingles with land developed into residential communities poses a challenge for fire management agencies and requires coordination at the Federal, State, and local levels to provide fire protection. To address this issue, FS—along with other Federal agencies<sup>16</sup>—entered into CFMA, and agreed to exchange protection areas with CAL FIRE. CFMA states that wildland fire protection for intermingled lands would be provided at an equivalent level to lands that are similar in nature, and that protection areas exchanged should be of equal hazard, risk, and value. It further states that “existing protection organization and facilities, response time, land ownership patterns, values to be protected, and pertinent statutes and regulations” should be considered when establishing boundaries of exchanged land.<sup>17</sup>

Such agreements are, by definition, complicated. CFMA allows agencies to negotiate and exchange fire protection responsibilities and establish protection areas that do not follow jurisdictional boundaries. Fire protection agreements were designed to facilitate “mutual aid,” where FS and its fire partners would assist each other to be more efficient and effective in combatting wildland fires. However, FS and other fire management agencies had to work closely in a complex interagency environment to overcome major challenges to formulating the agreements. For instance, each agency operates under different statutory authorities and missions, which determine the type of firefighting training and equipment used by those agencies. In addition, FS and the fire management agencies had to address the societal and political pressures that impact them. Some of those pressures require firefighting agencies to adopt more costly fire suppression strategies to protect homes from the threat of wildland fires.

---

<sup>15</sup> FS has periodically made small adjustments to the agreement based on local firefighting needs. Between 2007 and 2011, FS engaged in protection area exchanges with the State, which resulted in an additional 25,000 acres to be protected by FS. See CAL FIRE, *2007 Wildfire Activity Statistics* (2007), available at [http://www.fire.ca.gov/downloads/redbooks/2007\\_BW.pdf](http://www.fire.ca.gov/downloads/redbooks/2007_BW.pdf); CAL FIRE, *2011 Wildfire Activity Statistics* (2011), available at [http://www.fire.ca.gov/downloads/redbooks/2011/2011\\_Redbook\\_Final.pdf](http://www.fire.ca.gov/downloads/redbooks/2011/2011_Redbook_Final.pdf)

<sup>16</sup> The Bureau of Land Management, National Park Service, Bureau of Indian Affairs, and Fish and Wildlife Service.

<sup>17</sup> *California Master Cooperative Wildland Fire Management and Stafford Act Response Agreement*, Page 17, R5 FS Agreement No. 08-FI-11052012-110 (Dec. 11, 2007).

In recent years, many States, including California, have experienced substantial development and growth in the number of residential homes on the private lands that border national forests.

The cost of protecting different types of lands can vary significantly, based on factors such as the type of land involved and the fire’s proximity to private property. Two FS studies found that firefighting expenditures increased with the presence of housing and private lands.<sup>18</sup> Fire data in California show that the cost of suppressing wildfires in private areas is nearly 28 times greater than in grass and shrublands (see Table 1).<sup>19</sup> In California, there are approximately 8 million acres of WUI areas, of which about 5.5 million acres are considered at high risk of wildfire.<sup>20</sup> As more people continue to build on these lands, the risk will likely increase. Table 1 depicts the average fire suppression cost for the different types of land in California.

**Table 1: Region 5—Average Fire Suppression Cost for the Different Lands for FYs 2008 through 2010**

Land Types	Average Cost per Acre
Grass/Shrub	\$61/acre <sup>21</sup>
Forest	\$779/acre <sup>22</sup>
WUI areas	\$1,695/acre <sup>23</sup>

We found that the majority of protected area exchanges under the agreement with CAL FIRE shifted the protection of private WUI areas from the State to FS.<sup>24</sup> Originally, the State assumed responsibility for protecting private lands in rural areas that did not have local fire departments within its jurisdiction. Through the exchanges of protection areas over the years, FS has accepted responsibility for almost 2.8 million of these private lands. In return, the CAL FIRE protects over 3.7 million acres of Federal lands, a little more than 1 million of those acres are FS land.<sup>25</sup> In exchanging grassland for WUI areas, FS was, in effect, multiplying its costs and responsibilities.

We asked FS officials if an overall State-wide analysis was conducted to assess if FS’ fire protection responsibilities were fairly divided between California and FS. During the audit, we were informed the region’s State-wide analysis focused primarily on volume of acreage

<sup>18</sup> Krista M. Gebert et al., *Estimating Suppression Expenditure for Individual Large Wildland Fires*, 22 West. J. Appl. For. 188-97 (2007); Gen. Tech. Report RMRS-GTR-299.

<sup>19</sup> Based on fire data we obtained from FS Region 5 and from the BLM office in California to determine the average suppression cost for fires that occur on forest land, grassland, and shrubland.

<sup>20</sup> Elizabeth G. Hill, Cal. Legislative Analyst’s Off., *A Primer: California’s Wildland Fire Protection System* 19 (2005).

<sup>21</sup> The \$61/acre represents BLM’s average fire suppression cost for fighting fires on BLM lands, which are mostly grass and shrublands.

<sup>22</sup> The \$779/acre represents FS’ average fire suppression cost for fires fought on FS lands.

<sup>23</sup> The \$1,695 per acre cost represents the lowest average fire suppression cost based on our analysis of the four WUI fires identified in FS’ internal cost reviews.

<sup>24</sup> Through the exchanges, FS protects almost 3 million acres on behalf of California; the vast majority of the lands exchanged to FS were private lands, which accounted for about 2.8 million acres (89 percent of the total acreage exchanged with the State).

<sup>25</sup> California protects 3.7 million acres of Federal lands, of which approximately 2.2 million acres was BLM land, which is predominately grassland and shrubland.

protected and did not consider the hazards, risks, and values to be protected, as prescribed in the agreement. However, if FS had implemented a prior audit recommendation to periodically assess and renegotiate the master protection agreements, it would have been aware these factors were not considered in determining WUI protection responsibilities.

When we asked FS officials about why they had not performed such an analysis, they stated that they wanted to give regions flexibility in establishing fire protection agreements with various State fire management agencies, and they did not provide any guidance to regions to follow in determining if protection area exchanges were equitable. As a result, in California, the FS region chose to focus primarily on ensuring that exchanged areas had equal acreage, rather than ensuring equality of firefighting costs assumed by each entity. A former FS official in Region 5 requested an analysis to determine only the number of acres exchanged between the Federal agencies and the State—not considering the other factors that directly impact the cost of protecting those areas. Without guidance on how to objectively weigh risk factors, FS’ decisions were not in compliance with the master agreement, which requires that protected area exchanges be of equal hazard, risk, and value.

