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FEDERAL LAND MANAGEMENT

Use of Stewardship Contracting Is Increasing, but Agencies Could Benefit from Better Data and Contracting Strategies



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Highlights

Highlights of [GAO-09-23](#), a report to congressional requesters

Why GAO Did This Study

The Department of Agriculture's Forest Service and the Department of the Interior's Bureau of Land Management (BLM) have stewardship contracting authority, which allows the agencies to trade goods—such as timber—for services (e.g., thinning forests or rangelands) that the agencies would otherwise pay for with appropriated dollars, and to enter into stewardship contracts lasting up to 10 years. The authority is set to expire in 2013. GAO was asked to determine, among other things, (1) the extent to which the agencies are using stewardship contracting and (2) what successes and challenges the agencies have experienced in using it. In doing so, GAO assessed agency data, reviewed project files, and visited projects in numerous locations.

What GAO Recommends

GAO recommends that the Secretaries of Agriculture and the Interior (1) develop a strategy for the use of long-term contracts, including criteria on when such contracts are appropriate and potential options for funding them, and (2) improve their data collection systems to ensure that accurate and complete data are maintained. In commenting on a draft of this report, the Forest Service and BLM generally agreed with its findings and recommendations.

To view the full product, including the scope and methodology, click on [GAO-09-23](#). For more information, contact Robin M. Nazzaro at (202) 512-3841 or nazzaror@gao.gov.

FEDERAL LAND MANAGEMENT

Use of Stewardship Contracting Is Increasing, but Agencies Could Benefit from Better Data and Contracting Strategies

What GAO Found

From fiscal years 2003 through 2007, the Forest Service and BLM awarded a combined total of 535 stewardship contracts, with the number increasing each year—from 38 in fiscal year 2003 to 172 in fiscal year 2007. However, for certain aspects of stewardship contracting, such as the acres involved or the value of the services exchanged for goods, reliable data were not available for the full 5-year fiscal period because neither agency has had a comprehensive database of its stewardship contracting activity since 2003. The agencies did not begin to maintain nationwide stewardship data until recently, primarily because of difficulties in adapting their systems to account for all aspects of stewardship contracting. Further, these data are not complete, and reside in myriad systems, not all of which interface with one another. These deficiencies keep the agencies and Congress from accurately assessing the costs and value of stewardship contracting.

The agencies credit stewardship contracting with allowing them to accomplish more work—by allowing them to trade goods for services, thereby extending their budgets for thinning and other services—and spurring collaboration with members of the community and environmental groups. But stewardship contracting has its challenges too, including some resistance to its use (e.g., by contractors unfamiliar with it) and a paucity of markets for the small trees typically removed in stewardship projects. Also, although agency officials view long-term multiyear contracts as crucial to market development, these contracts can involve financial challenges. These contracts are attractive because they offer contractors and industry operators some certainty of supply, enabling them to obtain loans for equipment or processing facilities, which can then spur demand for materials resulting from stewardship projects. But such contracts can require a substantial up-front obligation of funds—to protect the contractor's investment if the government later cancels the contract—that may exceed the budget of a field unit (e.g., a national forest). Also, funding the annual work specified in the contract can force a unit to scale back its other programs if the value of the timber removed is not sufficient to pay for that work. Yet neither agency has developed a strategy for using such contracts, a step that could help field units determine which projects are appropriate for these long-term contracts and how they would be funded.

Goods for services: One project exchanged pine logs for a tribal ceremonial roundhouse (under construction at left) for service work that included installing a culvert (right)



Source: Frontier Builders, Inc.



Source: GAO.

