WILDFIRE SUPPRESSION

Funding Transfers Cause Project Cancellations and Delays, Strained Relationships, and Management Disruptions
Highlights of GAO-04-612, a report to congressional requesters

WILDFIRE SUPPRESSION

Funding Transfers Cause Project Cancellations and Delays, Strained Relationships, and Management Disruptions

Why GAO Did This Study

In 2003, wildfires burned roughly 4 million acres, destroyed over 5,000 structures, took the lives of 30 firefighters, and cost over $1 billion to suppress. The substantial expense of fighting wildfires has exceeded the funds appropriated for wildfire suppression nearly every year since 1990. To pay for wildfire suppression costs when the funds appropriated are insufficient, the U.S. Forest Service and the Department of the Interior have transferred funds from their other programs.

GAO was asked to identify (1) the amount of funds transferred and reimbursed for wildfire suppression since 1999, and the programs from which agencies transferred funds; (2) the effects on agency programs from which funds were taken; and (3) alternative approaches that could be considered for estimating annual suppression costs and funding wildfire suppression.

What GAO Found

The Forest Service and Interior transferred over $2.7 billion from other agency programs to help fund wildfire suppression over the last 5 years. On average, the Congress reimbursed agencies about 80 percent of the amounts transferred. Interior primarily used funds from its construction and land acquisition accounts. In recent years, the Forest Service used funds from many different programs; while before 2001, it transferred funds from a single reforestation program/timber sale area restoration trust fund.

Transferring funds for wildfire suppression resulted in canceled and delayed projects, strained relationships with state and local agency partners, and difficulties in managing programs. These impacts affected numerous activities, including fuels reduction and land acquisition. Although transfers were intended to aid fire suppression, some projects that could improve agency capabilities to fight fires, such as purchasing additional equipment, were canceled or delayed. Further, agencies’ relationships with states, nonprofit groups, and communities were negatively impacted because agency officials could not fulfill commitments, such as awarding grants. Transfers also disrupted the agencies’ ability to manage programs, including annual and long-term budgeting and planning. Although the agencies took some steps to mitigate the impacts of transfers, the effects were widespread and will likely increase if transfers continue.

To better manage the wildfire suppression funding shortfall, the agencies should improve their methods for estimating suppression costs by factoring in recent changes in the costs and uncertainties of fighting wildfires. Also, the Congress could consider alternative funding approaches, such as establishing a governmentwide or agency-specific reserve account.

What GAO Recommends

GAO recommends several measures to minimize the impacts of funding transfers and to improve the estimates on which the agencies base their wildfire budgeting requests. Further, GAO is asking the Congress to consider alternative approaches for funding wildfire suppression.

In commenting on the draft report, Forest Service and Interior generally agreed with the report’s findings and recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-04-612

To view the full product, including the scope and methodology, click on the link above. For more information, contact Barry T. Hill at (202) 512-3841 or hillbt@gao.gov.
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June 2, 2004

The Honorable Jeff Bingaman
Ranking Minority Member
Committee on Energy and Natural Resources
United States Senate

The Honorable Larry E. Craig
Chairman
The Honorable Ron Wyden
Ranking Minority Member
Subcommittee on Forests and Public Lands
Committee on Energy and Natural Resources
United States Senate

The Honorable Charles H. Taylor
Chairman
The Honorable Norman Dicks
Ranking Minority Member
Subcommittee on Interior and Related Agencies
Committee on Appropriations
House of Representatives

In 2003, wildfires burned roughly 4 million acres, destroyed over 5,000 structures, and took the lives of 30 firefighters. While extreme, this past fire season does not stand out among recent ones, which have broken records not only in the number of acres burned but also in the cost of suppressing the fires. In 2000, 2002, and 2003, costs to suppress wildfires were well over $1 billion and reached nearly $1 billion in 2001. The substantial expense of suppressing wildfires has exceeded the amount appropriated for wildfire suppression every year for the past 5 years. One reason for this difference is that suppression appropriations are based on estimates of wildfire suppression costs, which are difficult to make due to the inherent unpredictability of wildfires. The federal agencies responsible for wildfire management—the U.S. Forest Service in the Department of Agriculture and the Bureau of Indian Affairs, Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service in the Department of the Interior—provide the bulk of the resources needed to suppress these fires. To pay for wildfire suppression when appropriated funds for

1Unless otherwise noted, all dollars stated are in constant 2003 dollars.
suppression are insufficient, the Forest Service and Interior transfer funds from other programs within their respective agencies as permitted by law.

Seeking information on the effects of transferring funds to pay for wildfire suppression on other Forest Service and Interior programs, you asked us to identify (1) the amount of funds transferred and reimbursed from nonsuppression programs from 1999 through 2003, the programs affected, and the procedures the Forest Service and Interior followed when transferring and reimbursing funds; (2) the effects on the agencies’ programs from which funds were transferred; and (3) alternative approaches that could be considered for estimating annual suppression costs and funding wildfire suppression.

In conducting our review, we contacted budget officers at Forest Service and Interior headquarters, as well as in the Forest Service’s nine regions, to collect information on the amount of funds transferred from and reimbursed to various Forest Service and Interior programs.\(^2\) We also visited six Forest Service regional offices and 7 national forests and contacted an additional 14 national forests to examine impacts to the programs from which funds were transferred to support fire suppression. Where appropriate, we also met with officials from the four Interior agencies that are involved with wildfire suppression activities as well as grant recipients, a state forester, and representatives of nonprofit organizations. In our review of impacts, we focused on 2002 and 2003 because in these 2 years transfers for wildfire suppression involved many more programs than they had previously. To determine alternatives for estimating wildfire suppression costs, we reviewed the agencies’ current estimation methods, compared the estimates with actual costs and discussed reasons for differences between them with agency officials, and identified alternatives for estimating suppression costs. Also, to determine alternative approaches for funding wildfire suppression, we reviewed previous GAO and Congressional Budget Office reports, as well as a Forest Service study related to budgeting for emergencies, and discussed alternative funding options with agency officials. We took the appropriate

\(^2\)For ease of explanation, in this report we use the word “transfer” to refer both to transfers and reprogramming of funds by the Forest Service and Interior. “Transfer” is a legal term referring to the movement of money between one appropriations account and another and is prohibited unless specifically authorized by law. “Reprogramming” refers to the movement of funds between programs within a single appropriation account and is generally authorized. The Forest Service and Interior are authorized to transfer funds from other programs to fund wildfire suppression.
measures to ensure that Forest Service and Interior data on the amount of funds transferred and reimbursed from 1999 through 2003 were sufficiently reliable for the purposes of our study. We performed our work between July 2003 and March 2004 in accordance with generally accepted government auditing standards. See appendix I for additional details on our scope and methodology.

**Results in Brief**

From 1999 through 2003, the Forest Service and Interior transferred over $2.7 billion from numerous programs to help fund wildfire suppression activities. Before 2001, the Forest Service used a single reforestation/timber sale area restoration trust fund as the primary source of transfers. Since then, however, the agency began using funds from numerous other programs, including its national forest system program that manages forests, rangelands, and recreation and wilderness areas, out of growing concerns about the financial viability of the reforestation program. Interior, on the other hand, transferred funds primarily from its construction and land acquisition programs. When transfers were necessary, both agencies relied on monthly forecasting models to predict the additional funds needed to support suppression activities for the remainder of the fire season. These forecasts, however, have not been very accurate and produced estimates that have varied by hundreds of millions of dollars from actual suppression costs. In deciding which programs to tap for additional firefighting funds, both the Forest Service and Interior primarily selected programs with projects that would not need all of the funds provided to them until subsequent years. The Congress reimbursed, on average, about 80 percent of the funds that the agencies transferred during the 5-year period—nearly 100 percent of the funds transferred between 1999 and 2001 were reimbursed; while during the last 2 years, the Forest Service was reimbursed about 74 percent and Interior about 81 percent. Because reimbursements generally were provided in years after funds were originally transferred, the Forest Service distributed these reimbursed funds to projects reflecting current priorities, which were not always the same projects from which the funds were transferred. Interior followed various strategies, such as fully reimbursing high-priority projects at the expense of lower priority projects or reimbursing all projects at the same rate.

Despite Forest Service and Interior efforts to minimize the effects on programs, transferring funds caused numerous project delays and cancellations, strained relationships with state and local agency partners, and disrupted program management efforts. The agencies canceled and
delayed contracts, grants, and other activities for projects involving, among other things, fuels reduction, construction, land acquisition, and resource management. In some cases, these cancellations and delays increased costs and the time needed to complete the projects. Although the agencies transferred funds to help suppress wildfires, doing so actually resulted in delays of some projects that were intended to reduce fire risk or improve firefighting capabilities, such as purchasing additional firefighting equipment. Funding transfers also strained agency relationships with other federal and state agencies, nonprofit organizations, and communities because Forest Service and Interior officials were unable to fulfill commitments, such as awarding grants to communities for fuels reduction projects. Further, transfers disrupted the agencies’ efforts to manage their programs, including budgeting and planning annual and long-term programs of work. Recently, the Forest Service and Interior took actions to mitigate the impacts of transfers, including awarding contracts early in the year to avoid the loss of program funds to transfers. However, these and other Forest Service actions, such as relying on rough estimates of salary costs and transferring funds that were needed for the later part of the fiscal year, resulted in some programs exceeding their budget allocations to meet existing contract obligations and essential expenses. Overall, transfers have caused widespread impacts that will likely increase if the agencies continue transferring funds to cover fire suppression costs. Although Forest Service and Interior officials are generally aware of these impacts, the agencies do not consistently track the impacts of funding transfers at a national level. If transfers continue to be necessary, the agencies could enhance their understanding of how transfers affect programs by tracking nationwide impacts on all programs through their accomplishment reporting systems.

To help mitigate the negative effects of funding transfers, improvements in estimating annual suppression costs and alternative approaches for funding wildfire suppression should be considered. To estimate annual suppression costs, the Forest Service and Interior use a 10-year average of these costs. The agencies use these estimates to develop annual budget requests, and the Congress uses them to make appropriations decisions for wildfire suppression. Although estimating the costs of wildfires is inherently difficult because of their unpredictable nature, size, and intensity, the agencies’ estimates have been about $1.8 billion less than the actual total costs for the last 5 years. According to agency officials, abnormal drought conditions have contributed to unusually severe wildfire seasons, making it even more difficult to estimate suppression costs. Nonetheless, the 10-year average may not provide accurate or timely
information when firefighting costs change rapidly from year to year as they have recently. Alternative methods that more effectively account for annual changes in costs and that convey the uncertainties associated with making the estimates should be considered for improving the information provided to agency and congressional decision makers. Additionally, to further mitigate the impacts of funding transfers, alternative approaches could be considered for funding wildfire suppression. Two previously issued GAO reports and testimony from the Congressional Budget Office outline several alternative approaches to funding wildfire suppression, such as establishing a governmentwide or agency-specific reserve account to pay for wildfire suppression activities. Each alternative has advantages and disadvantages with respect to, among other things, reducing the need to transfer funds for nonsuppression programs, creating incentives for agencies to contain suppression costs, and allowing for congressional review. In selecting any alternative, the Congress will need to make difficult decisions, taking into consideration the effect on the federal budget deficit.

We are making recommendations to the Secretaries of Agriculture and the Interior to take actions to help mitigate the effects of funding transfers, including improving the agencies' methods for estimating annual wildfire suppression costs and conducting formal assessments of how their budget and forecast models performed relative to actual costs. In addition, we are proposing that the Congress consider alternative approaches for funding wildfire suppression in order to help the agencies suppress wildfires without negatively impacting their programs. In responding to a draft of this report, the Forest Service and Interior generally agreed with our findings and recommendations. Both agencies expressed some concern with our recommendation that the agencies pursue alternative methods for estimating suppression costs.

**Background**

About one-third of all land in the United States is federally owned and consists largely of forests, grasslands, and other vegetated lands. Over the years, underbrush has grown substantially on these lands, and along with recent drought conditions and disease infestation, has fueled larger and more intense wildfires. Further, there has been an increase in the number and size of communities that border these areas—in what is known as the wildland urban interface. Suppressing wildfires that threaten these areas costs significantly more because protecting homes and other structures is costly. In 2000 and 2002, wildfires burned nearly 8.5 million and 7 million acres, respectively; and in 2003, wildfires burned about another 4 million
In both 2000 and 2002, suppression costs were over $1.4 billion each year; in 2003, suppression costs nearly reached that amount.

Because suppression costs have exceeded appropriated funds, the agencies have had to transfer funds from other programs to supplement their suppression funds. Two years in advance of when funds are appropriated, the Forest Service and Interior develop budget requests by estimating the annual costs to suppress wildfires. Estimating these costs is inherently difficult because of the unpredictable nature of wildfires, including where they will occur, how intense they will be, and how quickly they will spread. As a result, these estimates, at times, result in funding for wildfire suppression that is insufficient to cover actual suppression costs. Historically, the Forest Service and Interior have used a 10-year rolling average of suppression expenditures as the foundation for their suppression budget requests.

During each year's fire season, the Forest Service and Interior also develop monthly forecasts to update the overall suppression costs estimate and determine how much additional funding, if any, will be needed. When it becomes apparent that annual appropriated funds are insufficient to support forecasted suppression needs, the Forest Service and Interior are authorized to use funds from other programs within their agency to pay for emergency firefighting activities.