In 2007, through an internal review, FS concluded that the WUI areas currently under the protection of Federal agencies should be under the protection of the State. The FS report stated, “Federal responsibility areas do not have WUIs; therefore, State protection of national forest lands is not equivalent to values at risk when WUI values are involved in the exchange.”<sup>26</sup> According to the team leader who led the review, the former FS official in Region 5 did not agree with the review findings because he believed the review team did not understand the complex interagency nature of firefighting in California and therefore took no corrective action.

FS officials have taken action to address the problem OIG identified. Subsequent to our field work, FS officials recognized the financial impact of the protection boundaries in the Lake Tahoe Basin and renegotiated the boundaries<sup>27</sup> with CAL FIRE to have the State of California take back fire protection responsibility on over 26,000 acres of State Responsibility Area (SRA) land.<sup>28</sup> At the same time, FS also renegotiated to give back almost 56,000 acres of its protection boundaries with CAL FIRE in the San Bernardino National Forest of SRA land.<sup>29</sup> These actions were taken as part of the agency’s efforts to realign its fire protection responsibility to its mission. We commend FS for these actions.

OIG believes that FS must continue to realign the agency’s fire responsibilities with its firefighting mission in California, while carefully considering the costs associated with the lands it has agreed to protect. To do so, FS needs to conduct an equivalency assessment of its fire protection responsibilities in California to ensure that fire protection costs are shared fairly among all parties.

---

<sup>26</sup> FS 2007 Large Fire Cost Review—Pacific Southwest Region, pages 15-16.

<sup>27</sup> Based on the FS Direct Protection Area Exchange Analysis-Exchanges for USFS BDF and LTBMU Areas Only (Version 0.2) (Sep. 28, 2013).

<sup>28</sup> State Responsibility Areas (SRA) include State and private lands where the State is responsible for fire protection under California Resources Code Sections 4125 and 4127.

<sup>29</sup> FS Direct Protection Area Exchange Analysis-Exchanges for USFS BDF and LTBU Areas Only (Version 0.2) (Sep. 28, 2013).

## **Recommendation 1**

Require Region 5 officials to develop and implement a process to periodically assess its protection responsibilities in California to ensure that agreements are equitable, and require other FS regions to perform a similar assessment of their protection responsibilities if similar agreements exist.

### **Agency Response**

In its November 13, 2015, response FS stated:

FS concurs with this recommendation. Region 5 currently reviews Direct Protection Areas (DPA) annually through the California Wildfire Coordinating Group (CWCG) and with the local National Forests. Exhibit E of the California Fire Management Agreement (CFMA) outlines the process for DPA adjustments. To address the need for all FS regions where similar agreements exist, the FS will update the Forest Service Manual to include a provision to perform periodic assessments of protection responsibilities in their agreements.

FS provided an estimated completion date of November 30, 2016, for this action.

### **OIG Position**

We accept FS' management decision for this recommendation.

## **Recommendation 2**

Require Region 5 officials and, if appropriate, other regional offices that participate in exchange of fire protection areas, to create and submit for national office approval the methodologies used for reviewing land exchanges within each region.

### **Agency Response**

In its November 13, 2015, response FS stated:

FS concurs with this recommendation. Region 5 officials will develop an interagency methodology and submit for concurrence to the national office prior to completing the review of land exchanges. To ensure consistency within other regions, the FS will add direction in the Forest Service Manual addressing the methodologies used for reviewing protection across land exchanges.

FS provided an estimated completion date of November 30, 2016, for this action.

## **OIG Position**

We accept management decision for this recommendation.

## **Recommendation 3**

Direct Region 5 officials to conduct a formal, comprehensive analysis of the protection boundaries to ensure that the terms of the agreement are equitable in regards to the types of land (e.g., grassland, forestland, and residential communities), the values at risk (e.g., structures, watershed, etc.), fire hazards, and the complexities involved in firefighting.

## **Agency Response**

In its November 13, 2015, response FS stated:

FS concurs with this recommendation. Region 5 will conduct a comprehensive analysis of protection boundaries and continue efforts to maintain wildland fire protection responsibilities in alignment with the values to be protected and assumed responsibilities of DPA lands included under the CFMA. Region 5 continues to identify and assess consolidated blocks of high value protection areas such as privately owned commercial timberlands and WUI lands outside of local responsibility for exchange with CAL FIRE.

Region 5 intends to work with CAL FIRE to develop a long term strategy to address equitable Regional DPA realignment. Region 5 will continue to complete local adjustments annually, with comprehensive assessment completed for the renewal of the CFMA (every five years).

FS provided an estimated completion date of November 30, 2016, for this action.

## **OIG Position**

We accept management decision for this recommendation.

## **Recommendation 4**

Require regional officials, based on the formal analysis conducted in Region 5, to renegotiate protection areas, as applicable, with State officials, to ensure the financial responsibility is equitably and appropriately allocated between FS and the State of California.

## **Agency Response**

In its November 13, 2015, response FS stated:

FS concurs with this recommendation. Based on the analysis completed under Recommendation 3, Fire and Aviation Management Director will issue a letter directing

the Region 5 fire officials to renegotiate protection areas, as applicable, with State officials.

FS provided an estimated completion date of December 31, 2016, for this action.

**OIG Position**

We accept management decision for this recommendation.

**Recommendation 5**

Ensure that applicable regions periodically renegotiate Wildland Urban Interface (WUI) area protection boundaries based on equivalency assessments performed.

**Agency Response**

In its November 13, 2015, response FS stated:

FS concurs with this recommendation. Region 5 intends to regularly reassess the defined WUI protection areas as part of the comprehensive assessment, completed as part of the CFMA renewal. The FS will add a provision to its Forest Service Manual to require other applicable regions (and Region 5) to periodically renegotiate WUI area protection boundaries.

FS provided an estimated completion date of November 30, 2016, for this action.

**OIG Position**

We accept management decision for this recommendation.

## Section 2: FS' Administration of Indirect Cost Rates

---

### Finding 2: Indirect Cost Rates for Local Fire Cooperators in California Were Not Reviewed

Local cooperators used indirect cost rates for firefighting activities that may have been excessive and unreasonable.<sup>30</sup> FS did not safeguard its assets by establishing policies and procedures to review indirect cost rates charged by local cooperators. Therefore, we are questioning over \$4.5 million in administrative costs, as there was no assurance these costs were reasonable and accurate (see Exhibit A).