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Abbreviations

BLM	Bureau of Land Management
ccf	hundred cubic feet
FAR	Federal Acquisition Regulation
FPDS-NG	Federal Procurement Data System—Next Generation
IDIQ	indefinite delivery/indefinite quantity
IRSC	integrated resource service contract
IRTC	integrated resource timber contract
K-V	Knutson-Vandenberg
MOU	memorandum of understanding
O&C	Oregon and California
TSA	Timber Sale Accounting
WUI	wildland-urban interface

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United States Government Accountability Office
Washington, DC 20548

November 13, 2008

The Honorable Jeff Bingaman
Chairman
Committee on Energy and Natural Resources
United States Senate

The Honorable Ron Wyden
Chairman
Subcommittee on Public Lands and Forests
Committee on Energy and Natural Resources
United States Senate

Recent severe wildland fire seasons have focused attention on the state of the nation's forests. Many of these forests have become dense with small, tightly spaced trees and thick brush, which—combined with drought, wind, insect damage, and other adverse conditions—have fueled extensive wildland fires in recent years. In response, both the Department of Agriculture's Forest Service and the Department of the Interior's Bureau of Land Management (BLM) have placed substantial emphasis on thinning forests and rangelands to help reduce the buildup of potentially hazardous fuels. The Forest Service and BLM, which together manage a total of about 450 million acres of federal land, have frequently cited the importance of one tool—stewardship contracting—in their efforts to reduce hazardous fuels and restore forest health. This tool was designed to help the agencies conduct land management projects—such as thinning forests, installing culverts, harvesting timber, and the like—more efficiently, by allowing them to use any of several innovative contracting approaches. For example, through stewardship contracting, the agencies can trade goods—such as timber—for fuel reduction or forest restoration services that the agencies would otherwise pay for with appropriated dollars.

In conducting stewardship projects—i.e., projects carried out through stewardship contracting authorities—the agencies use various types of stewardship contracts, as well as agreements, in which partner organizations contribute resources toward project accomplishment. Some types of contracts are large “umbrella contracts” under which individual task orders are issued for discrete projects or portions of a project.¹ In

¹Task order refers to an order for services placed against an established contract.

some cases, a single large stewardship contract, task order, or agreement may encompass multiple projects; in other cases, a single stewardship project may involve multiple contracts, task orders, or agreements. In this report, references to stewardship contracts generally include task orders and agreements as well.

The stewardship contracting authorities were first authorized for use by the Forest Service on a pilot basis in October 1998, when the Omnibus Consolidated and Emergency Supplemental Appropriations Act for 1999 established stewardship contracting authority to achieve national forest land management goals that meet local and rural community needs.² Prominent among the stewardship contracting authorities is the ability to trade goods for contract services—that is, to use the value of forest products sold to offset the cost of the contracted services, thereby allowing the accomplishment of more work within existing appropriations. Under such goods-for-services contracts, the Forest Service could, for example, pay for some or all of needed thinning operations by using the proceeds from any commercial timber sold as part of the project. Other prominent stewardship contracting authorities include the ability to (1) retain for use in future stewardship projects any receipts generated through selling forest products such as timber,³ rather than returning the receipts to the Department of the Treasury’s general fund, as required with traditional timber sales—thereby providing additional funds for local land management units to conduct restoration work, and (2) implement long-term contracts of up to 10 years—thereby providing contractors some assurance that they can obtain a steady supply of material, an important consideration when contemplating investment in equipment or facilities that can use the material removed through stewardship projects.

The 1998 law stated that the land management objectives of stewardship projects were to include road and trail maintenance, watershed restoration, prescribed burning, and noncommercial tree removal to improve forest health. Although stewardship contracting was initially established as a demonstration program that involved a limited number of projects within the Forest Service and was to end in 2002, the Consolidated Appropriations Resolution of 2003, among other things, extended the use of stewardship contracting authority to 2013, eliminated the limit on the number of projects, authorized commercial tree removal

²Pub. L. No. 105-277, § 347, 112 Stat. 2681-298 (1998).

³These retained receipts may be used without further appropriation.

for forest health purposes as a project objective, and extended the use of stewardship authority to BLM.⁴ In 2004, we reported on the projects undertaken by the Forest Service under the initial stewardship contracting authority.⁵

The Forest Service and BLM are now about halfway through the extended authority period, and stewardship contracting is increasingly seen as a way for the agencies to implement long-term large projects. In this context, you asked us to determine (1) the extent to which, and for what purposes, the agencies are using stewardship contracting; (2) what processes the agencies use in planning, implementing, and monitoring stewardship projects to manage resources; and (3) what successes and challenges the agencies have experienced in using stewardship contracting.