From 1999 through 2003, the Forest Service and Interior transferred over $2.7 billion from various agency programs to help fund wildfire suppression when appropriated funds were insufficient. The Forest Service transferred monies from numerous programs supporting the breadth of its activities, while Interior transferred funds primarily from two programs—construction and land acquisition. To determine the amount of funds to transfer, the agencies used similar monthly forecasting models to determine suppression funding needs during the fire seasons. Agency officials acknowledged, however, that the models produced widely varying forecasts of suppression costs that substantially underestimated actual costs. Also, in determining the programs from which to transfer funds, the agencies attempted to select programs with projects that would not be significantly impacted by transfers because a portion of their funds would

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Agencies Transferred over $2.7 Billion from Numerous Programs to Fund Wildfire Suppression from 1999 through 2003; 80 Percent Was Reimbursed

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The agencies calculate a simple rolling or moving average by computing the average annual expenditure over a 10-year period and updating it each year using expenditures from the most recent 10 years. Each year's value receives equal weight in the average. The moving average is generally considered to be a lagging indicator of current costs.
not be needed until subsequent years. Between 1999 and 2003, the Congress reimbursed the agencies for about 80 percent of the funds that were transferred on average. However, the Congress did not always reimburse the programs in amounts proportionate to the transfers. In addition, the Forest Service and Interior had some discretion in distributing the reimbursements among various projects, depending on their priorities at the time of reimbursement.

From 1999 through 2003, Agencies Transferred over $2.7 Billion from Numerous Programs

For each of the last 5 years, wildfire suppression costs have been substantially greater than the amount of funds appropriated for suppression, necessitating the Forest Service and Interior to transfer over $2.7 billion from other agency programs to help fund wildfire suppression activities. Of this amount, the Forest Service transferred the majority—almost $2.2 billion—while Interior transferred over $500 million. Nearly half of the total amount was transferred in 1 year alone, 2002, but substantial transfers were needed for other recent severe fire seasons as well. For example, during the 2000 and 2003 fire seasons, almost $400 million and about $870 million were transferred, respectively. As illustrated in figure 1, suppression costs have exceeded suppression appropriations almost every year since 1990.
To determine the amount of funds to transfer each year, the agencies used monthly forecasting models to estimate likely wildfire suppression costs during the wildfire season. Agency officials acknowledged, however, that the models produced forecasts of suppression costs that varied by hundreds of millions of dollars when compared with actual, year-end suppression costs. For example, in June 2003, Interior’s forecasting model predicted that suppression costs for the year would exceed suppression appropriations by about $72 million. A month later, the model predicted costs would exceed appropriations by about $56 million; by late August, the model predicted that costs would exceed appropriations by more than $100 million. By the end of the fiscal year, Interior had transferred over $175 million to cover actual suppression costs. Forest Service forecasts also
were well short of year-end suppression costs during 2003. The agency’s forecasting model predicted that annual suppression costs would reach nearly $800 million, indicating that current year funds would be about $375 million less than projected needs. By the end of the fiscal year, however, the Forest Service had transferred nearly $700 million to cover suppression costs of over $1 billion. Both Forest Service and Interior officials indicated there is a high degree of uncertainty in trying to estimate the current year’s suppression costs, primarily because weather conditions are difficult to predict—even over the short term. Despite the discrepancies between agency forecasts and actual suppression costs, the agencies have performed no formal assessments of their forecasting models’ accuracy. Agency officials acknowledged that such assessments would be useful for monitoring and improving the reliability of their models and enhancing their ability to predict when transfers will be needed and how much to transfer. The agencies also acknowledged that the forecasts have not been accurate and are revising the models in an effort to improve the forecasts.

In deciding the programs from which to transfer funds, Interior and Forest Service officials primarily selected programs with projects that would not be significantly impacted by transfers because a portion of their funds would not be needed until subsequent years. Interior transferred funds mostly from its construction and land acquisition programs, with about two-thirds of the funds coming from construction. These two programs are used to construct and maintain facilities, roads, and trails on Interior lands, among other things, and to acquire additional public lands. In 2002 and 2003, Interior also transferred some funds from fire-related preparedness, postfire rehabilitation, and hazardous fuels reduction projects in order to support suppression activities. Within Interior, the National Park Service transferred substantially more funds than the other three agencies over the last 5 years, transferring about 60 percent of the $540 million transferred.

Unlike Interior, the Forest Service transferred monies from numerous programs supporting the breadth of its activities. These programs included its construction; land acquisition; national forest system, which among other things conducts postwildfire rehabilitation and restoration work; and state and private forestry programs, which support activities such as grants to states, tribes, communities, and private landowners for fire management, urban forestry, and natural resource education as well as insect suppression. Before 2001, the Forest Service had transferred funds solely from its Knutson-Vandenberg Fund (K-V Fund), because historically this restoration program had large amounts of money that could not be
used by the end of the fiscal year.\textsuperscript{4} Since the mid-1980s, the Forest Service has transferred more than $2.3 billion from this program; however, more than $400 million has not been reimbursed. As a result, the Forest Service became concerned about the viability of the K-V Fund as a source of transfers and in 2001 began transferring funds from other major Forest Service programs.

The Forest Service and Interior programs from which funds were transferred and the amount of funds transferred and reimbursed from 1999 through 2003 are outlined in table 1. Additional details on these matters are included in appendixes II and III.

\textsuperscript{4}The Knutson-Vandenber Act of 1930 (16 U.S.C. 576-576b) established a special trust fund to collect a portion of timber sale receipts to pay for reforesting the area from which the timber was cut. The act was amended in 1976 to allow the Forest Service to use these funds for other activities, such as creating wildlife habitat or improving recreation facilities on the sale-area lands. For each timber sale area, Forest Service officials prepare a plan, usually covering 5 years, detailing the amount of funds they expect to collect and the reforestation or habitat improvement projects they plan to implement with those funds. Because the plans cover 5 years of work, there is typically a large balance in the fund at the end of the fiscal year that is designated for future projects and that can be transferred for fire suppression without affecting current-year projects.
<table>
<thead>
<tr>
<th>Agency/Program</th>
<th>Activity</th>
<th>Funds</th>
<th>Percentage of funds reimbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-V Fund</td>
<td>A trust fund that collects a portion of timber sale receipts for reforestation in the timber sale area and for other activities, such as fuels reduction and habitat improvement.</td>
<td>$639,924,829</td>
<td>$537,988,484</td>
</tr>
<tr>
<td>Capital improvements and maintenance</td>
<td>Construction and maintenance of facilities, roads, and trails on national forest land, including fire facilities.</td>
<td>317,320,407</td>
<td>281,911,320</td>
</tr>
<tr>
<td>National forest system</td>
<td>Management activities for forests, minerals and geology, rangeland, recreation and wilderness, wildlife and fisheries—including postwildfire nonemergency rehabilitation.</td>
<td>282,536,335</td>
<td>115,014,534</td>
</tr>
<tr>
<td>Land acquisition</td>
<td>Land purchases and related realty activities, such as appraisals, surveys, and negotiations with landowners.</td>
<td>245,339,974</td>
<td>241,339,974</td>
</tr>
<tr>
<td>Working Capital Fund</td>
<td>A revolving fund that collects fees from programs for purchase and maintenance of vehicles—including light trucks, fire vehicles, and heavy equipment—as well as computers and other technology equipment.</td>
<td>169,305,873</td>
<td>92,242,248</td>
</tr>
<tr>
<td>State and private forestry</td>
<td>Financial and technical assistance to states, tribes, communities, and private landowners, such as grants for fire management, urban forestry, and conservation education, as well as invasive species and insect suppression on federal, state, and private land.</td>
<td>112,259,986</td>
<td>109,259,986</td>
</tr>
<tr>
<td>Wildland fire management</td>
<td>Preparedness (including firefighting equipment purchases, training, and salaries of reserve firefighters); fuels reduction; and postfire emergency rehabilitation and restoration. This account also provides funding for wildfire suppression and receives the transfers from the other Forest Service accounts listed in this table.</td>
<td>81,309,076</td>
<td>60,981,807</td>
</tr>
<tr>
<td>Forest and range research</td>
<td>Forest and rangeland research, such as insect and disease studies, and fire sciences research.</td>
<td>33,376,359</td>
<td>33,376,359</td>
</tr>
</tbody>
</table>
The Congress Reimbursed Agencies for about 80 Percent of the Funds Transferred

Over the last 5 years, the Congress reimbursed, on average, about 80 percent of the funds that the Forest Service and Interior transferred for wildfire suppression expenses. Although the agencies received nearly full reimbursement for funds transferred in 2000 and 2001, the Forest Service and Interior were reimbursed about 74 percent and about 81 percent, respectively, of the funds transferred in 2002 and 2003. For these later 2 years, individual Forest Service programs were reimbursed at varying rates. For example, the Congress reimbursed the Forest Service's state and

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<table>
<thead>
<tr>
<th>Agency/Program</th>
<th>Activity</th>
<th>Funds</th>
<th>Percentage of funds reimbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other appropriations</td>
<td>Specific funds for programs such as range betterment, as well as economic assistance funds and some acquisitions for future land exchanges.</td>
<td>287,959,245 247,959,245</td>
<td>86</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>$2,169,032,083 1,720,073,957</td>
<td>79%</td>
</tr>
<tr>
<td>Interior*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Construction and maintenance of facilities, roads, and trails on Interior land.</td>
<td>$329,374,433 272,997,313</td>
<td>83%</td>
</tr>
<tr>
<td>Land acquisition</td>
<td>Land purchases and related realty activities, such as appraisals, surveys, and negotiations with landowners.</td>
<td>184,906,505 159,337,629</td>
<td>86%</td>
</tr>
<tr>
<td>Wildland fire management</td>
<td>Fire preparedness, fuels reduction, emergency stabilization, and fire facilities construction and maintenance. This account also provides funding for wildfire suppression and receives the transfers from the other Interior accounts listed in this table.</td>
<td>24,963,248 23,013,248</td>
<td>92%</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>$539,244,186 455,348,190</td>
<td>84%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$2,708,276,270 2,175,422,147</td>
<td>80%</td>
</tr>
</tbody>
</table>

Sources: Forest Service and Interior financial data.

Note: This table highlights selected fire-related activities that are typically funded by each program, as appropriate.

*Includes the Bureau of Indian Affairs, Bureau of Land Management, Fish and Wildlife Service, and National Park Service.
private forestry program for nearly 100 percent and its national forest system program for 40 percent of the funds transferred in 2002. In contrast, the Congress reimbursed Interior’s construction and land acquisition programs at about 81 percent each.

Congressional appropriators and Office of Management and Budget (OMB) officials worked with Forest Service and Interior officials to determine the amount of funds to reimburse to the numerous agency programs impacted by funding transfers in order to help the agencies meet their current program needs. For example, according to Forest Service officials, state and private forestry projects, such as community assistance grants and forest legacy project grants, were important priorities when the Forest Service received reimbursements in 2003 for funds transferred in 2002. As a result, the state and private forestry program received full reimbursement. In contrast, the national forest system had a large amount of funds transferred in 2002 that was dedicated for the salaries of staff diverted from their normal duties to fight wildfires. OMB officials indicated that since these employees had been paid—albeit out of the wildfire suppression account—the transferred salaries required no reimbursement. Therefore, the national forest system program was reimbursed for a much smaller amount—about 40 percent.

When the Forest Service and Interior received less than full reimbursement for funds transferred in 2002 and 2003, the agencies used different procedures to distribute the reimbursed funds within their programs. Forest Service officials distributed the funds to projects reflecting current priorities within individual programs, which were not necessarily the same projects from which funds were transferred. For example, Forest Service officials in California targeted the funds to projects within the San Bernardino National Forest to help address the increased wildfire risk created by insect infestation, even though no funds had been transferred from these projects. Similarly, officials in Colorado directed the reimbursed funds to high-priority rehabilitation efforts in the aftermath of the Hayman fire that had occurred in the Pike-San Isabel National Forest in June 2002. In contrast to the Forest Service’s approach, Interior reimbursed funds solely to projects from which funds were transferred;

6Reimbursements were generally not redistributed in the capital improvements and maintenance program because most of these projects’ budgets were greater than $250,000 and, by law, cannot be redistributed by the agency.
however, the four agencies within Interior did this in varying ways.\textsuperscript{7} For example, the Fish and Wildlife Service fully repaid its high-priority construction projects for transfers made in 2002, although it did not repay lower priority construction projects that also transferred funds, such as the restoration of a visitors center. The Bureau of Indian Affairs, on the other hand, fully repaid all projects from which funds were transferred in 2002, except one—a school renovation project that agency officials believed could be delayed pending future additional funding. In contrast, the Bureau of Land Management repaid all construction projects at the same percentage, while the National Park Service repaid construction projects at widely varying amounts depending on their perceived priorities.\textsuperscript{8}

Table I provides information on the amount of funds reimbursed to the various Forest Service and Interior programs. Additional details on reimbursements are provided in appendix II.

<table>
<thead>
<tr>
<th>Transfers Caused Project Cancellations and Delays, Strained Relationships with Agency Partners, and Created Difficulties in Program Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Forest Service and Interior canceled or delayed numerous projects, failed to fulfill certain commitments to partners, and faced difficulties in managing their programs when funds were transferred for fire suppression. The agencies canceled or delayed contracts, grants, and other activities, which in some cases increased the costs and time needed to complete projects. Further, agency relationships with state agencies, nonprofit organizations, and communities became strained when the agencies could not fulfill commitments, such as awarding grants on time. In addition, transfers disrupted agency efforts to effectively manage programs, causing planned activities to go unfunded and, in some cases, causing program funds to be depleted or overspent. If transfers continue, the impacts on projects, relationships, and program management will likely continue and increase. Although Forest Service and Interior local units generally are aware of these impacts, the agencies have no systems in place to track the impacts at a national level. (Dollars noted in the remaining text of this section are not adjusted for inflation.)</td>
</tr>
</tbody>
</table>

\textsuperscript{7}According to a Bureau of Land Management official, however, land acquisition projects for each bureau were reimbursed at the same percentage.