According to the Federal Managers' Financial Integrity Act (FMFIA), Federal agencies are required to establish internal controls and shall provide reasonable assurances that assets are safeguarded against waste, loss, unauthorized use, or misappropriation.<sup>31</sup> To implement FMFIA, Office of Management and Budget (OMB) Circular A-123 requires Federal agencies to develop appropriate and adequate controls over funds and to demonstrate how the financial internal controls meet agency goals.<sup>32</sup>

The Federal cost principles that govern non-Federal entities' administrative costs are found in OMB Circular A-87.<sup>33</sup> OMB Circular A-87 requires Federal agencies to perform oversight of indirect cost rates with respect to cooperative agreements with State and local governments. However, in 1981, FS received an OMB exemption from this requirement for all cooperative fire protection agreements.<sup>34</sup> Although, FS received an exemption from the OMB requirements, FMFIA and OMB Circular A-123 require agencies to safeguard assets and, in this case, FS did not close the gap in its policies and procedures governing FS' administrative cost reimbursements to local cooperators.

Wildland firefighting is a coordinated effort at the Federal, State, and local levels. Local fire departments often answer Federal or State requests for additional resources and are reimbursed for providing firefighting resources. This reimbursement is possible through cooperative fire protection agreements, which allow local fire departments (cooperators) to charge administrative costs based on certified indirect cost rates. In California, local fire departments submit on an annual basis a proposed indirect cost rate to the California Office of Emergency Services (CAL OES).<sup>35</sup> They must also provide justification for any rate that exceeds the standard rate of 10 percent. Once the indirect cost rate has been established, the cooperator can apply its rate towards the direct firefighting cost to determine the reimbursable administrative cost.

---

<sup>30</sup> Local cooperators are local fire departments or fire districts that participate in wildland firefighting activities.

<sup>31</sup> 31 U.S.C. § 3512.

<sup>32</sup> OMB, *Management's Responsibility for Internal Control*, Circular A-123 (Dec. 21, 2004).

<sup>33</sup> 2 C.F.R. pt. 225 (Cost Principles for State, Local, and Indian Tribal Governments, OMB Circular A-87).

<sup>34</sup> On March 4, 1981, OMB granted FS an exemption from the provisions of the Federal Grant and Cooperative Agreement Act, 31 U.S.C. §§ 6301-6308. This exemption was granted based on the premise that transfer of resources was not the primary purpose of cooperative fire agreements. OIG did not conduct any work to validate this assertion.

<sup>35</sup> CAL OES is responsible for maintaining all the local fire departments' indirect cost rates in California.

In 2011, FS and officials from other Federal, State, and local governments in California created an organization called the California Fire Assistance Agreement (CFAA) Committee. The CFAA Committee standardized the fire incident billing process and had CAL OES maintain the indirect cost rates of all the local cooperators in California. Since that time, local cooperators have been required to submit proposed indirect rates to CAL OES. However, FS did not verify that indirect cost rates submitted by local cooperators accurately reflected the indirect cost incurred.<sup>36</sup>

As stated above, FMFIA requires agencies to provide reasonable assurances that assets are properly safeguarded.<sup>37</sup> However, during the initial stages of our audit, FS did not have policies and procedures to determine whether indirect cost rates submitted by local cooperators were accurate and reasonable.<sup>38</sup> FS officials in Region 5 confirmed they did not have policies and procedures to determine if indirect cost rates submitted by local cooperators were accurate and reasonable. One Region 5 official indicated that FS relied on CAL OES to review submitted rates. However, a CAL OES official stated that the agency does not conduct a review to ensure the indirect cost rates are accurate and reasonable. Instead, CAL OES officials would “eyeball” rates that seem high and notify FS of those rates. However, when CAL OES officials did inform FS of potentially high rates, FS officials did not review those rates to determine if they were reasonable and accurate. CAL OES also did not require the local cooperators to submit evidence to support the proposed indirect cost rate.

FS national officials confirmed that FS did not have policies and procedures to ensure the accuracy and reasonableness of indirect cost rates. They agreed, however, that a policy should be established to govern indirect cost rates for cooperative fire agreements and, as we progressed through our audit, they were in the process of developing agency policy regarding administrative costs. The officials also stated that they will revise and incorporate language from their guidance on partnership agreements into the guidance for cooperative fire protection agreements.<sup>39</sup>

We selected and reviewed a non-statistical sample of the five most expensive fires in California from FYs 2008 through 2010. From this sample, we reviewed the invoices and supporting documentation for the local fire cooperators who received the most funding. FS paid 8 of the 10 cooperators over \$1.6 million in administrative costs, with indirect cost rates as high as 18 percent.<sup>40</sup> Since these rates were not reviewed by FS, there is no assurance that the rates used were accurate and reasonable.<sup>41</sup> In addition, we found that another cooperator—who was

---

<sup>36</sup> The California Fire Assistance Agreement (CFAA) is an agreement of the California interagency wildland fire group that includes local fire cooperators and Federal fire agencies. FS is one of the signatory agencies to this agreement and is required to reimburse cooperators based on the agreed upon rates.

<sup>37</sup> 31 U.S.C. § 3512.

<sup>38</sup> USDA FS, *Grants, Cooperative Agreements, and Other Agreements Handbook*, FSH 1509.11, Ch. 30, “Cooperative Law Enforcement, Forest Road, and Fire Protection Agreements” (Oct. 20, 2009).

<sup>39</sup> In effect, this revision will clarify Chapter 90 of the Forest Service Handbook (FSH), *Standard and Discretionary Provisions and Assurances* (July 11, 2013), and incorporate that content into Chapter 30 of FSH 1509.11, *Grants, Cooperative Agreements, and Other Agreements Handbook*.

<sup>40</sup> Fire costs were obtained from the Albuquerque Service Center (ASC), FS’ centralized billing/payment processing center. Administrative costs were derived from the recorded ASC payments made to cooperators.