In conducting our review, we reviewed Forest Service and BLM documents and guidance related to stewardship contracting; analyzed reports from systems that track stewardship project information, including information on the volume and value of goods traded for services; and met with agency headquarters officials. We also visited one or more stewardship contracting projects in seven of the nine Forest Service regions and in most of the western states in which BLM manages land.⁶ At the locations visited, we reviewed project financial and contracting files and met with agency officials (and, at some sites, with project contractors and local citizens) to obtain information about project planning, implementation, and monitoring, including community involvement in the projects. We also obtained agency officials' views on the successes and challenges they have experienced in using stewardship contracting. Although the information derived from our discussions and site visits cannot be generalized nationwide, the projects we selected represent a mix of stewardship contracting projects by virtue of their geographic diversity and the variety of project objectives, activities, and accomplishments. Appendix I contains details on the objectives, scope,

⁴Pub. L. No. 108-7, § 323, 117 Stat. 275 (2003).

⁵GAO, *Federal Land Management: Additional Guidance on Community Involvement Could Enhance Effectiveness of Stewardship Contracting*, GAO-04-652 (Washington, D.C.: June 14, 2004).

⁶Although there are 12 BLM state offices—11 in the West and 1 in the East—the vast majority of BLM-managed land and stewardship activity is in the West. Therefore, we did not include the Eastern States Office in our review.

and methodology of our review, which included an assessment of data reliability and internal controls. We conducted this performance audit from August 2007 through October 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Results in Brief

Although the Forest Service and BLM have awarded increasing numbers of stewardship contracts since fiscal year 2003, neither agency maintains a database that allows a complete and comprehensive picture of its stewardship contracting projects during this time. The agencies did not begin maintaining nationwide data until recently, but even these data are incomplete and inconsistent—some data are not tracked at all, while other data are available only for recent years or only on a cumulative basis rather than by fiscal year. Further, in each agency, stewardship data reside in more than one system, not all of which interface with one another, thereby preventing the agencies from efficiently and accurately reporting on their stewardship activities, although both agencies are taking steps to improve their data systems. Despite these limitations, reliable data were available to show that over the 5-year fiscal period 2003 through 2007, the two agencies awarded a combined total of 535 stewardship contracts, with the number awarded increasing each year—from 38 in fiscal year 2003 to 172 in fiscal year 2007. For other aspects of stewardship, however, reliable data were not available for the entire 5-year fiscal period. Data on the volume of timber sold (i.e., sold for cash or exchanged for services) were available for both agencies for only the 3-year fiscal period 2005 through 2007, during which the Forest Service sold about 130 million cubic feet of timber and BLM sold about 8 million cubic feet. During that same period, the Forest Service treated (e.g., thinned, cleared of brush, or burned) about 172,500 acres through stewardship projects, but comparable data were not available for BLM, which maintained only initial estimates of acres to be treated. For the 2-year fiscal period 2006 through 2007, the value of timber sold through stewardship projects was about \$8.2 million for the Forest Service and about \$5.9 million for BLM. For that same 2-year fiscal period, the value of services procured through stewardship contracts was about \$10.5 million for BLM, but comparable data were not available for the Forest Service. In both agencies, stewardship projects typically involved removing timber or other vegetation to reduce hazardous fuels or to otherwise improve forest health. Other activities

included restoring streams to improve fish habitat and creating and preserving nesting sites for birds. To enhance the agencies' ability to track and report on their stewardship projects, we are recommending that the agencies consider, in their ongoing efforts to improve their data systems, actions that will ensure the collection of complete, consistent, and integrated data.

Overall, the agencies use similar processes for planning and monitoring stewardship projects but have different approaches to implementing them. Both agencies' planning and monitoring processes focus on working with stakeholders (e.g., community members and interest groups) to identify suitable projects and to monitor those projects to ensure that they achieve the intended restoration goals. In some cases, the monitoring efforts also assessed other outcomes, such as a project's effects on the local economy. The level of community involvement in planning and monitoring varied by project, however, depending in part on the local community's interest. Regarding project implementation, the agencies differ in the types of contracts typically used and in the type of contractor they work with. The Forest Service relies heavily on timber-type stewardship contracts, in which the value of the timber sold exceeds the value of the services procured, with the Forest Service receiving the difference in cash—which it then uses to pay for service work on other stewardship projects. On the other hand, BLM relies primarily on service-type contracts, in which the value of the services procured usually exceeds the value of the timber sold, with BLM paying the difference in cash. And while the Forest Service awards most of its stewardship contracts through full and open competition, BLM generally sets aside its stewardship contracts for competition by small businesses only. In addition to contracts, both agencies also have in place some cooperative stewardship agreements, through which partners (e.g., the National Wild Turkey Federation) contribute funding, personnel, or equipment with which to carry out restoration goals.