\textsuperscript{8}In the National Park Service’s construction program, the service also reduced the budgets of all projects by about 1.5 percent to help cover the shortfall between fiscal year 2002 transfers and reimbursements.
Numerous Projects Were Delayed or Canceled

Projects in a variety of Forest Service and Interior programs were delayed or canceled as a result of funding transfers, thereby affecting agency firefighting capabilities, construction and land acquisition goals, state and community programs, and other resource management programs. Furthermore, officials often had to duplicate their efforts because of transfers, which prolonged delays and added costs. For example, officials had to revise budgets and construction plans, update cost estimates, and rewrite land acquisition documents when delays caused them to become outdated, all of which further compounded project delays. In some cases, preparation of such documents added substantial costs. For example, appraisal and legal fees for certain land acquisition efforts added thousands of dollars to project costs. In addition, when delays were prolonged, supply costs increased, land prices rose, and impacts to natural resources spread, which also increased projects’ costs.9

Projects Related to Firefighting Capabilities

Although funding transfers were intended to aid fire suppression, in some cases, the Forest Service and Interior delayed projects that were intended to reduce fire risk or improve agency firefighting capabilities. Following are examples of such projects:

- **Fuels reduction projects, New Mexico:** In 2003, $191,000 was transferred from three fuels reduction projects covering 480 acres of Forest Service land in the wildland urban interface. All three thinning projects were near communities, affecting about 325 homes. The projects are scheduled to be completed in 2004.

- **National Park Service fire facilities projects, nationwide:** In 2002, about $3.4 million was transferred from 13 fire facilities projects at 10 different parks. The projects—including construction of facilities for fire equipment storage; a crew dormitory; and fire engine storage buildings, among others—were delayed for several months. Four of these projects—in Big Bend National Park (Texas); Yellowstone National Park (Idaho, Montana, and Wyoming); Sequoia and Kings Canyon National Parks (California); and Shenandoah National Park (Virginia)—were again delayed in 2003 when about $1.9 million was transferred.

9Social costs, such as the effect of project delays on recreational activities, have not been estimated.
Forest Service fire facilities projects, California: In 2003, the Forest Service deferred construction of two engine bays, one fire station, and three fire barracks in California because of funding transfers. Consequently, fire crews at one forest must live in housing that, according to agency officials, is substandard and has required recurring maintenance to address roof leaks, plumbing malfunctions, and electrical failures caused by rodents damaging the wires. Additionally, officials told us that such conditions make it difficult to recruit and retain fire crews.

Wildfire management courses, southern region: In 2003, the Forest Service canceled two required training courses for officials who approve wildfire management decisions and expenses. About 80 officials who represent national forests in at least 12 states had planned to attend. One course emphasized cost containment, and the other covered a wide range of fire management issues, including safety. Both courses were rescheduled and held in 2004.

Fire research projects, Montana: When funds were transferred in 2002, the LANDFIRE project—a multiagency effort to collect comprehensive data on fire risk—was delayed about 3 months, the collection of data critical for modeling fire behavior was delayed about 6 months, and data on smoke levels were lost because an instrument was not purchased in time to use it during the 2002 fire season. In addition, temporary staff were released early in 2002, further reducing the amount of research that could be performed.

Construction and Land Acquisition Projects

Agency officials also targeted construction and land acquisition programs for funding transfers because these projects are often funded one year, with the expectation that the project will be implemented—and the funds spent—over several years. Consequently, these programs often have large unused fund balances, and transfers can sometimes be made with minimal impact as long as the funds are reimbursed before they are needed. Accordingly, some officials, especially in the Interior agencies, told us that impacts to projects had been relatively limited. Nevertheless, many construction and land acquisition projects were delayed or canceled, particularly in the Forest Service.

Some construction projects that were delayed due to funding transfers were delayed for 1 year or more because of seasonal requirements, even when funds were reimbursed after only a few months. For example, a project to replace three backcountry bridges at the Inyo National Forest in
California was planned for late summer when stream flows would be low and conditions would be safe for workers. According to a Forest Service official, the project was important for public safety because one bridge was completely washed out and the other two bridges were at risk of failing while people were crossing them. Figure 2 shows one of these bridges before—when handrails were sagging or missing and support logs were decaying—and after it was replaced. Project funds were transferred in 2002, so the project was deferred to late summer 2003; however, funds were once again transferred, and the project was not completed until 2004.
Figure 2: Funding Transfers Delayed Replacement of a Failing Backcountry Bridge (Inyo National Forest, California)

Top (left and right): Deteriorating bridge was at risk of failing while people crossed it.
Bottom: New bridge was completed after multiple delays that were caused by funding transfers.

Source: Forest Service.
In other cases, additional adverse effects resulted when projects with seasonal requirements were delayed. For example, according to a Forest Service official, a popular campground in Arizona may be closed during the 2004 operating season while improvements are made because seasonal requirements combined with fire transfers resulted in extended delays. In 2003, $450,000 was transferred from this project, delaying it 2 months into the winter. Because of the weather construction crews could not work on the project, thus it was delayed several additional months. Further, this campground was already closed during the 2003 operating season because funding transfers in 2002 had delayed planned improvements.

In some cases, construction projects that were initially delayed were canceled when supply costs rose and the Forest Service no longer had sufficient funds to pay for the projects. For example, a 2003 project to rehabilitate a historic residence at the Sierra National Forest in California was delayed when funds were transferred for wildfire suppression. According to an agency official, the project, which would have converted the residence into a public information facility, was intended to attract tourists and help diversify the local economy in an area where a 1994 lumber mill closure contributed to a deteriorating economy. The lowest bid that the Forest Service received for the project was about $186,000. However, before the funds were reimbursed, the contractor—citing a 300 percent increase in lumber prices—rescinded the bid and estimated the new cost of the project at $280,000, an increase of nearly $100,000. Consequently, the Forest Service canceled the project and resubmitted it in its 2005 budget, with a higher cost estimate.

Land acquisition costs can also increase when projects are delayed. For example, figure 3 shows a portion of a 65-acre property in Arizona that the Forest Service intended to purchase for approximately $3.2 million in 2002, but had to defer due to funding transfers. About a year later, the Forest Service purchased the property, but the value had increased, costing about $195,000 more than it had a year earlier. A nonprofit organization also incurred additional costs of about $3,000 because it paid for the updated appraisal.
In addition, the agencies sometimes risked losing the opportunity to purchase land when funds were transferred from land acquisition programs. For example, in 2003, the Fish and Wildlife Service planned to purchase property in Alabama that contains habitat for the gopher tortoise, which is a species of concern in Alabama. However, because of funding transfers and only partial reimbursement, the service no longer had sufficient funds. Agency officials were concerned that the property would be sold privately. To prevent a sale to private owners, a nonprofit organization agreed to buy the property and hold it until the Fish and Wildlife Service could purchase it from them.

When funds were transferred for fire suppression, many Forest Service grants were delayed or canceled, which affected states, communities, nonprofit organizations, and others. Examples of such projects are discussed below:

- *Urban and community forestry grants in seven states, southern region:* The Forest Service did not fund eight urban and community
forestry grants totaling $993,000 due to 2003 funding transfers. State forestry departments planned to “subgrant” about 80 percent of the funds to local communities for more than 75 projects, such as planting trees, developing local land use plans, and holding several workshops and conferences on topics such as urban forestry.

- **Community assistance grant, New Mexico**: A 2002 grant to a small business owner was delayed about 6 months because of funding transfers. The business processes small-diameter wood to make signs and other marketable products, and the grant would have paid for a wood chipper essential to the process. When the grant was delayed, the business owner could not purchase the chipper and process the wood. As a result, he closed his business for a year, laid off some staff, and reported estimated revenue losses of millions of dollars.

- **Watershed education grant, New Mexico**: A 2003 economic action grant for $32,000 was canceled and will not be funded. The grant would have paid for a nonprofit organization to conduct an education project about sustainable grazing in a severely degraded watershed where the intended audience included ranchers, community members, public officials, and others. The nonprofit organization reported investing about $5,250 in preparation for the project.

**Resource Management Projects**

When resource management projects were delayed and canceled, natural resources were affected (e.g., soils eroded, insects infested forests, and encroaching plants spread and threatened newly planted trees). Further, prolonged delays sometimes compounded these effects because additional time allowed the damage to spread. For example, at the Lincoln National Forest in New Mexico, a project to repair a washout in a road was deferred when funds were transferred in 2002. During a 2-year delay that was partially caused by funding transfers, the washout grew dramatically. Consequently, a more significant structure is now needed to prevent erosion, which will result in additional costs of between $9,000 and $15,000, according to an agency official. Additionally, at the White River National Forest in Colorado in 2003, $111,000 was transferred from a project to remove about 150 acres of trees infested with spruce beetle—thereby deferring the project. As a result, the infestation grew to about 230 acres, killing additional trees and raising the cost of the project about $24,000 more than previously estimated, according to an agency official. Further, there is a chance that the beetle population will spread to the point where it cannot be contained at any cost and where tree mortality will increase.
dramatically—affecting up to 6,000 acres. If this further infestation occurs, an agency official said the project would be canceled.

According to an official at the Bitterroot National Forest in Montana, a project to stabilize 9 miles of a dirt road was delayed when about $1.2 million was transferred in 2002. As shown in figure 4, the road was collapsing. As a result, sediment was running into a creek, jeopardizing the habitat of two species of fish, one of which is a threatened species. Two years after the transfer, $430,000 was reimbursed to the project, and officials expect to stabilize about 2 of the 9 miles of road. Because of the prolonged delay, however, additional sediment has run into the stream and further compromised the fish habitat. Furthermore, agency officials do not expect to receive any additional reimbursement to complete the remaining stabilization, and they are concerned about the increasing sedimentation and continuing decline of the fish habitat.

Figure 4: Funding Transfers Delayed Stabilization of Collapsing Road, Causing Sediment Runoff and Compromising Fish Habitat (Bitterroot National Forest, Montana)

Source: Forest Service.
In addition, sometimes canceling one project affects the success of others. For example, at the Hiawatha National Forest in Michigan, a project intended to ensure the success of reforestation efforts—by removing encroaching plants—will be canceled in 2004. The encroaching plants are crowding newly planted trees, as shown in the photograph on the left in figure 5, and threatening their survival, according to agency officials. As a result, one official estimated that 20 to 25 percent of the newly planted trees will die, and that it will cost about $24,000 to remove the dead trees and reforest the area. In contrast, the photograph on the right shows a site where young trees were protected by removing encroaching plants, and, consequently, the trees survived.

Figure 5: Areas with and without Subsequent Treatments to Ensure the Success of Reforestation Efforts (Hiawatha National Forest, Michigan)

Source: GAO.

Left: Encroaching plants in reforested area, threatening newly planted trees.
Right: A successful reforestation project, in which subsequent treatments to remove encroaching “weed trees” were completed, protecting the newly planted trees.
Examples such as these were widespread in the six regions we visited. For example, because of funding transfers in 2002 and 2003, the Forest Service’s northern region deferred reforestation on 5,900 acres, weed control on 74,000 acres, maintenance on 1,500 miles of road, replacement of 150 culverts to improve fish habitat, repair of five damaged bridges, and award of 11 stewardship contracts.10

Agency Relationships with Partners Were Strained

When the Forest Service and Interior transferred funds for fire suppression, they sometimes failed to fulfill commitments to partners, which caused relationships to be strained. Federal agencies rely on partnerships and other forms of collaboration with each other, state and local governments, nonprofit organizations, and others to accomplish their work. For example, federal land acquisitions are often facilitated by nonprofit organizations and involve private landowners, agency recreation programs depend on volunteers, and some research projects are joint efforts between the Forest Service and Interior and may involve university participants as well. In addition, communities, state forestry programs, and others depend on federal grant programs for financial support. When funds were transferred for fire suppression, not only were federal programs impacted, but nonprofit organizations, states, and communities were also affected.

In transferring funds from land acquisition programs, agency relationships with nonprofit organizations were affected. Nonprofit organizations often facilitate agency land acquisitions by negotiating with landowners and by sometimes purchasing the land, then selling it to the agency. When agencies delayed land acquisitions, nonprofit organizations sometimes incurred interest costs of thousands of dollars on loans they took out for the purchase of the land. These costs were generally absorbed by the nonprofit organization and not passed on to the federal agencies. For example, one organization bought a parcel of land in South Carolina with the intent of selling it to the Forest Service in 2002; however, the funds to purchase the land were transferred for wildfire suppression. The Forest Service eventually purchased the land in 2003, but in the meantime, the nonprofit organization had incurred about $300,000 in interest costs. One

10Stewardship contracting involves the use of any of several contracting authorities that were first authorized for use by the Forest Service on a pilot basis in 1999. Goals of stewardship contracts include road and trail maintenance, watershed restoration, and prescribed burning and thinning to improve forest health.
nonprofit organization reported that 22 land acquisition projects were delayed in 2002, and 21 projects in 2003, due to transfers. A representative from the organization said that if funds are again transferred in 2004, the organization will view this practice as a trend, rather than an anomaly, and will likely invest its funds elsewhere rather than work with the Forest Service and Interior.