<sup>41</sup> We sampled 10 local cooperators for 5 fires in the State of California and for which FS paid over \$30 million from FY 2008-2011 for fire suppression services.

involved in fighting all five fires—had an indirect cost rate of 49 percent for FY 2008 through part of FY 2009 and a rate of 42 percent for part of FY 2009 and for FY 2010. In our estimate, this resulted in a payment of over \$2.9 million in administrative costs. In total, we are questioning over \$4.5 million in administrative costs, as there was no assurance these costs were reasonable and accurate (see Exhibit C).<sup>42</sup>

For the five fire incidents we reviewed, FS spent a total of over \$218 million in fire suppression costs. On those fire incidents, there were typically 80-90 cooperators who participated and assisted FS on each fire. Annually, FS spends more than \$1 billion for fire suppression activities nationwide, which includes administrative costs charged by numerous cooperators.

Administrative costs claimed by the cooperators are driven by the indirect cost rates that were approved by FS. As of October 2013, we obtained all indirect cost rates from CAL OES and found 67 indirect cost rates over 10 percent, with some as high as 33 percent. Therefore, FS needs to establish a system of controls that ensures those rates are accurate and reasonable, and prevents FS from paying unnecessary administrative costs to cooperators.

In March 2015, we discussed this matter with FS officials at the Albuquerque Service Center (ASC).<sup>43</sup> The officials stated that FS has issued interim guidance on indirect cost rates, which requires local cooperators to provide cost justification for any indirect cost rate above 10 percent. FS officials also concurred with our proposed corrective action to review a sample of indirect cost rates between 10 to 25 percent and to require a mandatory review of indirect cost rates over 25 percent. In addition, FS is in the process of establishing internal policy on the scope of reviews to be performed. Specifically, the agency will identify indirect cost rates to be reviewed, the type of documentation to be examined by agency officials, and the timing of the reviews.

## **Recommendation 6**

Establish policies and procedures to ensure that indirect cost rates submitted by the local fire cooperators on cooperative fire protection agreements are accurate and reasonable.

## **Agency Response**

In its November 13, 2015, response FS stated:

FS concurs with this recommendation. The Forest Service has revised guidance for FSH 1509.11 Chapter 30 to include policies and procedures for ensuring indirect cost rates submitted by local fire cooperators and cooperative fire protection agreements are accurate and reasonable. Guidance will be released through Interim Directive to the agency upon final approval by ORMS (Directives); final guidance includes:

---

<sup>42</sup> FS paid nearly \$9.6 million to the cooperator for the five fires, but we were unable to determine how much was for administrative costs because the indirect cost rates were embedded in the personnel billing rates and the cooperator was unable to provide the supporting documentation to itemize the charges. Although the cooperator's negotiated administrative rates with FS were between 17 to 18 percent based on the cooperative agreement, the certified indirect cost rates submitted to the County Auditor-Controller ranged from 42 percent to 49 percent.

<sup>43</sup> ASC is the centralized financial service processing center for the FS. ASC oversees the budget and conducts financial management reviews for the FS.

Ch. 30 guidance:

- The payment recipient must maintain evidence supporting the rate calculated. Documentation and/or evidence may include, but is not limited to, accounting records, audit results, cost allocation plan, letter of indirect cost rate approval from an independent accounting firm, or other Federal agency approved rate notice applicable to agreements (such as NICRA).
- If the payment recipient chooses to provide their NICRA, any applicable exclusions/terms conditions of the NICRA must be followed.
- An applicable NICRA or an indirect cost rate summary in a format that clearly defines the indirect cost rate and MTDC must be uploaded to the NRM record.
- Audit and Assurance (A&A) will do a sampling based on a risk-based approach, depending on the universe size, of the rates over 10% on an annual or quarterly basis. A&A will conduct a mandatory review for all indirect cost rates used by local cooperators equal to or in excess of 25 percent.

FS provided an estimated completion date of November 30, 2016, for this action.

## **OIG Position**

We accept management decision for this recommendation.

## **Recommendation 7**

Include a provision that would require a mandatory review for all indirect cost rates used by local cooperators that exceed 25 percent, and to review a sample of rates used by cooperators that are between 10 to 25 percent.

## **Agency Response**

In its November 13, 2015, response FS stated:

The Forest Service concurs with this recommendation. The Forest Service has revised guidance for FSH 1509.11 Chapter 30 to include policies and procedures for ensuring indirect cost rates submitted by local fire cooperators and cooperative fire protection agreements are accurate and reasonable. Revised policy (please see FS response to Recommendation 6 above) includes the requirement to review a sample of rates used by cooperators that are between 10-25 percent and mandatory review of rates 25% or higher. Moreover, applicable provisions were revised to include standards for documentation requirements to address these indirect cost rate categories.

Revised provision will be included in all applicable agreements and will be released through Interim Directive as appropriate to the agency upon final approval by ORMS (Directives); revised provisions noted below:

Provision:

When indirect cost rates are applied to federal reimbursements, the Parties agree to the following.

1. If the payment recipient has never received or does not currently have a negotiated indirect cost rate, they are eligible for a de minimis indirect cost rate up to 10% of Modified Total Direct Costs (MTDC). MTDC is defined as all salaries and wages, fringe benefits, materials and supplies, services, travel, and contracts up to the first \$25,000 of each contract.
2. For rates greater than 10%, the payment recipient shall provide either an applicable negotiated indirect cost rate agreement (NICRA) from a cognizant Federal agency, or an indirect cost rate summary in a format that clearly defines the indirect cost rate and MTDC.
3. The payment recipient must maintain adequate documentation to support the methodology and computation of the indirect cost rate. Documentation must be made available to the Federal agency upon request.
4. Failure to provide adequate documentation supporting the indirect cost rate could result in disallowed costs and repayment to the Federal agency.

FS provided an estimated completion date of November 30, 2016, for this action.

## **OIG Position**

We accept management decision for this recommendation.

### **Finding 3: FS Region 2 Staff Did Not Recover Unallowable Administrative Costs**

Colorado's Negotiated Indirect Cost Rate Agreement (NICRA) does not permit administrative costs to be applied to fire suppression activities. In 2011, the FS Rocky Mountain Regional Office (Region 2) identified the region had erroneously approved payments to Colorado State University (CSU) that included unallowable administrative costs. During our audit, while Region 2 officials had stopped paying further unallowable costs for this agreement, they had not recovered the estimated \$6.5 million in unallowable administrative costs paid to CSU for fire suppression activities from FYs 2007 through FY 2011. FS Region 2 officials were waiting for an agreement to be reached between CSU and its Federal cognizant agency on an allowable indirect cost rate; however, no agreement was reached as of July 2015.