The Forest Service and BLM credit stewardship contracting with helping them accomplish more work and build collaborative partnerships, but they also note that using it poses some challenges. The agencies can accomplish more work "on the ground" because they can trade forest products for some of the services received rather than paying for the services with appropriated funds, thereby freeing those funds for additional work. Also, the agencies have developed collaborative partnerships by bringing together individuals who represent diverse interests from within and outside the agencies to discuss what work should be done and in what way. Stewardship contracting is not without

challenges, however. First, the Forest Service and BLM have faced some resistance to using stewardship contracting—in part from agency staff and contractors unfamiliar with its use. Second, market uncertainties can pose challenges. In many areas of the country, according to agency officials, the paucity of markets for small-diameter forest products prevents contractors from selling the products they remove under stewardship contracts. Without marketable products, the agencies have nothing to trade for the services received, and so must use appropriated funds instead to pay for those services. And third, as happened with the one long-term (i.e., 10-year) multiyear contract that had been implemented at the time of our review, the agencies may face challenges in providing sufficient funds to award and implement long-term multiyear contracts, particularly while continuing to fund other agency activities. A contractor entering into a multiyear contract may want a substantial cancellation ceiling—the amount an agency obligates at the inception of a multiyear contract to protect the contractor’s investment and the government’s interest in case the government later cancels the contract. Faced with this up-front obligation requirement, a field unit (e.g., a national forest or district office) might be reluctant to enter into a multiyear contract that involves a large cancellation ceiling, thereby forgoing an opportunity to stimulate the market for small-diameter materials. Another difficulty in using multiyear contracts is that funding the annual service work included in a multiyear contract can cost more than anticipated, and thus can consume a substantial portion of a field unit’s annual budget, requiring the unit to curtail other programs to pay for the ongoing multiyear contract. Although the agencies have taken steps to address the first two challenges, such as conducting training courses and workshops to help overcome resistance to the tool’s use and supporting efforts by entrepreneurs and researchers to find cost-effective uses for forest products, they have not developed strategies for the nationwide use of long-term stewardship contracts. In particular, neither agency has established a strategy defining the role that long-term multiyear contracts should play in stimulating the market for small-diameter materials or how the associated cancellation ceilings will be funded. Accordingly, we are recommending that the agencies develop strategies to guide their use of long-term multiyear stewardship contracts in stimulating markets for small-diameter materials and to inform units’ decisions about implementing such contracts. In commenting on a draft of this report, the Forest Service and BLM generally agreed with its findings and recommendations.

Background

In managing federal lands, the Forest Service and BLM often contract for services such as road maintenance, forest thinning, and other activities.

They also frequently contract to sell forest resources such as timber or firewood. Traditionally, these contracts have been executed separately—service contracts have generally been funded with appropriated funds from the agencies’ budgets, while timber has been sold through contracts with private purchasers. The Omnibus Consolidated and Emergency Supplemental Appropriations Act for 1999 authorized the Forest Service to combine these contracting mechanisms by entering into “stewardship end result contracts,” under which the agency could use the value of forest products sold to offset the cost of the contracted services. Under such goods-for-services contracts, the Forest Service could, for example, pay for thinning operations by using the proceeds from any commercial timber sold as part of the project.

In addition to authorizing contracts, the act authorized the use of agreements to carry out stewardship projects. According to Forest Service and BLM guidance, the decision on whether to use contracts or agreements should be based on the principal purpose of the award, including its intended primary beneficiary.