Agency relationships with landowners were affected as well. For example, the Forest Service has been working for several years with state officials and others to obtain a conservation easement in Hawaii. According to a Forest Service official, it “has been a major effort to build a high enough level of trust with the private landowner.” The official is concerned that transfers—which depleted the necessary funds for this project in both 2002 and 2003—may jeopardize their relationship with the landowner, who may choose to develop the property rather than wait for the Forest Service to secure the necessary funds. If the land is developed, an important habitat for two endangered bird species will be lost.

Community groups and volunteer or nonprofit organizations also invest considerable time and money to prepare projects and grant proposals. When the Forest Service and Interior did not fulfill their commitments, some of these investments were lost. For example, a 2002 Collaborative Forest Restoration Program grant in New Mexico would have paid for thinning treatments to be conducted by a local workforce, with the resulting wood chips to be processed into marketable products. A nonprofit organization that was a partner in the project conducted a $30,000 training program to prepare the local workforce. However, the grant was delayed for about 6 months because of 2002 funding transfers, and when funds became available, the trainees were employed elsewhere and unavailable. Another example involves a nonprofit organization that works collaboratively with communities and Forest Service and Interior agencies to design and implement large-scale fire restoration projects across the country. The collaborative teams collectively review the outcomes of projects, such as controlled burns, and share their knowledge and experience with one another. Of the 30 projects that were to receive federal funding, 12 have been delayed as a result of funding transfers. According to a representative of this organization, the practice of transferring funds for wildfire suppression “hurts the credibility of agencies,” and has led two of the project teams to not apply for further funding because of the uncertainty caused by the possibility of transfers.
The fire transfers also affect state forestry departments, which depend on Forest Service grants to support their programs. In recent years, state budgets have been strained, making it difficult for state governments to compensate for the loss of federal funding. When the Forest Service began transferring funds for fire suppression in 2002, some states were concerned about the viability of their forestry programs. For example, Forest Service grants supply nearly 60 percent of Nebraska’s annual State Forest Service budget, without which the state would have to significantly reduce its operation—including laying off staff. According to the Nebraska State Forester, when funds were transferred in 2002, the state had already spent over $1 million beyond its existing budget because it anticipated receiving a Forest Service grant. After a period of uncertainty, the grant was awarded. However, the State Forester said that, partly as a result of ongoing budget uncertainties, one staff member left the agency and two candidates declined job offers, leaving another position vacant.

States were also affected when, in 2003, $50 million was transferred from the 5-year, $100 million Forest Land Enhancement Program, and only $10 million was reimbursed. This program, which is managed by states, helps private landowners improve the health of their forestlands through activities such as timber improvement, wildlife habitat management, and fuels reduction. The $100 million was intended to last for 5 years. In the first year, the Forest Service allocated $20 million to the states, leaving an $80 million balance in the program. When only $10 million of the $50 million transfer was reimbursed, the program was left with a balance of $40 million—or half of the expected budget—for the remaining 4 years. Foresters are concerned about the viability of the program, which provides an economically feasible alternative to landowners who might otherwise sell their land for development. Further, foresters believe that by preventing development of such land, the program helps avoid habitat fragmentation, which was identified by the Forest Service Chief as one of the four largest threats to the nation’s forests. Nonetheless, with so much of the program’s budget lost to funding transfers and its viability in question, agency officials did not expect to receive any funding for the program in 2004 and did not request any funding for 2005. According to agency officials, the Forest Service will not be able to continue the program unless the Congress appropriates funds for fiscal year 2005 or subsequent years of the authorization period.
Agencies’ Management Efforts Were Disrupted

When funds were transferred for fire suppression, the agencies’ efforts to manage their programs—including budgeting and planning for annual and long-term programs of work—were disrupted. Some programs, such as the Forest Service K-V and Working Capital Funds, are managed like savings accounts, accumulating funds over multiple years to be spent according to a specific schedule for activities such as forest improvement and vehicle maintenance and replacement. When transfers were made from these programs without subsequent reimbursement, agencies had to begin accumulating the funds again or cancel the planned expenses. For other programs, such as construction and land acquisition, transfers interfered with agency and congressional priorities. In some cases, Forest Service programs went into deficit because transfers disrupted planned budgets and officials overspent program funds in order to pay for essential expenses. Actions taken by the agencies may have mitigated some of these impacts, but compounded others.

Program Funding Shortfalls

Funding transfers have left the Forest Service with insufficient funds to pay for all of the K-V projects it planned at the time the funds were collected. Over the past 5 years, about $640 million has been transferred from the K-V Fund for wildfire suppression, while only $540 million has been reimbursed. Moreover, transfers have been made from the K-V Fund for decades with only partial reimbursement. Since the mid-1980s, about $2.3 billion has been transferred from the K-V Fund, and only $1.9 billion has been reimbursed. According to agency officials, there have been sufficient funds to fully implement the K-V reforestation projects in any given year. However, there have not always been sufficient funds over the years to implement other programs that rely on the K-V Fund. For example, before reimbursements were received for 2003 transfers, Forest Service officials said they would only be able to fund about $60 million of $96 million in K-V projects for 2004 dealing with activities such as habitat improvement. Even though reimbursements for 2003 transfers were later received, Forest Service officials indicated that many of the habitat improvement projects that had been deferred to absorb the shortfall will not be accomplished in 2004 due to the shortened period of work. Faced with unpredictable information about funding transfers and reimbursements, it has been difficult for the Forest Service to reliably estimate how much will be deposited into and withdrawn from the K-V Fund and, therefore, to effectively manage the fund and the programs it supports.

Similarly, transferring funds from the Working Capital Fund disrupted the Forest Service’s efforts to carry out long-term expense planning, making it
difficult for agency officials to effectively manage programs. For example, the Forest Service no longer has enough funds to pay for its planned vehicle and computer replacements because of funding transfers. Each program that uses vehicles or computers allocates a portion of its budget to pay monthly charges into the Working Capital Fund, which accrues these deposits over a period of years to spend on vehicle and computer purchases and maintenance. Vehicles and computers are then maintained as needed and replaced according to a schedule designed to maximize cost effectiveness. In 2002 and 2003, however, some of the funds that agency officials had been accumulating for years were transferred and no longer available for maintenance and planned replacements. As a result, maintenance and replacement schedules were disrupted, and purchases had to be delayed. For example, in 2002, the Forest Service postponed planned purchases of fire engines, helitack trucks, fire crew carriers, and patrol rigs when funds were transferred in California. Since more than 90 percent of these transfers were not reimbursed, agency officials had to either continue using older vehicles or reduce their fleet size and will have to make additional payments to accrue enough savings for the planned purchases.

Changes in Project Priorities

Forest Service efforts to prioritize projects were also disrupted. In an attempt to avoid project delays and cancellations after having lost funds to transfers in 2002, agency officials awarded contracts and grants earlier in the year in 2003. Although such efforts mitigated some impacts of funding transfers, they also interfered with agency attempts to implement high-priority projects. When officials expected funds to be transferred, they implemented projects that could be completed quickly and early in the year, although they were not necessarily their highest priority projects. On the other hand, the Forest Service was able to implement some of its high-priority projects later by redirecting reimbursements to them. For example, in California, agency officials targeted funds to the San Bernardino National Forest, where insect infestation had caused widespread tree mortality and elevated fire risk. In Colorado, officials directed reimbursements to high-priority rehabilitation efforts in the aftermath of the Hayman fire, shown in figure 6.
The redirection of funds was authorized by the Congress and may have helped preserve agency priorities. However, under some programs, such as construction and land acquisition, appropriations committee reports direct the agencies to fund specific projects (which agency officials refer to as “congressionally directed” projects). In some cases, officials paid for congressionally directed projects by shifting funds from projects that the committee reports had not specifically identified, or projects that were less expensive than anticipated, and therefore had “savings.” However, one National Park Service official expressed concern about these unfunded projects, suggesting that if transfers continue without complete reimbursement, the construction program may no longer have sufficient funds to pay for all congressionally directed projects, even though funds were already appropriated for them.

Although an agency’s decision to ignore committee report language “may expose it to grave political consequences,” such language does not by itself establish legal requirements that agencies must follow. See Lincoln v. Vigil, 508 U.S. 182, 192-93 (1993).
Funding transfers also disrupted annual budgeting efforts, contributing to numerous individual Forest Service programs going into deficit in 2003 when agency officials overspent funds internally set aside for the programs. Forest Service officials attributed the deficits in part to actions they took to execute the transfer of funds—specifically, the combination of spending early and transferring late. In 2002, the fire season began unusually early, and the Forest Service ordered an agencywide spending freeze on all nonessential expenses beginning in early July. By doing so, the Forest Service ensured that enough funds were available to pay for suppression costs. However, at the end of the fiscal year, there were substantial funds left in some programs, and officials believed that more projects could have been completed. In an effort to avoid this situation and to complete more projects while still providing for suppression costs in 2003, the Forest Service did not start transferring funds until mid-August and, even then, did not order a spending freeze. In addition, agency officials focused on spending money earlier in the year, so that they could complete more projects before funds were transferred for suppression. After funds were transferred, some programs had nearly depleted their financial resources. Nevertheless, agency officials said they continued spending in a number of cases because they had made commitments to contractors or others, or because expenses such as vehicle maintenance were essential. At year-end, some programs were in deficit. For example, all 11 forests in the Forest Service’s southwestern region ended 2003 with deficits in at least 30 percent of the programs from which transfers were made. Seven of the 11 forests had deficits in 50 percent or more of these programs.\(^2\)

Another factor that contributed to 2003 program deficits was that the Forest Service used unreliable estimates to determine the amount of money available for transfers. Specifically, when the Forest Service made transfers in 2003, its headquarters officials estimated the minimum balance necessary for each program by projecting salary needs for the remainder of the fiscal year and adding a small amount for contingencies. The estimate was based on two pay periods in July, and, in most cases, headquarters transferred all of the balance above this estimated amount. However, headquarters officials made this transfer without adequately consulting the regions or local forest units to obtain information on their specific salary needs.

\(^2\)Although some Forest Service programs within appropriation accounts were in deficit, the Forest Service did not obligate or expend money in excess of the total amounts available in its appropriations accounts, and no violations of the Anti-Deficiency Act occurred.
needs for the remainder of the fiscal year. As such, in some cases, the salary estimates were understated because some staff were on suppression duty during the two pay periods and the suppression program was paying their salaries. Consequently, when these staff returned from suppression duty before the end of the fiscal year, the balance remaining was not always sufficient to cover their salary costs. According to headquarters officials, they used rough salary estimates because suppression program funds were nearly depleted and they needed to make transfers immediately, leaving inadequate time for forest-level officials—who have access to detailed payroll information—to estimate salary costs. Nevertheless, officials in the Washington Office directed regional and forest-level officials to ensure that all full-time staff continued to be paid in full. In order to do so, in some cases, staff worked in alternate programs so that they could be paid through those programs. In other cases, agency officials continued to draw salaries from depleted programs, and, as a result, the programs went into deficit. Further, to avoid this situation, some officials said their managers encouraged them to go on fire suppression detail where there was a need, so that their salaries would be paid from the suppression program. Forest Service officials indicated they used the following year’s appropriation to replenish the programs that went into deficit; however, this practice reduced the amount of funds available for that year’s program of work.

Finally, if transfers to pay for wildfire suppression continue, project cancellations and delays, strained relationships, and management difficulties will likely continue and be compounded. According to agency officials, some impacts have yet to become apparent. For example, some projects are funded in one year with the expectation that the funds will be spent over several years as the project is implemented. For such projects, the impacts of transfers may only become apparent as the project nears its completion. Additionally, when projects are deferred to the next year, agency officials often must use resources originally dedicated to other projects. The result is a domino effect: deferring one year’s projects displaces the next year’s projects, which must in turn be deferred to the following year. Furthermore, because of 2003 program deficits, the impacts of funding transfers will continue into 2004. For programs that were in deficit at the end of 2003, officials had to first pay off the deficit at the beginning of 2004, effectively reducing their annual budget and the number of projects they will be able to fund.

If funding transfers continue, the agencies and the Congress will repeatedly confront difficult decisions in determining how much funding to transfer from which programs and how much to reimburse. In making such
decisions, the Forest Service and Interior have attempted to minimize impacts to programs and projects, but neither agency systematically tracks such impacts at a national level. To identify the impacts of funding transfers on its programs in 2003, Forest Service officials collected some information about impacts from regional offices. However, the information was neither consistent nor comprehensive because not every region provided it, and those that did, provided it in different forms with varying degrees of detail. Enhancing their understanding of how funding transfers affect programs could improve the ability of the agencies and the Congress to minimize negative impacts to programs and projects.

In 2003, the Forest Service added a feature to its accomplishment reporting system to track the impacts of funding transfers. The feature allows agency officials to identify which national performance goals are affected by transfers and to what extent. For example, officials can identify how many acres of land were not acquired because of funding transfers. However, there are several agency programs that do not use this system to track their accomplishments. If more programs used this system and tracked accomplishment shortfalls caused by funding transfers, the Forest Service and the Congress would have more comprehensive information and could make more informed decisions about wildfire suppression funding, transfers, and reimbursements. Interior similarly could refine its existing accomplishment tracking systems to collect nationwide information about the impacts of transfers on their programs. Because accomplishment information is compiled at the end of the fiscal year, it would be of limited value in determining potential effects of current year transfers before they are made. Nevertheless, nationwide information on impacts from prior years could help agency officials and the Congress make informed decisions about current year transfers and reimbursements.