The Colorado State Forest Service (CSFS) acted as the lead State agency responsible for wildland fire prevention and suppression activities in Colorado from FYs 2007 through 2012.<sup>44</sup> Through a cooperative agreement with FS Region 2, CSFS coordinated fire management services with local cooperators<sup>45</sup> and reviewed cooperator bills prior to sending them to CSU for payment. CSU paid local cooperators, applied an indirect cost rate for its administrative costs, and then billed FS for the total amount.

NICRA established a 23 percent indirect cost rate, which was later increased to 26 percent,<sup>46</sup> for Colorado, and specified that rates could not be applied to "direct firefighter services obtained under contract and interagency agreements" or "reimbursements to cooperators performing fire suppression activities." A senior negotiator at the U.S. Department of Health and Human Services (HHS), which is the Federal cognizant agency, stated that the 23 percent and 26 percent rates were not applicable when billing for cooperators' direct fire suppression activities.<sup>47</sup> The HHS negotiator also stated that no indirect cost rate had been established whereby CSU could be reimbursed for administrative support costs related to the local cooperators' fire suppression activities.

In August 2011, an FS official in Region 2 identified that CSU had improperly applied the 23 and 26 percent indirect cost rates to direct firefighting costs incurred by local cooperators in the State. The FS official, a former Region 2 incident business specialist, noted the high indirect cost rates, and questioned an HHS official about the matter. The HHS official informed the FS official that NICRA prohibits the application of CSU's indirect rate to cooperators' invoices for fire suppression activities. On August 25, 2011, the FS official concluded that the region had erroneously approved payments to CSU and implemented measures to prevent the payment of

---

<sup>44</sup> Effective July 1, 2012, wildland fire prevention and suppression operations were transferred from CSFS to the Division of Fire Prevention and Control within the Colorado Department of Public Safety.

<sup>45</sup> Local cooperators include local fire departments and fire districts that assist in combating wildland fires.

<sup>46</sup> The 23 percent indirect rate (effective July 1, 2005 to June 30, 2009) was increased to 26 percent in 2010 (retroactive from July 1, 2009, and applicable through June 30, 2014).

<sup>47</sup> HHS is the Federal cognizant agency responsible for negotiating and approving the indirect cost rates used by CSU to claim costs under grants, contracts, and other agreements with the Federal Government. During the time of our audit, CSFS was a division under CSU.

unallowable indirect costs to CSU in the future. However, at the time of our audit, FS had not recovered the overpayments previously paid to CSU for the unallowable administrative costs.

We selected and reviewed a non-statistical sample of 15 invoices (13 invoices from the period of November 2007 to March 2011, and 2 invoices for the period subsequent to August 25, 2011) to determine if CSU had charged indirect cost rates to its requests for reimbursement of fire suppression costs. We found that two invoices we reviewed, paid after August 25, 2011, did not include indirect cost rates. However, the remaining 13 invoices that were issued from August 25, 2007, to August 25, 2011, all included charges for indirect cost rates and resulted in over \$1 million in unallowable indirect costs. These overpayments have not been recovered. Table 2 depicts all the costs billed by local cooperators and the additional indirect costs FS paid to CSU from August 2007 to August 2011.

**Table 2: Estimated Administrative Costs Paid to CSU  
August 25, 2007 to August 25, 2011**

<b>Time Period</b>	<b>Costs Billed by Local Cooperators</b>	<b>CSU Indirect Rate</b>	<b>Additional Indirect Costs FS Paid to CSU</b>
August 25, 2007- June 30, 2009	\$24,051,770	23 percent	\$5,531,907
July 1, 2009- August 25, 2011	\$3,889,409	26 percent	\$1,011,246
<b>TOTAL</b>	<b>\$27,941,179</b>		<b>\$6,543,153</b>

FS Region 2 officials informed us that they were waiting for HHS and CSU to agree on an indirect cost rate for administrative support expenses related to cooperators' direct fire suppression activities. However, since NICRA prohibits administrative costs for these activities in Colorado during these time periods, it is our view that FS should seek recovery.<sup>48</sup>

### **Recommendation 8**

Determine how much of the estimated \$6,543,153 and any subsequent reimbursements paid to Colorado State University (CSU) after August 25, 2011, were unallowable administrative costs and recover these costs.

<sup>48</sup> In May 2013, FS began seeking legal advice from the Office of the General Counsel (OGC) on how to proceed. In December 2013, the region began working with OGC to prepare a formal offset agreement to propose to CSU.

## **Agency Response**

In its November 13, 2015, response FS stated:

Audit & Assurance in conjunction with Region 2 will determine how much of the estimated \$6,543,153 and any subsequent reimbursement paid to Colorado State University (CSU) after August 25, 2011 were unallowable administrative costs and recover these costs as required by law.

FS provided an estimated completion date of November 30, 2016, for this action.

## **OIG Position**

We do not accept management decision for this recommendation. FS needs to provide OIG (a) copy of the bill for collection for amounts owed to the Government and documentary support that the amounts have been entered as a receivable on the agency's accounting records; or (b) justification for any monetary amount not collected.

## Scope and Methodology

---

We conducted a review of FS' administration of cost share agreements, which included assessing FS' internal controls over non-Federal entities' indirect cost rates related to fire suppression activities. We also assessed whether FS had taken appropriate corrective actions on the prior OIG audit recommendations that pertained to cost share agreements.<sup>49</sup> As part of our assessment, we reviewed FS' fire protection boundaries to determine if the agency had accounted for the growth and expansion of WUI areas when negotiating fire protection agreements. Fieldwork was performed from January 2012 through April 2013.

We included FS activities during FYs 2008 through 2011. However, FS had not compiled or received from other agencies the fire cost data for FY 2011 when we initiated the audit and selected fire incidents to examine.<sup>50</sup> For administrative cost reimbursements made to the State of Colorado, we included all payments submitted by CSU—which spanned FYs 2007-2011. We performed fieldwork at the National Interagency Fire Center in Boise, Idaho; FS' national service center in Albuquerque, New Mexico; three regional offices; three national forests; and a training center in McClellan, California. We also contacted HHS and visited the Bureau of Land Management (BLM) field office and the Kern County Fire Department in Bakersfield, California (see Exhibit B).