- *Contracts.* The primary beneficiary of a contract is the federal government. Contracts are used for the purchase of goods and services for the direct benefit of the government or for the sale of government property such as timber. A contract is a mutually binding legal relationship obligating the seller to furnish supplies or services and the buyer to pay for them. Agency guidance directs that contracts rather than agreements be used for projects that are highly complex or financially risky.
- *Agreements.* Agreements are typically used to transfer a thing of value to a state or local government, or other recipient, to carry out a public purpose. According to the agencies, agreements are often used for projects that are for the mutual interest and benefit of the government and a cooperating organization—often a nonprofit organization or a state or local government. Under such agreements, both the government and the cooperating organization share the costs of the project, with the cooperator contributing funding, personnel, or equipment.

A variety of agreements, including those entered into under the Wyden Amendment, may be used to implement stewardship contracting projects. Under the Wyden Amendment, the Forest Service and BLM may enter into cooperative agreements with landowners for the protection, restoration, and enhancement of fish and wildlife habitat and other resources on public or private land, as long as the agreement benefits the fish, wildlife,

and other resources on national forest and BLM lands within the watershed.

Additional contracting authorities were also included in the legislation; the full list of authorities follows. (Stewardship contracting authority was initially granted only to the Forest Service; in 2003 it was extended to BLM.)

- *Goods for services* allows the agency to use the value of commercial products, such as timber, to offset the cost of services received, such as thinning, stream improvement, and other activities.
- *Designation by description or prescription* allows the agency to conduct a timber harvest by providing the contractor with a description of the desired end result of the harvest. For example, the agency might require that all ponderosa pine less than 10 inches in diameter be harvested. Ordinarily, cutting any standing tree before an agency employee has marked or otherwise designated it for cutting is prohibited.
- *Multiyear contracting* allows the agency to enter into stewardship contracts of up to 10 years in length. (Standard service contracts are limited to 5 years, although timber sale contracts of up to 10 years were already authorized for the Forest Service.)
- *Retention of receipts* allows the agency to retain receipts generated from the sale of commercial products sold through stewardship contracts, rather than returning the funds to the Department of the Treasury's general fund. The receipts are available for expenditure, without further appropriation, on other stewardship contracting projects.
- *Exception to advertising* exempts the agency from the requirement under the National Forest Management Act that all sales of timber having an appraised value of \$10,000 or more be advertised.⁷
- *Supervision of marking and harvesting of timber sales* exempts the agency from the requirement that only federal agency employees supervise the harvesting of trees on agency-managed lands. This authority has

⁷Under the National Forest Management Act of 1976, the Forest Service develops land and resource management plans that guide all natural resource management activities on the national forests. The act includes provisions governing timber sales from national forest lands.

allowed the agencies to use certain state agencies to assist in stewardship contracting.⁸

- *Best-value contracting* requires the agency to consider other factors—such as past performance or work quality—in addition to price when making stewardship contract award decisions.⁹

The 1999 law authorized 28 stewardship contracts by the Forest Service; the authority of the Forest Service to enter into these contracts was to end on September 30, 2002. Contracts were to “achieve land management goals for the national forests that meet local and rural community needs.” The goals listed in the legislation included, but were not limited to, maintaining or obliterating roads and trails to restore or maintain water quality; noncommercially cutting or removing trees or other activities to promote healthy forest stands, reduce fire hazards, or achieve other noncommercial objectives; and restoring and maintaining wildlife and fish habitat. The law also required that the Forest Service establish a multiparty monitoring and evaluation process to assess each stewardship contract.

Subsequent laws modified the requirements of the initial stewardship contracting authority. For example, the Consolidated Appropriations Act of 2000 changed the requirement from 28 stewardship contracts to 28 stewardship projects, allowing for the possibility that individual projects might involve more than one contract.¹⁰ Subsequent legislation in the following 2 years increased the number of authorized projects and changed the end date of the demonstration period from 2002 to 2004.¹¹ Most recently, the Consolidated Appropriations Resolution of 2003

⁸The Department of the Interior and Related Agencies Appropriations Act of 2001 authorized the Forest Service to permit the Colorado State Forest Service to conduct watershed restoration and protection services on national forest land in Colorado when the state agency is performing similar services on adjacent state or private land. Subsequently, the Consolidated Appropriations Act of 2005 provided similar authority to BLM regarding its lands in Colorado and authorized the Forest Service to permit the Utah State Forester to perform restoration services on national forest land in Utah.