### Improvements for Estimating Suppression Costs and Alternatives for Funding Wildfire Suppression Could Be Considered

To help mitigate the negative impacts of funding transfers, the Forest Service and Interior should improve their method for estimating annual suppression costs and the Congress could consider alternative approaches for funding wildfire suppression. The agencies’ use of a 10-year average of wildfire suppression costs to estimate and budget for annual suppression costs has substantially underestimated actual costs during the last several years. While uncertainties about the number of wildfires and their location, size, and intensity make it difficult to estimate wildfire suppression costs, alternative methods that more effectively account for these uncertainties and annual changes in firefighting costs should be considered for
improving the information provided to agency and congressional decision makers. Additionally, to further mitigate the impacts of funding transfers, the Congress could consider several alternative approaches to funding wildfire suppression, such as establishing a governmentwide or agency-specific reserve account dedicated to funding wildfire suppression activities. Each alternative has advantages and disadvantages with respect to, among other things, reducing the need to transfer funds, creating incentives for agencies to contain suppression costs, and allowing for congressional review. Thus, selecting any alternative would require the Congress to make difficult decisions, including taking into consideration the effect on the federal budget deficit.

Annual Wildfire Suppression Budgets and Appropriation Decisions Have Been Based on Cost Estimates That Have Significantly Understated Actual Costs

For the past several years, the Forest Service, Interior, and the Congress have made annual wildfire suppression budget and appropriations decisions based on estimates of suppression costs that frequently have substantially understated actual costs. In developing their annual suppression budgets, the Forest Service and Interior use a 10-year average of suppression costs to estimate annual suppression costs. The agencies calculate this estimate up to 2 years in advance of when suppression funds are actually needed. The Congress also uses this estimate in deciding how much to appropriate for wildfire suppression activities. However, since 1990, these annual estimates frequently have understated actual suppression costs by hundreds of millions of dollars, as illustrated in figure 7. In fact, over the last 5 years, the estimates have understated actual suppression costs by about $1.8 billion. This shortfall in funding to cover actual suppression costs has occurred, in part, because the agencies and the Congress developed annual budget requests and made appropriation decisions for suppression activities on the basis of these estimates. In funding suppression activities based on these estimates, the Congress was able to fund, and the agencies were able to address, other program priorities without negatively affecting the federal budget deficit. However, in doing so, the agencies have had insufficient funds to pay for all suppression activities in recent years because of the increase in the number and intensity of wildfires and the costs to suppress them. As a result, the agencies have had to transfer hundreds of millions of dollars from other programs.
Improvements in Estimating Suppression Costs Should Be Considered

Alternative methods should be considered for improving the suppression cost estimates that are provided to agency and congressional decision makers for use in estimating and funding wildfire suppression costs. Agency officials acknowledged that the 10-year average has substantially understated actual suppression costs in recent years. Although agency officials indicated they have considered alternative methods for improving the forecasts, they believe that the 10-year average is a reasonable and inexpensive way to estimate wildfire suppression costs. However, the
usefulness of a 10-year average is limited when actual costs change rapidly from year to year, as they have recently. Furthermore, because the average is presented as a “point estimate” of likely costs instead of in conjunction with a range of cost estimates reflecting the uncertainties of wildfires, it may convey an unwarranted sense of precision to decision makers. For example, as shown in figure 7, recent actual suppression costs have been higher than earlier levels. Agency officials believe that recent abnormal drought conditions have contributed to unusually large and catastrophic wildfires that are much more expensive to suppress than typical fires prevalent for most of the previous 10 years. In addition, over the last few years, the cost of fighting wildfires in the wildland urban interface has risen significantly due to the number of homes built in these areas and the increased resources needed to protect them from wildfires. Also, costs related to the use of aircraft to fight wildfires, especially insurance rates, have increased significantly since September 11, 2001. Alternative methods that more effectively account for annual changes in expenditures and that convey the uncertainties associated with making the forecasts should be considered for improving the information provided to agency and congressional decision makers. For example, an estimate based on a weighted 10-year average, in which more weight in the average is given to recent expenditures relative to older ones, may be more effective in accounting for annual changes in expenditures. This information could provide agency and congressional decision makers with more useful data to develop budget requests and fund suppression activities at a level that reduces the need for funding transfers and subsequent reimbursements. However, in doing so, higher estimated costs for suppression could result, at least in the near term. In this context, the Congress would have to make difficult decisions about whether to increase funding for wildfire suppression to more closely reflect estimated costs, and, if so, whether to reduce appropriations to other government programs in order to avoid adding to the federal budget deficit.

In addition to the agencies refining their estimates of suppression costs, the Congress also could consider alternative funding approaches to further mitigate the effects of funding transfers on agency programs and reduce the need to provide supplemental appropriations. For example, the

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13In addition, regression analysis could be used to develop costs estimates and upper and lower confidence limits to provide information on the uncertainty associated with the cost estimates.
Congress might consider creating an emergency reserve account that is governmentwide or agency-specific, and that provides a specific amount of funds when the reserve is created or allows for as much funding as is necessary. Each alternative has advantages and disadvantages related to influencing the need for transferring funds, creating incentives for the agencies to contain suppression costs, and allowing for congressional review. We previously issued two reports, and the Congressional Budget Office issued testimony, that presented various alternatives for funding wildfire suppression and other emergency needs.\textsuperscript{14} Some of the alternatives presented in these reports and testimony are summarized in table 2 and described below:

Table 2: Comparison of Alternative Types of Reserve Accounts to Help Fund Wildfire Suppression

<table>
<thead>
<tr>
<th>Current year funds</th>
<th>No-Year funds</th>
<th>Permanent indefinite appropriation</th>
<th>Current indefinite appropriation</th>
<th>Definite appropriation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td></td>
<td>A certain amount of funding would be available for various emergencies over multiple years.</td>
<td>As much funding as needed would always be available for fire suppression.</td>
<td>A specific amount of funding would be available for fire suppression for a specific time period, such as 1 year.</td>
</tr>
</tbody>
</table>

**Advantages**

<table>
<thead>
<tr>
<th></th>
<th>Governmentwide reserve account</th>
<th>Agency-Specific reserve account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pooling resources would allow for fluctuations in funding needs.</td>
<td>A certain amount of funding would be available for various emergencies.</td>
<td>As much funding as needed would always be available for fire suppression.</td>
</tr>
<tr>
<td>Annual opportunity for congressional review.</td>
<td>A certain amount of funding would be available for various emergencies over multiple years.</td>
<td>As much funding as needed would always be available for fire suppression for 1 year.</td>
</tr>
<tr>
<td>No incentive to spend entire fund before year-end.</td>
<td>No need to transfer funds.</td>
<td>No need to transfer funds.</td>
</tr>
<tr>
<td>Annual opportunity for congressional review.</td>
<td>Annual opportunity for congressional review.</td>
<td>Annual opportunity for congressional review.</td>
</tr>
<tr>
<td>Federal budget deficit would not increase if funding for other agency or other government programs was cut.</td>
<td>Federal budget deficit would not increase if funding for other agency or other government programs was cut.</td>
<td>Inherent incentive to contain suppression costs.</td>
</tr>
<tr>
<td>Inherent incentive to contain suppression costs.</td>
<td>Federal budget deficit would not increase if funding for other agency or other government programs was cut.</td>
<td>Annual opportunity for congressional review.</td>
</tr>
</tbody>
</table>

**Disadvantages**

<table>
<thead>
<tr>
<th></th>
<th>Governmentwide reserve account</th>
<th>Agency-Specific reserve account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfers may still be necessary.</td>
<td>Transfers may still be necessary.</td>
<td>Federal budget deficit could increase if funding for other agency or other government programs is not cut.</td>
</tr>
<tr>
<td>Supplemental appropriations may add to the federal budget deficit if funding for other agency or other government programs is not cut.</td>
<td>Supplemental appropriations may add to the federal budget deficit if funding for other agency or other government programs is not cut.</td>
<td>Federal budget deficit could increase if suppression costs exceeded budget estimates.</td>
</tr>
<tr>
<td>May create incentive to spend entire fund before year-end.</td>
<td>Less incentive to contain suppression costs.</td>
<td>Less incentive to contain suppression costs.</td>
</tr>
<tr>
<td>Less incentive to contain suppression costs.</td>
<td>Less incentive to contain suppression costs.</td>
<td>No opportunity for annual congressional review.</td>
</tr>
<tr>
<td>Sources: GAO and GAO analysis of Congressional Budget Office data.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Reserve accounts provide early recognition that there will likely be a demand on federal resources for natural disasters—thus providing greater transparency in the budget process. The greater the amount of funds in the reserve account, the less likely agencies would need to transfer funds from other programs. Reducing the need to transfer funds would mitigate the need for supplemental appropriations that have added hundreds of millions of dollars to the federal budget deficit. However, the greater the amount of funds in the reserve account, the more difficult it would be for the Congress to limit total government spending. On the other hand, if the Congress limited the amount of funds appropriated for wildfire suppression, including the amount in the reserve account, there would be a greater chance that the agencies would need to transfer funds, and the Congress would need to reimburse the transfers through supplemental appropriations. The amount and accessibility of funds in the reserve account also may affect the agencies’ incentives to contain the costs of suppression activities. However, the effect of such incentives would likely be limited, given that many unpredictable and uncontrollable factors affect the costs of fire suppression activities.

**Governmentwide Reserve Account**

The Congress could create a governmentwide reserve account into which funds normally appropriated to agencies having responsibility for addressing unforeseen situations and emergencies would be appropriated. These agencies would include not only the Forest Service and Interior, but also the Federal Emergency Management Agency and the Department of Defense, among others. Combining the emergency funds of all these agencies into one account might alleviate the need for supplemental appropriations, because in any given year an increase in spending for one agency may be offset by a lower than usual spending by another agency. Without supplemental appropriations, there would be no increase in the budget deficit. A possible disadvantage of using a governmentwide reserve that is funded annually is that it could produce the expectation that the entire fund should be spent each year and, as the year progresses, claims on the fund might increase. Similarly, a governmentwide reserve might not provide incentives for agencies to contain the costs of wildfire suppression.

A governmentwide reserve account could be created using funds designated as no-year money, so that funds not spent in a given year remain in the account for use in following years. Under such an account, there would be no incentive to spend the entire fund each year. To further control the use of the reserve account, the agencies’ access to the fund could be tied to specific criteria. Criteria could parallel those previously offered by OMB in designating funds as an emergency requirement; namely,
that the emergency (1) require a necessary expenditure—an essential or vital expenditure, not one that is merely useful or beneficial; (2) occur suddenly—quickly coming into being, not building up over time; (3) be urgent—a pressing and compelling need requiring immediate action; (4) be unforeseen—not predictable or anticipated as a coming need; and (5) not be permanent—the need to fund is temporary. Nevertheless, whether the funds are designated as no-year or not, additional funding could still be needed at year-end. If so, the agencies would need to transfer funds from other program accounts, and the Congress would have to choose between providing supplemental appropriations to reimburse the funding transfers—which would add to the federal budget deficit—or providing no reimbursements. In such cases, even if the agencies did need to transfer funds, the amount transferred would be less than it would have been without the reserve.

Agency-Specific Reserve Accounts

Another approach for funding wildfire suppression activities cited in one of our earlier reports is to establish agency-specific reserve accounts for those agencies that regularly respond to federal emergencies and require those agencies to satisfy criteria similar to the OMB criteria previously described, before the funds are released. Agency-specific reserve accounts could be funded through a permanent, indefinite appropriation, which would provide as much funding as needed for specific purposes and would always be available for those purposes without any further action by the Congress. A permanent, indefinite appropriation would eliminate the need to transfer funds from other programs and to provide supplemental appropriations to reimburse funding transfers. A disadvantage of an indefinite appropriation is that if actual expenditures exceed the estimates, the federal budget deficit will be greater than anticipated. A disadvantage of a permanent appropriation is that it would lessen the opportunity for the Congress to regularly review the efficiency and effectiveness of fire suppression activities, because such reviews are typically conducted during the annual appropriations process.

Alternatively, funding for agency-specific reserve accounts could be provided through a current, indefinite appropriation, which provides as much funding as needed for the current fiscal year. Funding wildfire suppression using a current, indefinite appropriation would allow the Congress to periodically review suppression activities through the annual appropriations process since the Congress would appropriate reserve funds each year. However, an indefinite appropriation could still result in higher than estimated costs and a higher than anticipated federal budget deficit. Additionally, any indefinite appropriation would have no inherent
incentives for the agencies to contain suppression costs because the funding level would be unlimited.

Agency-specific reserve accounts also could be funded by a definite appropriation with a specific amount of funds, not to be exceeded in a given year. With such limits, there would be an incentive for the agencies to contain suppression costs. As with a current, indefinite appropriation, the Congress could review suppression activities each year during its annual appropriations process. This alternative also could avoid increasing the federal budget deficit if appropriations to other agency program accounts were reduced by an amount corresponding to the amount in the reserve. However, should suppression costs be higher than the amount provided in the reserve account for the current year, a decision would need to be made on whether to transfer funds from other agency programs and, if so, whether to reimburse the funding transfers with a supplemental appropriation that would increase the federal budget deficit.