To complete the objectives of our audit, we selected four non-statistical samples as discussed below:

- To determine those States experiencing the largest development of WUI areas near or adjacent to FS land, we held a conference call with key FS National Office officials. Those officials informed us that California, Colorado, Montana, (northern) Idaho, and North Dakota experienced the largest WUI growth. We selected all five States to conduct our audit of the respective FS regions (1, 2, and 5). At the FS regions, we assessed FS' fire protection boundaries to determine if fire protection responsibilities were equitably shared with other non-Federal firefighting agencies.
- To examine how FS approved non-Federal fire management agencies' indirect cost rates, we identified the total number of wildfires from FYs 2008 through 2011 where FS expenditures exceeded \$30 million. Our analysis identified five wildfire incidents located in California during that time that met our criteria. FS' expenditures totaled about \$218 million for the five fire incidents.<sup>51</sup> We then chose the 10 non-Federal fire management agencies that received the largest reimbursements from FS for administrative costs incurred while participating on those fires. We also obtained the allowable indirect cost rates of local county fire departments from California.

---

<sup>49</sup> Audit Report 08601-0044-SF, *FS Large Fire Suppression Costs*, Nov. 2006.

<sup>50</sup> FS can take over a year to consolidate fire cost data on multi-jurisdictional fires and finalize the cost share agreement.

<sup>51</sup> We performed analysis using the multi-jurisdictional wildfire data provided by the FS national official on February 21, 2012.

- To determine the universe of multi-jurisdictional wildfires over \$5 million, we obtained data from the FS national officials. Based on that data, we identified all wildfire incidents for FYs 2008 through 2011 nationwide.<sup>52</sup> We selected a non-statistical sample of the most current fire cost data available, which led us to select two fires in FY 2010.<sup>53</sup> Based on high FS expenditure values, location, and analysis, we selected the 2010 Bull and Canyon fires in order to review FS' administration of cost share agreements.
- In the State of Colorado (Region 2), we selected a non-statistical sample of 15 invoices from the universe of 2,107 (\$6,408,673 of \$40,198,048) invoices submitted during the period of August 25, 2007, to October 1, 2012, which spanned the period of two NICRA agreements. Our audit focused on the unallowable administrative costs paid to Colorado State University.

To accomplish our audit, we:

- Reviewed pertinent laws, regulations, and policies (including interagency policies) related to various States, local governments, and other agencies that performed fire protection and suppression activities. These included the Reciprocal Fire Protection Act, the Cooperative Funds and Deposits Act, OMB Circular A-87, FS directives, the Federal interagency fire standards, and the National Wildfire Coordinating Group.
- Interviewed FS national, regional, and forest officials to gain an understanding concerning the fire protection and cost share agreements and other documents (i.e., annual operating plans) entered into with non-Federal entities for fire suppression activities. We interviewed FS officials to determine whether WUI growth was tracked and considered in those areas when establishing fire protection boundaries. In addition, we interviewed former and current Rocky Mountain Research Station staff to determine what research studies have been conducted on WUI areas and the impact those areas have on fire suppression costs.
- Interviewed key staff from non-Federal fire management agencies to gain an understanding concerning the approval of indirect cost rates and administrative costs included within annual operating plans.
- Interviewed other Federal agency personnel, including an HHS official, to gain an understanding concerning the applicability of an administrative rate negotiated with a non-Federal entity. We also interviewed a BLM official to determine the agency's average suppression cost per acre for FYs 2008-2010.
- Reviewed documentation related to select multi-jurisdictional wildfire incidents, such as (a) legal instruments entered into between FS and non-Federal entities (i.e., cost share agreements and governing master agreements, cooperative fire protection agreements,

---

<sup>52</sup> FS' total fire suppression cost for fires over \$5 million during FYs 2008 through 2011 was \$660 million.

<sup>53</sup> As documented in the engagement letter sent to FS, we requested wildfire data covering FYs 2010 to 2012. We subsequently chose FYs 2010 and 2011 to increase the probability that fire expenditure data would be available.

and annual operating plans); (b) incident activity records; and (c) financial documents (i.e., transaction registers and invoice documentation).

- Reviewed California maps depicting Federal, State, and local responsibility areas, as well as DPAs—which delineated the protection boundaries of Federal agencies versus California during FYs 2008-2011.
- Reviewed FS research papers related to fire behavior and the impact of WUI development on fire suppression costs.
- Reviewed FS’ actions related to specific recommendations in the prior OIG large fire suppression audit to determine whether issues still persist.<sup>54</sup>

This audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

---

<sup>54</sup> Audit Report 08601-0044-SF, *FS Large Fire Suppression Costs*, Nov. 2006.

## **Exhibit A: Summary of Monetary Results**

---

The table below displays questioned costs as the results of our audit work.

<b>Finding</b>	<b>Recommendation</b>	<b>Description</b>	<b>Amount</b>	<b>Category</b>
2	6	Policy needed to ensure local cooperators' indirect costs on fire agreements are accurate and reasonable	\$4,584,383	Funds To Be Put To Better Use
3	8	Recovery of the unallowable administrative costs paid to CSU from August 25, 2007 to August 25, 2011	\$6,543,153	Questioned Costs/ Recovery Recommended
<b>Total Monetary Results</b>			\$11,127,536	

## Exhibit B: Audit Sites

Organization/Entity	Location
<b>Forest Service</b>	
National Interagency Fire Center	Boise, Idaho
Albuquerque Service Center	Albuquerque, New Mexico
Northern Region—Region 1	Missoula, Montana
Rocky Mountain Region—Region 2	Golden, Colorado
Pacific Southwest Region—Region 5	Vallejo, California
Sequoia National Forest	Porterville, California
Lake Tahoe Basin Management Unit <sup>55</sup>	South Lake Tahoe, California
Arapaho-Roosevelt National Forest	Fort Collins, Colorado
Forest Service Fire Office	McClellan, California
<b>Other Agencies</b>	
Kern County Fire Department	Bakersfield, California
Department of Health and Human Services	San Francisco, California
Bureau of Land Management Office	El Dorado Hills, California

<sup>55</sup> The Lake Tahoe Basin Management Unit is categorized as a National Forest.

## Exhibit C: Estimated Overpayments of Administrative Costs to Local Cooperators

Local Cooperators	Total ASC Payments	Estimated Overpayments of Administrative Costs
Cooperator A	\$3,125,104	\$455,216
Cooperator B	\$2,141,838	\$279,820
Cooperator C	\$1,377,684	\$200,176
Cooperator D	\$1,286,996	\$196,322
Cooperator E	\$1,197,714	\$128,327
Cooperator F	\$944,159	\$118,178
Cooperator G	\$936,918	\$141,721
Cooperator H	\$793,227	\$121,001
Cooperator I	\$6,637,788	\$2,943,623
<b>Total Estimated Administrative Costs</b>		<b>\$4,584,384<sup>57</sup></b>

<sup>56</sup> Based on our review of five selected fires over \$30 million during FYs 2008-2011.