⁹In contrast to the other stewardship authorities, best-value contracting was not newly introduced in the stewardship legislation. The Forest Service and BLM had been permitted to procure services on a best-value basis prior to the legislation. Under the stewardship contracting legislation, however, the agencies are required—rather than simply permitted—to use best-value contracting when awarding stewardship contracts.

¹⁰Pub. L. No. 106-113, 113 Stat. 1501A-201 (1999).

¹¹Pub. L. No. 106-291, 114 Stat. 998 (2000); Pub. L. No. 107-63, 115 Stat. 471 (2001).

extended the authority to enter into stewardship contracts to 2013, extended stewardship contracting authority to BLM, removed the restriction on the number of projects that could be implemented under this authority, removed the emphasis on noncommercial activities among the land management goals listed, and replaced the requirement for multiparty monitoring and evaluation of each project with a requirement to monitor and evaluate the overall use of stewardship contracting.

Stewardship contracting projects are subject to environmental and resource management laws—such as the National Environmental Policy Act, the Endangered Species Act, and others—that also apply to nonstewardship projects. Responsibility for administering stewardship contracting authority at the Forest Service lies within two agency offices: the Forest and Rangeland Management Group and the Acquisition Management Group. Each of the nine Forest Service regions has designated a stewardship contracting coordinator to facilitate stewardship contracting activities. These nine regions oversee 155 national forests; the forests, in turn, oversee more than 600 ranger districts. Within BLM, authority for administering stewardship contracts resides within its Division of Forests and Woodlands. Each of BLM’s 12 state offices also has a stewardship contracting coordinator. The state offices oversee the activities of field-level units, including 144 district and field offices that carry out the on-the-ground activities. References to “field units” in this report include the Forest Service’s national forests and ranger districts and BLM’s district and field offices.

Both agencies generally consider stewardship contracting to be a tool, rather than a program, because it has no associated budget or official accomplishment targets. Instead, the agencies must use existing appropriations to plan and administer their stewardship contracting activities. The Forest Service primarily relies on its fuel reduction and vegetation and watershed management funds to carry out stewardship contracting activities; BLM primarily relies on its forestry and fuel reduction funds. When the agencies use agreements to carry out stewardship projects, the partner organizations typically contribute resources such as funding, volunteer labor, or equipment.

Use of Stewardship Contracting Is Increasing, but Agency Data Are Incomplete

The agencies awarded increasing numbers of stewardship contracts during fiscal years 2003 through 2007; however, details about their overall use of stewardship contracting are incomplete because the agencies did not begin to collect nationwide data until recently, and even these data are not complete or consistent across agencies. As a result, certain data are available only for more recent years or are not tracked at all, limiting the agencies' ability to evaluate their implementation of stewardship contracting and provide information on its use to Congress and other interested parties. From fiscal years 2003 through 2007, the number of stewardship contracts that the agencies awarded increased each year. For the Forest Service, the number of contract awards increased from 36 in fiscal year 2003 to 121 in fiscal year 2007, for a total of 352; for BLM, the number increased from 2 to 51 during the same period, for a total of 183 contracts awarded through fiscal year 2007.¹² For other aspects of stewardship projects, however, reliable data were available only for more limited periods of time. For example, complete and comparable data on the volume of timber sold (i.e., sold for cash or exchanged for services) were available only for fiscal years 2005 through 2007. During that period, Forest Service stewardship projects sold about 130 million cubic feet of timber; BLM projects sold about 8 million cubic feet. During the same 3-year fiscal period, Forest Service projects treated about 172,500 acres; BLM did not maintain data on acres treated through stewardship contracts. And during fiscal years 2006 and 2007, the Forest Service sold at least \$8.2 million worth of timber through stewardship contracts, while BLM sold about \$5.9 million. During the same 2-year fiscal period, BLM procured services valued at about \$10.5 million through stewardship contracts; comparable data were not available for the Forest Service. The agencies' stewardship projects generally involved removing timber or other vegetation to reduce hazardous fuels or to otherwise improve forest health; the projects also encompassed various activities that benefited communities or met other restoration objectives, such as controlling disease or improving wildlife habitat.