Recently, the Senate Committee on the Budget has proposed an option for funding wildfire suppression activities in its resolution on the budget for fiscal year 2005. The resolution would provide for a reserve account funded through a definite appropriation of up to $500 million in additional annual funding for fiscal years 2004 through 2006. The funds in the account would be available to the Forest Service and Interior for fire suppression activities only if (1) the agencies are initially appropriated funds equal to or greater than the 10-year average of wildfire suppression costs and (2) the initial appropriations are insufficient to cover actual costs. Such an alternative would add to the federal budget deficit, unless the $500 million was reduced from other Forest Service, Interior, or other governmentwide programs when the Congress initially develops the federal budget. Further, if the funds in this account were sufficient to pay for all wildfire suppression activities above the 10-year average of suppression costs, there would be no need for the Forest Service or Interior to transfer funds from other program accounts. Had there been a $500 million reserve account available for wildfire suppression over the last 5 years, transfers would still have been necessary, but to a lesser extent, because suppression costs greatly exceeded the 10-year average in the extensive fire seasons in 2002 and 2003.

15Of the $500 million, $400 million would be available to the Forest Service, and $100 million would be available to Interior.
Other Funding Options

During our visits with agency officials, we also discussed various other ideas for acquiring additional revenues to help pay for wildfire suppression. One idea was to charge fees for visitors, and state, local, and private entities that use federal land and resources, or to people who own property adjacent to federal forest land. For example, agencies could place a surcharge on existing user fees at national forests, parks, and other federal lands and use the additional revenue to help fund wildfire suppression. Another idea was to establish a special fund, similar to the K-V Fund, whose revenues would be dedicated to wildfire suppression. Revenues accruing to such a fund could come from fees charged for state, local, or private use of federal lands and its resources. Still another option was to levy a stipend on property owners’ federal tax for living in the wildland urban interface. Some other, more unconventional methods for mitigating the federal share of wildfire suppression costs also were discussed, such as allowing private companies to “sponsor” fire suppression efforts by providing funding as a measure of corporate goodwill to the local community. The advantage of all of these options would be to reduce the federal government’s burden to pay for fire suppression. Because the Forest Service and Interior do not have the authority to increase funding for suppression over the amount provided in appropriations, any of these options would require congressional action. Further, all of these options could strain agency relations with the public and others.

Conclusions

Wildfires burn millions of acres of federal land every year, and the Forest Service and Interior spend billions of dollars suppressing them. In doing so, the agencies must balance the goal of protecting lives, property, and resources against the goal of containing costs. Transferring funds from other agency programs has helped fund needed wildfire suppression activities but not without a cost. These transfers have had widespread negative effects on Forest Service and Interior programs, projects, relationships, and management. In addition, the subsequent repayment of transfers with supplemental appropriations has added hundreds of millions of dollars to the federal budget deficit. These effects are likely to increase should funding transfers continue to be necessary in the future.

Notwithstanding the uncertainties and difficulty of accurately estimating wildfire suppression costs, there are a number of factors that exacerbate the problem of transferring funds to help suppress wildfires. First, the methodology the agencies use to estimate suppression costs and determine their budgets is flawed because it does not adequately account for recent increases in the costs to suppress wildfires. Without this information, the
Congress may have insufficient information to make prudent funding decisions. Second, the estimates generated by the monthly forecasting models have been inaccurate and did not provide a sound basis for deciding if, and to what extent, funding transfers were needed. Third, the agencies have inadequate information to understand the effects that transfers are having on their programs. As such, they are not well positioned to report the impacts to the Congress or make informed decisions about future transfers. Finally, the Forest Service's method for estimating salary costs for the remainder of the fiscal year without adequately consulting with local forest units is problematic. Consequently, Forest Service headquarters officials do not have sufficiently accurate data to make transfer decisions and preclude agency programs from going into deficit.

Because of the difficulty of accurately estimating suppression costs and the budget implications of providing additional funding for suppression, it is likely that suppression funding shortfalls will continue in the future. To minimize the budgetary implications, the intended goal should be to achieve an appropriate balance between the shortfall and the impacts that transfers will have on agency programs. Despite the best efforts to achieve this balance, there will be times when the size of the shortfall will create problems and impacts to important programs. Currently, there is no budgeting or funding mechanism that can help mitigate these impacts. Consequently, the agencies are forced to make difficult decisions to fund wildfire suppression at the expense of meeting other important programmatic goals.

**Recommendations for Executive Action**

To help minimize the impacts of wildfire funding transfers on other agency programs and to improve the agencies' budget estimates for wildfire suppression costs, we are recommending that the Secretaries of Agriculture and the Interior direct the Forest Service and Interior agencies to work together to

- improve their methods for estimating annual wildfire suppression costs by more effectively accounting for annual changes in costs and the uncertainties associated with wildfires in making these estimates, so that funding needs for wildfire suppression can be predicted with greater accuracy;

- annually conduct a formal assessment of how the agencies’ methods for estimating annual suppression costs and their monthly forecasting
models performed in estimating wildfire suppression costs relative to actual costs, to determine if additional improvements are needed; and

- consistently track accomplishment shortfalls caused by funding transfers across all programs and include this information in annual accomplishment reports to provide agency decision makers and the Congress with better information for making wildfire suppression transfer and funding decisions.

In addition, to more accurately determine the amount of funds available to transfer for wildfire suppression, we recommend that the Secretary of Agriculture direct the Chief of the Forest Service to estimate remaining salary needs for the fiscal year by consulting with local forest officials to obtain more current, specific payroll information, so that the risk of programs going into deficit can be reduced.

### Matters for Congressional Consideration

To reduce the potential need for the Forest Service and Interior to rely on transferring funds from other programs to pay for wildfire suppression on public lands, the Congress could consider alternative funding approaches for wildfire suppression, such as, but not limited to, establishing a governmentwide or agency-specific emergency reserve account.

### Agency Comments and Our Evaluation

We provided a draft of this report to the Secretaries of Agriculture and the Interior for review and comment. In responding, the Forest Service generally concurred with our findings and recommendations, and Interior concurred with our findings, but both agencies expressed concerns about our recommendation that they pursue alternative methods for estimating suppression costs. Both the Forest Service and Interior provided written comments, which are included in appendixes IV and V, respectively.

Concerning our recommendation that the agencies improve their methods for estimating annual wildfire suppression costs, Interior commented that the current method—relying on the 10-year average of suppression costs—has proved to be “a reasonable and durable basis for suppression budgeting.” In support of this point, they noted that between 1995 and 1998, their actual suppression costs were below the 10-year average in three seasons. While we do not dispute this fact, we disagree that using the 10-year average has been “a reasonable and durable basis” for budgeting for suppression costs. As noted in our report, since 1990, the agencies’
reliance on the 10-year average has frequently resulted in annual budget estimates well below actual suppression costs. For Interior, the 10-year average was below actual costs in 8 of the 14 years since 1990; for the two agencies together, the 10-year average was below actual costs in 11 of the 14 years. Further, in the years when the average has understated actual costs, the difference has frequently been significant. Over the last 5 years, the 10-year average has understated the two agencies’ actual suppression costs by a total of about $1.8 billion.

The Forest Service, in commenting on the use of the 10-year average, recognized the weaknesses associated with using the average to estimate annual wildfire suppression costs and noted the agency has looked into other methods that could more accurately predict future suppression costs. Some of the methods considered included using a 5-year average and inflating the historical costs to current dollar values. The Forest Service also noted that agency officials have discussed various modeling methods with researchers who said they could design a very expensive, complex model that would be more accurate than the 10-year average. We support the Forest Service for taking this initial step and encourage the agency to continue its efforts to identify and implement a cost-effective method for improving their estimates of annual suppression costs. As noted in our report, alternative methods that more effectively account for annual changes in expenditures and that convey the uncertainties associated with making the forecasts should be considered.

The Forest Service also noted that our report does not address the potential consequences associated with not making the funding transfers. These negative impacts could include (1) not having adequate personnel and equipment, (2) an increase in the number of acres burned, and (3) an increase in the loss of homes and other property. While we believe that such impacts could result if funding transfers did not occur, the objective of our report is to identify the effects on Forest Service and Interior programs from which funds were actually transferred.

In addition, Interior noted that shifting funds from one program to another within the wildland fire management account does not constitute a transfer, and, as such, we were incorrect in saying that Interior transferred funds from wildland fire programs. However, as noted in footnote 2, for ease of explanation throughout the report, we use the word “transfer” to refer both to the transfer of funds from one appropriation account to another and to the reprogramming of funds between programs within a
single appropriation account. In either situation, the program from which the funds were taken is affected.

The agencies also provided other comments and technical clarifications on the draft that we incorporated into the report where appropriate.

As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies of this report to the Chairman, Senate Committee on Energy and Natural Resources; the Chairman and Ranking Minority Member, House Committee on Resources; the Chairman and Ranking Minority Member, Subcommittee on Forests and Forest Health, House Committee on Resources; and other interested congressional committees. We will also send copies of this report to the Secretary of Agriculture; the Secretary of the Interior; the Chief of the Forest Service; the Directors of the Bureau of Land Management, the National Park Service, and the Fish and Wildlife Service; the Acting Director, Bureau of Indian Affairs; the Director, Office of Management and Budget; and other interested parties. We will make copies available to others upon request. In addition, this report will be available at no charge on GAO’s Web site at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-3841. Key contributors to this report are listed in appendix VI.

Barry T. Hill
Director, Natural Resources and Environment
To determine the amount and the programs from which the U.S. Forest Service and the Department of the Interior transferred funds from 1999 through 2003, we collected data from the agencies’ headquarters on funds transferred and reimbursed by agency, program, and year. We identified the procedures the agencies follow when transferring and reimbursing funds by obtaining and reviewing agency strategy and planning documents and discussing the procedures actually used with agency officials in headquarters, regional offices, and local units. We also interviewed agency officials about the internal controls they use to carry out these procedures. In addition, we contacted budget officers at the Forest Service’s nine regional offices and obtained information on the amounts transferred and reimbursed to their units. Where appropriate, we also met with officials from the Interior agencies that are involved with wildfire suppression activities—the Bureau of Indian Affairs, Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service. We interviewed budget officers in Forest Service and Interior headquarters about the financial systems they use to ensure the accuracy of the amount of funds transferred and reimbursed. We also interviewed Office of Management and Budget (OMB) officials to obtain their views on the reliability and completeness of the data they receive from each agency, as well as the adequacy of the agencies’ internal procedures to generate and track these data. Although we relied primarily on agency data, we compared these data with budget documents that corroborated the amounts transferred and reimbursed, where possible. We took appropriate measures to ensure that the Forest Service and Interior data on the amount of funds transferred and reimbursed and on actual suppression costs were sufficiently reliable for our purposes, and that the internal procedures at the Forest Service and Interior were sufficient to generate these data. In addition, we used the Gross Domestic Product Price Index to adjust dollars for inflation.

To identify the impacts on agency programs from which funds were transferred, we interviewed Forest Service and Interior headquarters officials with responsibility for the affected programs. We also visited six Forest Service regional offices; 7 national forests, and contacted an additional 14 national forests; and visited seven Interior field offices. Although we did not visit all Forest Service regions, we chose a
nonprobability sample of regions that reflected a range of funds transferred as well as the geographic diversity of program impacts (see table 3).\(^1\)

<table>
<thead>
<tr>
<th>Forest Service region</th>
<th>Geographic area</th>
<th>Funds transferred, 1999-2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 1</td>
<td>Montana, North Dakota, Northeastern Washington, Northern Idaho, and South Dakota</td>
<td>$71,337,000</td>
</tr>
<tr>
<td>Region 2</td>
<td>Colorado, Kansas, Nebraska, South Dakota, and Wyoming</td>
<td>46,102,000</td>
</tr>
<tr>
<td>Region 3</td>
<td>Arizona, New Mexico, Oklahoma panhandle, and Texas panhandle</td>
<td>73,794,000</td>
</tr>
<tr>
<td>Region 5</td>
<td>California, Hawaii, and U.S. Pacific Islands</td>
<td>94,440,000</td>
</tr>
<tr>
<td>Region 8</td>
<td>Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia</td>
<td>90,860,000</td>
</tr>
<tr>
<td>Region 9</td>
<td>Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin</td>
<td>57,000,000</td>
</tr>
</tbody>
</table>

Sources: For geographic information, www.fs.fed.us. For funds transferred, GAO analysis of Forest Service financial data.

Where appropriate, we also met with Interior field offices, grant recipients, a state forester, and representatives of nonprofit organizations who were collocated in the Forest Service regions visited. In addition, we contacted national forests officials in each region we visited and obtained detailed information regarding the specific impacts to their programs and projects. We interviewed representatives of impacted programs in both regional and national forest offices. We collected documents that listed the projects deferred or canceled due to transfers; obtained information on the cost of the impact to some affected projects; and—in some instances—conducted site visits to affected project locations. In our review of impacts, we focused on fiscal years 2002 and 2003 because in these 2 fiscal years transfers for wildfire suppression involved many more programs than they did previously.

\(^1\)Results from nonprobability samples cannot be used to make inferences about a population. This is because in a nonprobability sample, some elements of the population being studied have no chance or an unknown chance of being selected as part of the sample.
In reviewing the agencies’ methods for estimating suppression costs, we discussed the details of each method with agency officials responsible for developing the estimates. We reviewed the agencies’ current estimation methodology, compared the estimates with actual costs and discussed the reasons for differences between them with agency officials, and identified alternatives for estimating suppression costs. In reviewing alternative approaches for funding wildfire suppression, we reviewed previous GAO and Congressional Budget Office reports, as well as a Forest Service study related to budgeting for emergencies, and discussed alternative funding options with agency officials. We also obtained the views of OMB officials on other appropriation approaches for funding wildfire suppression. In addition, we analyzed Forest Service and Interior budget documents, congressional appropriations documents, and agency suppression cost forecasting models.