<sup>57</sup> Difference is due to rounding.

## Exhibit D: Summary of OIG Assessment of the Prior Audit Recommendations (08601-44-SF)

The table below displays the summary of three prior recommendations that were closed from the Large Fire Suppression report, dated November 2006.

No.	Recommendation	Agency's Response	Was Corrective Action Taken Effective? (Y or N)
1	Request clarification from Congress as to the responsibilities of both FS and States in protecting expanding WUI developments and other private properties threatened by wildfires.	The FS will work through its Legislative Affairs Office and Office of the General Counsel to attempt to determine if Congressional intent already exists in current laws regarding WUI protection responsibilities. If it does not, the agency will seek clarification from Congressional committees with FS jurisdiction regarding protection responsibilities in the WUI and on other private properties that are threatened by wildfires.	Y
2	If Congress does not expect the FS to continue bearing the financial cost of protecting WUI developments under State and local control, direct each Region to renegotiate WUI protection responsibilities in master protection agreements to ensure the financial cost of WUI protection is equitably and appropriately allocated between FS and its non-Federal partners.	If Congress determines that protection of private property in the WUI is primarily a State responsibility, then the Washington Office will direct each Region to review their master protection agreements and renegotiate WUI protection responsibilities where needed.	Y
3	In partnership with other Federal wildland fire management agencies, modify national direction that requires updates of the master protection agreements to require Wildland Urban Interface (WUI) protection responsibilities be periodically assessed and renegotiated. Create incentives to encourage States to enter into new master protection agreements and to help ensure that the master protection agreements are equitable to FS and its non-Federal partners.	FS will work with its Federal fire management agency partners to establish national direction to determine an appropriate schedule to periodically assess and renegotiate master protection agreements with States. FS has begun discussions regarding instituting appropriate incentives to encourage States to enter into equitable agreements. The agency will expand these discussions to include its Federal wildland fire management partners and Office of Management and Budget. Any agreed upon incentives will be included in national direction so that they will be considered as each Region renegotiates agreements with States.	N <sup>58</sup>

<sup>58</sup> FS has modified its national direction that required master protection agreement to be updated every 5 years; however, the guidance needs to be clarified on when and how the periodic assessment and renegotiation of WUI protection responsibilities are to be conducted.

## Abbreviations

---

ASC.....	Albuquerque Service Center
BLM.....	Bureau of Land Management
CAL FIRE.....	California Department of Fire Prevention
CAL OES.....	California Office of Emergency Services
CFAA.....	California Fire Assistance Agreement
CFMA.....	California Fire Master Agreement
C.F.R.....	Code of Federal Regulations
CSFS.....	Colorado State Forest Service
CSU.....	Colorado State University
DPA.....	Direct Protection Area
FMFIA.....	Federal Managers' Financial Integrity Act
FS.....	Forest Service
FSH.....	Forest Service Handbook
FY.....	Fiscal Year
GTR.....	General Technical Report
HHS.....	U.S. Department of Health and Human Services
NICRA.....	Negotiated Indirect Cost Rate Agreement
NIFC.....	National Interagency Fire Center
OGC.....	Office of the General Counsel
OIG.....	Office of Inspector General
OMB.....	Office of Management and Budget
P.L.....	Public Law
U.S.C.....	United States Code
USDA.....	Department of Agriculture
WUI.....	Wildland Urban Interface

**USDA'S  
FOREST SERVICE  
RESPONSE TO AUDIT REPORT**





**File Code:** 1430  
**Route To:**

**Date:** November 13, 2015

**Subject:** FS Response to Reach Management Decision on Office of Inspector General Report No. 08601-0002-41, "FS Firefighting Cost Share Agreements with Non-Federal Entities"

**To:** Gil H. Harden, Assistant Inspector General for Audit, Office of Inspector General

Enclosed is the Forest Service's response to reach management decision on Office of Inspector General (OIG) Audit Report No. 08601-0002-41. The response outlines our proposed actions for each of the audit recommendations. Please contact Thelma Strong, Chief Financial Officer, at (202) 205-1321 or [tstrong@fs.fed.us](mailto:tstrong@fs.fed.us) with any questions.

/s/Thomas L. Tidwell

THOMAS L. TIDWELL  
Chief

Enclosure





---

---

**USDA Forest Service (FS)**

---

---

**Office of Inspector General (OIG) Draft Audit Report No. 08601-0002-41  
Official Draft Report on FS Cost Share Agreements with Non-Federal Entities  
November 13, 2015**

**Management Decision**

---

---

**Recommendation 1:** Require Region 5 officials to develop and implement a process to periodically assess its protection responsibilities in California to ensure that agreements are equitable, and require other FS regions to perform a similar assessment of their protection responsibilities if similar agreements exist.

**FS Response (11/13/2015):**

FS concurs with this recommendation. Region 5 currently reviews Direct Protection Areas (DPA) annually through the California Wildfire Coordinating Group (CWCG) and with the local National Forests. Exhibit E of the California Fire Management Agreement (CFMA) outlines the process for DPA adjustments. To address the need for all FS regions where similar agreements exist, the FS will update the Forest Service Manual to include a provision to perform periodic assessments of protection responsibilities in their agreements.

**Estimated Completion Date:** November 30, 2016

---

**Recommendation 2:** Require Region 5 officials and, if appropriate, other regional offices that participate in exchange of fire protection areas, to create and submit for national office approval the methodologies used for reviewing land exchanges within each region.

**FS Response (11/13/2015):**

FS concurs with this recommendation. Region 5 officials will develop an interagency methodology and submit for concurrence to the national office prior to completing the review of land exchanges. To ensure consistency within other regions, the FS will add direction in the Forest Service Manual addressing the methodologies used for reviewing protection acres land exchanges.

**Estimated Completion Date:** November 30, 2016

---

**Recommendation 3:** Direct Region 5 officials to conduct a formal, comprehensive analysis of the protection boundaries to ensure that the terms of the agreement are equitable in regards to the types of land (e.g., grassland, forestland, and residential communities), the values at risk (e.g., structures, watershed, etc.), fire hazards, and the complexities involved in firefighting.