¹²In addition to contracts, the BLM numbers include the four agreements BLM had entered into through fiscal year 2007, which are intermingled with contracts in BLM's tracking system. The Forest Service numbers do not include agreements because that agency does not track agreements nationally. Forest Service officials told us that from fiscal year 2003 through fiscal year 2007, the agency had entered into 12 agreements with partner organizations, but data on these agreements—such as timber volume or acreage involved—are not captured in automated systems.

The Forest Service and BLM Recently Began Collecting Nationwide Stewardship Data, but Neither Agency Collects Complete or Consistent Data

Neither the Forest Service nor BLM maintains data that provide a complete national view of stewardship projects. The agencies did not begin maintaining nationwide data on stewardship contracting projects until recently—primarily because of difficulties in adapting their systems to account for all aspects of stewardship projects. The agencies have adopted ways of collecting and reporting data specific to their respective needs and current capabilities, but the agencies must assemble data from various automated and manual sources to capture a complete picture of their stewardship contracting projects and accomplishments. Further, neither agency has a system that separately tracks data on stewardship agreements.

The Forest Service has modified its existing Timber Sale Accounting (TSA) system to incorporate information on stewardship projects, including the collection and distribution of revenues stemming from stewardship contracts. But the Forest Service did not begin consistently distinguishing stewardship contracts (and their associated service credits) from conventional timber sale contracts in TSA until the beginning of fiscal year 2007. This approach tracks actual dollar values within TSA but has been challenging because the barterlike aspect of stewardship contracting makes it difficult to account for using traditional accounting systems like TSA. TSA was designed to account only for the value of timber sold and the cash received for it, and it was difficult for the Forest Service to adapt the system to account for the value of services received in exchange for timber. Additionally, when entering data, regions vary in whether they assign one number for an entire contract or a number for each task order within a contract. Other nonmonetary information about stewardship projects, such as the number of acres treated, is collected by the national stewardship contracting coordinator through a variety of other sources, including direct contact with regional and forest staff. Information on the value of services over \$3,000 purchased as part of certain stewardship projects is maintained in the Federal Procurement Data System—Next Generation (FPDS-NG). However, the system contains information on only some stewardship contracts—those in which the value of services exceeds the value of the timber. Further, these contracts are not consistently distinguished from other types of contracts (i.e., standard procurement contracts) in this system, so complete information specific to stewardship projects cannot be extracted.

The Forest Service does not maintain national data on stewardship activities conducted through agreements rather than contracts. The Forest Service has not yet determined how to modify its systems to incorporate data from agreements under which, as with contracts, forest products may

be exchanged for services. The expectation is that stewardship agreements will go through the same accounting measures as contracts do, but it is unclear how forests are to keep track of the services performed under stewardship agreements. This is made more complicated by the fact that partnership agreements are no longer the simple instruments they have traditionally been. Now, for example, timber might be harvested under stewardship agreements, whereas it was traditionally harvested under contracts. In fact, lacking data on agreements, Forest Service officials were not certain whether timber has yet been sold under an agreement or by what means it would be tracked in agency databases if it were.

In contrast to the Forest Service's approach, BLM developed a dedicated stewardship contracting tracking system that BLM staff began using during calendar year 2005, but not all data in this system are validated, and the system does not interface with any other BLM system. Prior to the availability of this tracking system, staff in the field offices generated and maintained their own spreadsheets to track the stewardship project data they found useful. When the agencywide tracking system was developed, according to the system manager, the agency did not impose standards to guide the range and format of data entries or ensure consistency of data elements, such as contract award dates or the format of numerical values. The system contains data on the value of timber sold and services purchased; these data are reconciled manually with BLM's accounting system rather than being directly tied to the system to allow automated reconciliation. Other information about stewardship contracts, such as the volume of products harvested, is collected by BLM's stewardship contracting data manager through a variety of other sources, including direct contact with field staff. Also, unlike the Forest Service, which does not track agreements in its system, BLM includes agreements in its data system but cannot readily distinguish them from contracts. However, BLM has an effort under way to upgrade its system to improve data consistency and bring the system into compliance with accounting standards; the upgrade is expected to be completed in October 2008. Once completed, this upgraded system is intended to allow BLM to standardize data definitions, as well as to aggregate multiple contracts associated with a single project, in order to better track costs and accomplishments. It is unclear, however, whether the upgraded system will be able to accurately account for the values of products and services procured through stewardship agreements.