We performed our work between July 2003 and March 2004 in accordance with generally accepted government auditing standards.

These tables summarize the amount of funds transferred from and reimbursed to Forest Service and Interior programs from 1999 through 2003. Table 4 summarizes the funds transferred from major Forest Service programs and from the construction and land acquisition programs, as well as various fire programs, within Interior’s four agencies that have responsibility for wildfire suppression activities. Table 5 summarizes the amount of funds reimbursed to these programs over the 5-year period. The information presented in the tables was obtained from Forest Service and Interior budget documents.

Table 4: Transfers to Wildfire Suppression, by Forest Service and Interior Program, 1999 through 2003

<table>
<thead>
<tr>
<th>Agency/Program</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Program total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Forest Service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K-V Fund</td>
<td>$0</td>
<td>$292,156,240</td>
<td>$20,686,802</td>
<td>$172,781,787</td>
<td>$154,000,000</td>
<td>$639,624,829</td>
</tr>
<tr>
<td>Capital improvements and maintenance</td>
<td>0</td>
<td>0</td>
<td>52,751,345</td>
<td>159,569,062</td>
<td>105,000,000</td>
<td>317,320,407</td>
</tr>
<tr>
<td>National forest system</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>157,536,335</td>
<td>125,000,000</td>
<td>282,536,335</td>
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<tr>
<td>Land acquisition/Land and Water Conservation Fund</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>145,339,974</td>
<td>100,000,000</td>
<td>245,339,974</td>
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<tr>
<td>Working Capital Fund</td>
<td>0</td>
<td>0</td>
<td>52,751,345</td>
<td>96,554,528</td>
<td>20,000,000</td>
<td>169,305,873</td>
</tr>
<tr>
<td>State and private forestry</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>78,259,986</td>
<td>34,000,000</td>
<td>112,259,986</td>
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<tr>
<td>Wildland fire management</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>81,309,076</td>
<td>0</td>
<td>81,309,076</td>
</tr>
<tr>
<td>Forest and range research</td>
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<td>0</td>
<td>0</td>
<td>23,376,359</td>
<td>10,000,000</td>
<td>33,376,359</td>
</tr>
<tr>
<td>Other appropriations*</td>
<td>0</td>
<td>0</td>
<td>40,339,264</td>
<td>100,619,982</td>
<td>147,000,000</td>
<td>287,959,245</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$0</td>
<td>$292,156,240</td>
<td>$166,528,755</td>
<td>$1,015,347,088</td>
<td>$695,000,000</td>
<td>$2,169,032,084</td>
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**Bureau of Indian Affairs**

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$37,605,448</td>
<td>$43,400,000</td>
</tr>
<tr>
<td>Land acquisition</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fire programs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5,531,050</td>
<td>500,000</td>
</tr>
</tbody>
</table>

**Bureau of Land Management**

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>0</td>
<td>2,041,918</td>
<td>0</td>
<td>5,081,817</td>
<td>4,300,000</td>
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<td>Land acquisition</td>
<td>0</td>
<td>2,011,220</td>
<td>0</td>
<td>6,098,181</td>
<td>4,200,000</td>
</tr>
<tr>
<td>Fire programs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3,750,381</td>
<td>6,500,000</td>
</tr>
</tbody>
</table>
## Appendix II
Summary of Funds Transferred from and Reimbursed to Forest Service and Interior Programs, 1999 through 2003

Sources: Forest Service and Interior Financial Data.

Note: Funds listed are in 2003 dollars.

*Other appropriations include the forest land enhancement, brush disposal, timber salvage sale, forest restoration and improvements, and recreation fee demonstration programs.

### Table 5: Transfer Reimbursements to Forest Service and Interior Programs, 1999 through 2003

<table>
<thead>
<tr>
<th>Agency/Program</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Program total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fish and Wildlife Service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>$0</td>
<td>20,145,020</td>
<td>0</td>
<td>17,278,179</td>
<td>14,600,000</td>
<td>52,023,198</td>
</tr>
<tr>
<td>Land acquisition</td>
<td>$0</td>
<td>6,890,018</td>
<td>0</td>
<td>19,310,906</td>
<td>13,900,000</td>
<td>40,100,924</td>
</tr>
<tr>
<td>Fire programs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,000,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td><strong>National Park Service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>0</td>
<td>24,367,524</td>
<td>0</td>
<td>96,554,528</td>
<td>64,000,000</td>
<td>184,922,052</td>
</tr>
<tr>
<td>Land acquisition</td>
<td>0</td>
<td>50,398,010</td>
<td>0</td>
<td>61,998,171</td>
<td>20,100,000</td>
<td>132,496,180</td>
</tr>
<tr>
<td>Fire programs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5,081,817</td>
<td>2,600,000</td>
<td>7,681,817</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$0</td>
<td>$105,853,710</td>
<td>$0</td>
<td>$258,290,477</td>
<td>$175,100,000</td>
<td>$539,244,186</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$0</td>
<td>$398,009,950</td>
<td>$166,528,755</td>
<td>$1,273,637,565</td>
<td>$870,100,000</td>
<td>$2,708,276,270</td>
</tr>
</tbody>
</table>

Sources: Forest Service and Interior Financial Data.

Note: Funds listed are in 2003 dollars.

*Other appropriations include the forest land enhancement, brush disposal, timber salvage sale, forest restoration and improvements, and recreation fee demonstration programs.
Appendix II
Summary of Funds Transferred from and
Reimbursed to Forest Service and Interior
Programs, 1999 through 2003

(Continued From Previous Page)

<table>
<thead>
<tr>
<th>Agency/Program</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Program total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fire programs</strong></td>
<td></td>
<td></td>
<td></td>
<td>5,531,050</td>
<td>408,000</td>
<td>5,939,050</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5,531,050</td>
<td>408,000</td>
<td>5,939,050</td>
</tr>
</tbody>
</table>

**Bureau of Land Management**

| Construction           | 0        | 2,037,684| 0        | 4,002,439| 3,513,100| 9,553,223    |
| Land acquisition       | 0        | 2,006,986| 0        | 4,802,317| 3,431,400| 10,240,704   |
| Fire programs          | 0        | 0        | 0        | 3,750,381| 5,304,000| 9,054,381    |

**Fish and Wildlife Service**

| Construction           | 0        | 20,145,020| 0        | 13,606,566| 11,928,200| 45,679,785   |
| Land acquisition       | 0        | 6,890,018 | 0        | 15,207,338| 11,356,300| 33,453,656   |
| Fire programs          | 0        | 0        | 0        | 0         | 816,000    | 816,000      |

**National Park Service**

| Construction           | 0        | 24,367,524| 0        | 76,036,691| 52,288,000| 152,692,215  |
| Land acquisition       | 0        | 50,398,010| 0        | 48,823,559| 16,421,700| 115,643,269  |
| Fire programs          | 0        | 0        | 0        | 5,081,817 | 2,122,000  | 7,203,817    |

**Subtotal**

| $0                      | $105,845,242| $0 | $206,456,449| $143,046,500| $455,348,190|

**Total**

| $0                      | $398,001,482| $166,528,755| $913,845,411| $697,046,500| $2,175,422,147|

Sources: Forest Service and Interior financial data.

Notes:

Funds generally were reimbursed in the fiscal year following the year in which the funds were transferred. In this table, however, we listed reimbursements in the year in which the funds were transferred.

Funds listed are in 2003 dollars.

*Other appropriations include the forest land enhancement, brush disposal, timber salvage sale, forest restoration and improvements, and recreation fee demonstration programs.
These tables include information on funds made available for transfers, by Forest Service region. Table 6 summarizes information on funds made available for transfers by region for each year from 1999 through 2003. Table 7 summarizes information on funds made available for transfers by major Forest Service program and by region, aggregated over the 5-year period. Table 8 summarizes information on funds made available for transfers as a percentage of overall budget authority for each Forest Service region and by major program for 2002.

Table 6: Funds Made Available for Transfers to Wildfire Suppression, by Forest Service Washington Office and Regions, 1999 through 2003

<table>
<thead>
<tr>
<th>Agency/Region</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1999</td>
</tr>
<tr>
<td>Forest Service</td>
<td></td>
</tr>
<tr>
<td>Washington Office</td>
<td>$0</td>
</tr>
<tr>
<td>Region 1</td>
<td>0</td>
</tr>
<tr>
<td>Region 2</td>
<td>0</td>
</tr>
<tr>
<td>Region 3</td>
<td>0</td>
</tr>
<tr>
<td>Region 4</td>
<td>0</td>
</tr>
<tr>
<td>Region 5</td>
<td>0</td>
</tr>
<tr>
<td>Region 6</td>
<td>0</td>
</tr>
<tr>
<td>Region 8</td>
<td>0</td>
</tr>
<tr>
<td>Region 9</td>
<td>0</td>
</tr>
<tr>
<td>Region 10</td>
<td>0</td>
</tr>
<tr>
<td>Labs and research units</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>$0</td>
</tr>
</tbody>
</table>

Sources: Forest Service and Interior financial data.

Notes:

Funds listed are in 2003 dollars.

Forest Service regions made available slightly more funds than were actually used for fire suppression. The data for each region reflect the funds the regions made available for transfers. The funds that were made available for transfers, but not used for wildfire suppression, were kept in the wildfire suppression account and carried over into the following fiscal year.

*There is no region 7 in the Forest Service.

*Transfers from the Washington Office come from programs such as the K-V Fund and land acquisition, whose funds are managed initially at the Washington Office.

* Funds also were made available from research units and labs, such as the north central forest experiment station and the northeastern forest experiment station, the pacific northwest, pacific southwest, rocky mountain, and southern research stations; the forest products laboratory; the international institute for tropical forestry; and the northeastern area state and private forestry.
Table 7: Funds Made Available for Transfers to Wildfire Suppression, by Forest Service Region and Program, 1999 through 2003

<table>
<thead>
<tr>
<th>Forest Service</th>
<th>K-V Fund</th>
<th>Capital improvements and maintenance</th>
<th>National forest system acquisition</th>
<th>Land capital improvement fund</th>
<th>Wildland fire management and suppression</th>
<th>State and private forestry</th>
<th>Forest range research</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington Office</td>
<td>$639,625</td>
<td>$6,651</td>
<td>$62,708</td>
<td>$242,664</td>
<td>$169,306</td>
<td>$10,393</td>
<td>$10,215</td>
<td>$1,293</td>
<td>$287,959</td>
</tr>
<tr>
<td>Region 1</td>
<td>0</td>
<td>15,387</td>
<td>40,086</td>
<td>114</td>
<td>0</td>
<td>3,733</td>
<td>12,011</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Region 2</td>
<td>0</td>
<td>19,327</td>
<td>18,182</td>
<td>299</td>
<td>0</td>
<td>2,429</td>
<td>5,852</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Region 3</td>
<td>0</td>
<td>21,251</td>
<td>28,054</td>
<td>0</td>
<td>0</td>
<td>5,042</td>
<td>19,427</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Region 4</td>
<td>0</td>
<td>19,472</td>
<td>37,239</td>
<td>46</td>
<td>0</td>
<td>4,680</td>
<td>6,379</td>
<td>112</td>
<td>0</td>
</tr>
<tr>
<td>Region 5</td>
<td>0</td>
<td>43,212</td>
<td>24,302</td>
<td>27</td>
<td>0</td>
<td>8,323</td>
<td>18,576</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Region 6</td>
<td>0</td>
<td>56,686</td>
<td>17,843</td>
<td>76</td>
<td>0</td>
<td>9,281</td>
<td>9,621</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Region 8</td>
<td>0</td>
<td>59,575</td>
<td>16,371</td>
<td>2,114</td>
<td>0</td>
<td>11,667</td>
<td>1,118</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Region 9</td>
<td>0</td>
<td>33,079</td>
<td>19,998</td>
<td>0</td>
<td>0</td>
<td>173</td>
<td>3,751</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Region 10</td>
<td>0</td>
<td>18,552</td>
<td>17,507</td>
<td>0</td>
<td>0</td>
<td>4,671</td>
<td>746</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Labs, research stations, and other units</td>
<td>0</td>
<td>34,127</td>
<td>4,654</td>
<td>0</td>
<td>0</td>
<td>53,841</td>
<td>1,886</td>
<td>32,411</td>
<td>0</td>
</tr>
</tbody>
</table>


Source: Forest Service financial data.

Note: Funds are listed in 2003 dollars.

*Other appropriations include the forest land enhancement, brush disposal, timber salvage sale, forest restoration and improvements, and recreation fee demonstration programs.