**FS Response (11/13/2015):**

FS concurs with this recommendation. Region 5 will conduct a comprehensive analysis of protection boundaries and continue efforts to maintain wildland fire protection responsibilities in alignment with

the values to be protected and assumed responsibilities of DPA lands included under the CFMA. Region 5 continues to identify and assess consolidated blocks of high value protection areas such as privately owned commercial timberlands and WUI lands outside of local responsibility for exchange with CAL FIRE.

Region 5 intends to work with CAL FIRE to develop a long term strategy to address equitable Regional DPA realignment. Region 5 will continue to complete local adjustments annually, with comprehensive assessment completed for the renewal of the CFMA (every five years).

**Estimated Completion Date:** November 30, 2016

---

**Recommendation 4:** Require regional officials, based on the formal analysis conducted in Region 5, to renegotiate protection areas, as applicable, with State officials, to ensure the financial responsibility is equitably and appropriately allocated between FS and the State of California.

**FS Response (11/13/2015):**

FS concurs with this recommendation. Based on the analysis completed under Recommendation 3, Fire and Aviation Management Director will issue a letter directing the Region 5 fire officials to renegotiate protection areas, as applicable, with State officials.

**Estimated Completion Date:** December 31, 2016

---

**Recommendation 5:** Ensure that applicable regions periodically renegotiate Wildland Urban Interface (WUI) area protection boundaries based on equivalency assessments performed.

**FS Response (11/13/2015):**

FS concurs with this recommendation. Region 5 intends to regularly reassess the defined WUI protection areas as part of the comprehensive assessment, completed as part of the CFMA renewal. The FS will add a provision to its Forest Service Manual to require other applicable regions (and Region 5) to periodically renegotiate WUI area protection boundaries.

**Estimated Completion Date:** November 30, 2016

---

**Recommendation 6:** Establish policies and procedures to ensure that indirect cost rates submitted by the local fire cooperators on cooperative fire protection agreements are accurate and reasonable.

**FS Response (11/13/2015):**

FS concurs with this recommendation. The Forest Service has revised guidance for FSH 1509.11 Chapter 30 to include policies and procedures for ensuring indirect cost rates submitted by local fire cooperators and cooperative fire protection agreements are accurate and reasonable. Guidance will be released through Interim Directive to the agency upon final approval by ORMS (Directives); final guidance includes:

Ch. 30 guidance:

- The payment recipient must maintain evidence supporting the rate calculated. Documentation and/or evidence may include, but is not

limited to, accounting records, audit results, cost allocation plan, letter of indirect cost rate approval from an independent accounting firm, or other Federal agency approved rate notice applicable to agreements (such as NICRA).

- If the payment recipient chooses to provide their NICRA, any applicable exclusions/terms conditions of the NICRA must be followed.
- An applicable NICRA or an indirect cost rate summary in a format that clearly defines the indirect cost rate and MTDC must be uploaded to the NRM record.
- Audit and Assurance (A&A) will do a sampling based on a risk-based approach, depending on the universe size, of the rates over 10% on an annual or quarterly basis. A&A will conduct a mandatory review for all indirect cost rates used by local cooperators equal to or in excess of 25 percent.

**Estimated Completion Date:** November 30, 2016

---

**Recommendation 7:** Include a provision that would require a mandatory review for all indirect cost rates used by local cooperators that exceed 25 percent, and to review a sample of rates used by cooperators that are between 10 to 25 percent.

**FS Response (11/13/2015):**

The Forest Service concurs with this recommendation. The Forest Service has revised guidance for FSH 1509.11 Chapter 30 to include policies and procedures for ensuring indirect cost rates submitted by local fire cooperators and cooperative fire protection agreements are accurate and reasonable. Revised policy (please see FS response to Recommendation 6 above) includes the requirement to review a sample of rates used by cooperators that are between 10-25 percent and mandatory review of rates 25% or higher. Moreover, applicable provisions were revised to include standards for documentation requirements to address these indirect cost rate categories.

Revised provision will be included in all applicable agreements and will be released through Interim Directive as appropriate to the agency upon final approval by ORMS (Directives); revised provisions noted below:

Provision:

When indirect cost rates are applied to federal reimbursements, the Parties agree to the following.

1. If the payment recipient has never received or does not currently have a negotiated indirect cost rate, they are eligible for a de minimis indirect cost rate up to 10% of Modified Total Direct Costs (MTDC). MTDC is defined as all salaries and wages, fringe benefits, materials and supplies, services, travel, and contracts up to the first \$25,000 of each contract.
2. For rates greater than 10%, the payment recipient shall provide either an applicable negotiated indirect cost rate agreement (NICRA) from a cognizant

Federal agency, or an indirect cost rate summary in a format that clearly defines the indirect cost rate and MTDC.

3. The payment recipient must maintain adequate documentation to support the methodology and computation of the indirect cost rate. Documentation must be made available to the Federal agency upon request.
4. Failure to provide adequate documentation supporting the indirect cost rate could result in disallowed costs and repayment to the Federal agency.

**Estimated Completion Date:** November 30, 2016

---

**Recommendation 8:** Determine how much of the estimated \$6,543,153 and any subsequent reimbursement paid to Colorado State University (CSU) after August 25 2011 were unallowable administrative costs and recover these costs.

**FS Response (11/13/2015):**

Audit & Assurance in conjunction with Region 2 will determine how much of the estimated \$6,543,153 and any subsequent reimbursement paid to Colorado State University (CSU) after August 25, 2011 were unallowable administrative costs and recover these costs as required by law.

**Estimated Completion Date:** November 30, 2016

---

To learn more about OIG, visit our website at  
[www.usda.gov/oig/index.htm](http://www.usda.gov/oig/index.htm)

## How To Report Suspected Wrongdoing in USDA Programs

### Fraud, Waste, and Abuse

File complaint online: <http://www.usda.gov/oig/hotline.htm>  
Click on Submit a Complaint

Telephone: 800-424-9121  
Fax: 202-690-2474

**Bribes or Gratuities**  
202-720-7257 (24 hours a day)



The U.S. Department of Agriculture (USDA) prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Assistant Secretary for Civil Rights, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW., Stop 9410, Washington, D.C. 20250-9410, or call toll-free at (866) 632-9992 (English) or (800) 877-8339 (TDD) or (866) 377-8642 (English Federal-relay) or (800) 845-6136 (Spanish Federal-relay). USDA is an equal opportunity provider and employer.