*Funds also were made available from research units and labs, such as the north central forest experiment station and the northeastern forest experiment station, the pacific northwest, pacific southwest, rocky mountain, and southern research stations; the forest products laboratory; the international institute for tropical forestry; and the northeastern area state and private forestry.
## Table 8: Transfers to Wildfire Suppression, by Forest Service Washington Office and Regions, as a Percentage of Total Budget Authority, 2002

<table>
<thead>
<tr>
<th>Forest Service</th>
<th>K-V Fund</th>
<th>Capital improvements and maintenance</th>
<th>National forest system</th>
<th>Land acquisition</th>
<th>Working Capital Fund</th>
<th>State and private forestry</th>
<th>Wildland fire management</th>
<th>Forest range research</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington Office</td>
<td>37.9%</td>
<td>24.2%</td>
<td>9.8%</td>
<td>52.6%</td>
<td>71.5%</td>
<td>18.8%</td>
<td>5.5%</td>
<td>7.8%</td>
<td>35.9%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Region 1</td>
<td>0</td>
<td>15.7</td>
<td>19.6</td>
<td>6.8</td>
<td>0</td>
<td>11.4</td>
<td>14.2</td>
<td>6.4</td>
<td>0</td>
<td>15.0</td>
</tr>
<tr>
<td>Region 2</td>
<td>0</td>
<td>18.7</td>
<td>8.5</td>
<td>6.7</td>
<td>0</td>
<td>10.0</td>
<td>10.3</td>
<td>93.3</td>
<td>0</td>
<td>10.9</td>
</tr>
<tr>
<td>Region 3</td>
<td>0</td>
<td>21.1</td>
<td>16.5</td>
<td>0</td>
<td>0</td>
<td>27.1</td>
<td>15.9</td>
<td>96.3</td>
<td>0</td>
<td>16.7</td>
</tr>
<tr>
<td>Region 4</td>
<td>0</td>
<td>20.9</td>
<td>16.7</td>
<td>1.1</td>
<td>0</td>
<td>24.7</td>
<td>7.6</td>
<td>95.7</td>
<td>0</td>
<td>13.7</td>
</tr>
<tr>
<td>Region 5</td>
<td>0</td>
<td>24.1</td>
<td>8.5</td>
<td>0.1</td>
<td>0</td>
<td>19.3</td>
<td>6.7</td>
<td>0</td>
<td>0</td>
<td>8.9</td>
</tr>
<tr>
<td>Region 6</td>
<td>0</td>
<td>45.4</td>
<td>5.5</td>
<td>0.3</td>
<td>0</td>
<td>30.3</td>
<td>44.9</td>
<td>93.7</td>
<td>0</td>
<td>16.5</td>
</tr>
<tr>
<td>Region 8</td>
<td>0</td>
<td>22.9</td>
<td>6.7</td>
<td>12.5</td>
<td>0</td>
<td>7.2</td>
<td>3.5</td>
<td>16.9</td>
<td>0</td>
<td>9.5</td>
</tr>
<tr>
<td>Region 9</td>
<td>0</td>
<td>36.1</td>
<td>11.3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11.1</td>
<td>0</td>
<td>0</td>
<td>13.3</td>
</tr>
<tr>
<td>Region 10</td>
<td>0</td>
<td>19.5</td>
<td>13.1</td>
<td>0</td>
<td>0</td>
<td>17.4</td>
<td>18.4</td>
<td>100</td>
<td>0</td>
<td>15.5</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Forest Service financial data.

Note: Total budget authority includes the allocation for the current year plus carryover from the previous fiscal year.
Appendix IV

Comments from the Department of Agriculture

United States
Department of
Agriculture

File Code: 1310/5130
Date: MAY 18 2004

Mr. Barry T. Hill
Director, Natural Resources and Environment
U.S. General Accounting Office
441 G Street, N.W.
Washington, DC 20548

Dear Mr. Hill:

Thank you for the opportunity to review and comment on the U.S. General Accounting Office (GAO) draft report, "Wildfire Suppression: Funding Transfers Cause Project Cancellations, Strained Relationships, and Management Disruptions (GAO-04-612)." The Agency generally concurs with the findings and recommendations presented in the report. The enclosed comments are intended to clarify a few areas of the report.

If you have any questions, please contact Sandy Coleman, Agency Audit Liaison, at (703) 605-4940.

Sincerely,

DALE N. BOSWORTH
Chief

Enclosure

cc: Sandra Cantler, Hank Kashdan, Ted Beauvais
Appendix IV
Comments from the Department of Agriculture

Forest Service Comments on GAO Audit Report,
"Funding Transfers Cause Project Cancellations, Strained Relationships, and Management Disruptions
(GAO-04-612)"

General Comments:

1. The Forest Service agrees that improving fire suppression cost estimates would be beneficial in terms of both budget planning and reducing the impacts on other important Agency programs. However, ultimately the best strategy for reducing the impacts on other programs is to reduce fire suppression costs through continued aggressive fuel reduction activities and maintaining a strong initial attack force.

2. While GAO's report adequately portrays the negative impacts funding transfers have on the programs that the money is taken from, it does not address the potential consequences associated with not making these transfers. The negative impacts could include: (1) not having adequate personnel or equipment to address the fires as they occur, (2) an increase in the number of acres burned, and (3) an increase in the loss of homes and other property—all of which could lead to a further increase in suppression expenditures. Additional impacts could include a decrease in fire-fighter safety and long-term economic consequences to rural communities.

Specific comments:

Page 3, 1st paragraph: Change "single reforestation program" to "single reforestation/timber sale area restoration trust fund." The K-V fund is more than just reforestation.

Page 4: The discussion hints that there were "program deficits" which is true but can be misleading. External parties would be inclined to criticize the Agency as a result of this discussion. The Forest Service concurs with GAO that specific Unit deficits occurred; however, a deficit did not occur at the Agency-level. The discussion should note that "no violations of the Anti-Deficiency Act occurred."

Page 9, top of the page: Although no formal assessments have been performed, the Agency is implementing a new model in an effort to improve forecasting. This should be acknowledged in the report.

Page 12, 1st paragraph: Add "Forest Legacy" to the sentence as follows: "...such as community assistance and Forest Legacy project grants..." This acknowledges the program in the report and gives credit for restoring those funds.

Page 25, 1st paragraph, last sentence: Change the sentence to read, "As of April 2004, the Forest Service will not be able to continue the program unless Congress appropriates funds for FY 2005 or subsequent years of the authorization period."
Comments from the Department of Agriculture

Page 57 GAO-04-612 Wildfire Suppression Funding Transfers

Appendix IV

Page 26, 1st paragraph: The paragraph discusses insufficient funds in the K-V Fund. However, due to fire repayments and reconciliations, there is sufficient cash to fully implement the planned FY 2004 and FY 2005 programs of work. These repayments and reconciliations had not occurred when GAO performed their field work. The paragraph should be replaced as follows:

Funding transfers have left the Forest Service with insufficient funds to pay for all of the K-V projects it planned at the time the funds were collected. Over the past 5 years, about $640 million has been transferred from the K-V fund for wildfire suppression, while only $540 million has been reimbursed. Moreover, transfers have been made from the K-V fund for decades with only partial reimbursement. Since the mid-1980s, about $2.3 billion has been transferred from the K-V fund and only $1.9 billion has been reimbursed. While there has always been sufficient cash in the K-V fund to fully implement the planned K-V program of work in any given year, faced with unpredictable information about funding transfers and reimbursements, it has been difficult for the Forest Service to reliably estimate how much will be deposited into and withdrawn from the K-V fund, and therefore to effectively manage the fund and the program it supports.

Page 29: The discussion hints that there were “program deficits” which is true but can be misleading. As a result of this discussion, many external parties would be inclined to criticize the Agency. The Forest Service concurs with GAO that specific Unit deficits occurred, however, a deficit did not occur at the Agency level. Footnote #15 is not sufficient. The discussion (and footnote) should note that “no violations of the Anti-Deficiency Act occurred.”

Page 33, bottom of page: The paragraph states that “Agency officials…believe the 10-year average is the best available method for estimating wildfire suppression costs.” In fact, Agency officials have recognized the weaknesses associated with using the 10-year average for some time and have looked into other methods that could more accurately predict future suppression costs. Proposals have included continued use of the 10-year average, using a 5-year average or inflating the historical costs to current dollar values to more accurately predict future suppression costs. In addition, Agency officials have also discussed various modeling methods with researchers who have said that they can design a model that would be more accurate than the 10-year average. However, this would require developing a very expensive, complex model.

Page 47, Appendix II, Table 4: Change "LWCF" to "L&WCF (Land and Water Conservation Fund)."

Page 47, Appendix II, Table 4, footnote 21: Change "federal land enhancement" to "Forest Land Enhancement."

Page 50, Appendix III, Table 6, footnote 27: Include in the list "Northeastern Area State and Private Forestry."
Page 51, Appendix III, Table 7, footnote 31: Include in the list "Northeastern Area State and Private Forestry," considering they are the major source of State and Private Forestry funds for the $53.841 million.
Appendix V

Comments from the Department of the Interior

United States Department of the Interior
OFFICE OF THE ASSISTANT SECRETARY
POLICY, MANAGEMENT AND BUDGET
Washington, DC 20240

MAY 12 2004

Barry T. Hill, Director
Natural Resources and Environment
United States General Accounting Office
441 G Street, N.W.
Washington, DC 20548

Dear Director Hill:

Thank you for giving us the opportunity to review the draft report, Wildfire Suppression: Funding Transfers Cause Project Cancellations, Strained Relationships, and Management Disruptions (GAO-04-612). The report is well-researched and well-prepared and appropriately focuses on the impacts to agency programs resulting from the transfers of funds to pay for wildfire suppression activities. We agree with the fundamental premise of the report that there are multiple negative impacts that result from moving funds from approved projects and purposes to emergency wildland fire response. The report also correctly notes that predicting wildland fire suppression costs is inherently difficult because of the unpredictable nature of wildfires.

The Department of the Interior does not dispute the findings of the GAO study. However in summarizing these impacts, careful attention should be given to distinguishing between the Department of the Interior and the U.S. Forest Service to avoid giving the impression that the methods of borrowing funds for fire suppression, and the resulting impacts to non-fire programs, are the same for both agencies. The subtle caveats and distinctions buried in the report may be insufficient to dispel more prominent and blanket statements made at other places in the report. For example, at the bottom of page three in the Results in Brief section of the report, GAO states: “Both agencies cancelled and delayed contracts, grants, and other activities for projects involving, among other things, fuels reduction, construction, land acquisition, and resource management.” The Department of the Interior has limited its fire borrowings to construction and land acquisition accounts and relatively small amounts from within the Wildland Fire Management account. It has not borrowed from resource management or other operating accounts that would disrupt or impede on-the-ground activities such as park and refuge operations, resource protection, or BIA school operations. Similarly, the clarification on page six of the report that Interior transferred funds “primarily” from two programs, construction and land acquisition, is incorrect. The Department transferred funds only from these accounts. Even when Interior has shifted funds within the Wildland Fire Management account to suppression, most of these funds have been redirected from the fire facilities and maintenance budget, which like the other Interior construction accounts, has significant carryover balances.

1
Appendix V
Comments from the Department of the Interior

As noted in the report, the inherent uncertainty of predicting fire costs has been problematic during the fire season. To compensate for this uncertainty, the Department deliberately borrows funds in conservative increments to avoid excessive borrowing that could be more disruptive to the construction and land acquisition programs. Incremental borrowing, considered alone, should not be interpreted as evidence of poor forecasting.

One of the major recommendations in the report is that the agencies “improve their methods for estimating annual wildfire suppression costs by more effectively accounting for annual changes in costs and the uncertainties associated with wildfires in making estimates, so that funding needs for wildfire suppression can be predicted with greater accuracy...” The Department concurs with GAO that the program’s methods for forecasting suppression costs during the course of the fire season are not highly accurate in predicting future fire activity and suppression costs. In recognition of this, Interior has contracted with the Forest Service’s Intermountain Research Station to develop a new statistical forecasting system designed to improve the agency’s ability to predict the potential costs for suppression operations each year. The model will consider historical costs and fire season severity, comparing the predicted fire season conditions with those of the past. It will then project probabilities for costs for the approaching fire season. The model data will be updated with the actual occurrences as the season progresses, improving the reliability of the projections. It will be used for the first time during the 2004 western fire season.

The GAO recommends that alternative methods should be considered for improving the annual suppression cost estimates that are used in formulating agency budget requests and Congressional appropriations. The Department recognizes that predicting future fire activity and suppression costs is inherently difficult. Given these uncertainties, the Department believes that the use of the 10-year suppression cost average has proved to be a reasonable and durable basis for suppression budgeting. Although suppression costs have exceeded the 10-year average in the past several fire seasons, looking back historically there have been years in which suppression costs were below the average. For example, during the four fire seasons from 1995 to 1998 costs were below the average in three seasons.

Our final comment is in response to the suggestion that a government-wide reserve account might see an increase in spending for one agency offset by a lower than usual spending by another agency. In recent years, the costs for both agencies have tended to move in tandem. As most of the suppression costs are incurred in a relatively small percentage of large fires each year, the costs are borne by all of the agencies who send firefighters and equipment. As a rule, each agency helps fight large fires on lands managed by the other. Consequently, the costs tend to rise and fall proportionately for both. Therefore, it is unlikely that one agency would be able to offset the costs of the other.
In closing, I would like to express my appreciation for a balanced and thorough examination of the issues surrounding wildland fire suppression funding. The Department of the Interior will use this report as a point of reference as we deal with fire management funding issues in the future.

Sincerely,

P. Lynn Scarlett
Assistant Secretary
Policy, Management and Budget
# GAO Contact and Staff Acknowledgments

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<td>In addition to the individual named above, Nathan Anderson, Paul Bollea, Christine Bonham, Christine Colburn, John Delicath, Timothy Guinane, and Richard Johnson made key contributions to this report.</td>
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