The lack of complete data hampers the agencies' ability to evaluate their use of stewardship contracting and to provide details on its use to

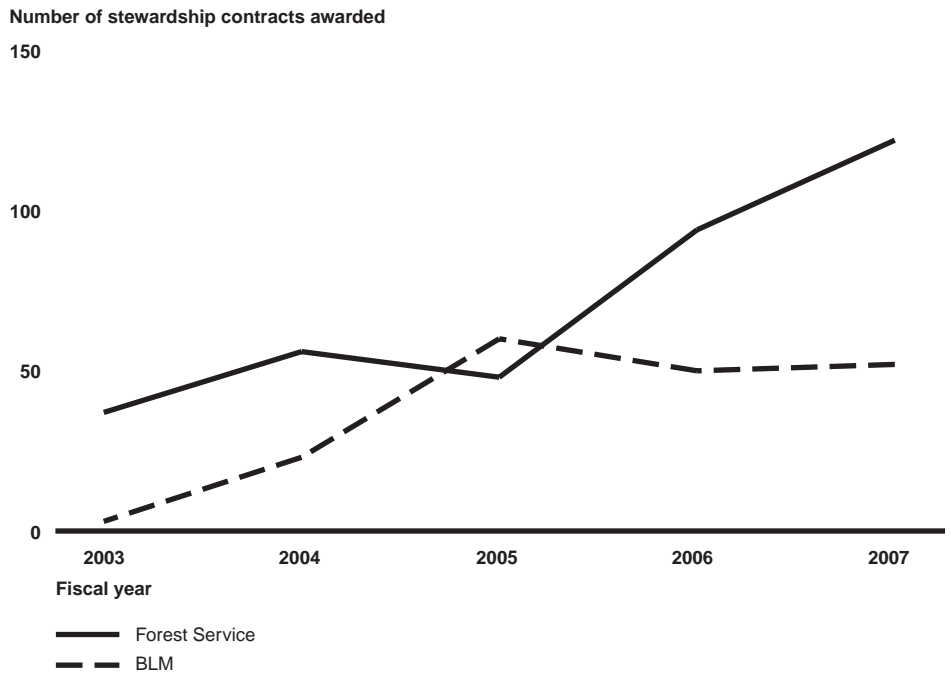
Congress and other interested parties, including the public. Without such data, for example, the agencies cannot compare the costs and accomplishments of stewardship contracting projects with those of other projects that have similar goals, nor can the agencies accurately track year-to-year trends in the costs and accomplishments associated with stewardship contracting. Likewise, without a complete picture of the agencies' use of stewardship contracting, Congress cannot fully assess the merits of this tool or its role in the agency's larger land management efforts. The agencies' inability to fully account for the values of products sold and services procured through agreements further clouds the picture of stewardship projects and potentially hampers congressional oversight. As we have previously reported, barterlike transactions are not reflected in the budget because no federal government cash flows are involved.¹³ As a result, congressional budget decision makers do not have an opportunity to consider whether the value of the exchanged property should be reallocated to other competing resource needs.

During Fiscal Years 2003 through 2007, the Agencies Awarded Increasing Numbers of Stewardship Contracts

From fiscal years 2003 through 2007, the Forest Service and BLM awarded a total of 535 stewardship contracts. The Forest Service, the first to receive the stewardship contracting authority, awarded 352 contracts, or over 65 percent of the total for the period; BLM awarded 183 contracts. While the Forest Service's contract awards generally increased each year throughout the 5-year fiscal period, BLM's followed a more inconsistent pattern, as shown in figure 1.

¹³GAO, *Budget Issues: Alternative Approaches to Finance Federal Capital*, [GAO-03-1011](#) (Washington, D.C.: Aug. 21, 2003).

Figure 1: Stewardship Contracts Awarded, by Agency and Fiscal Year



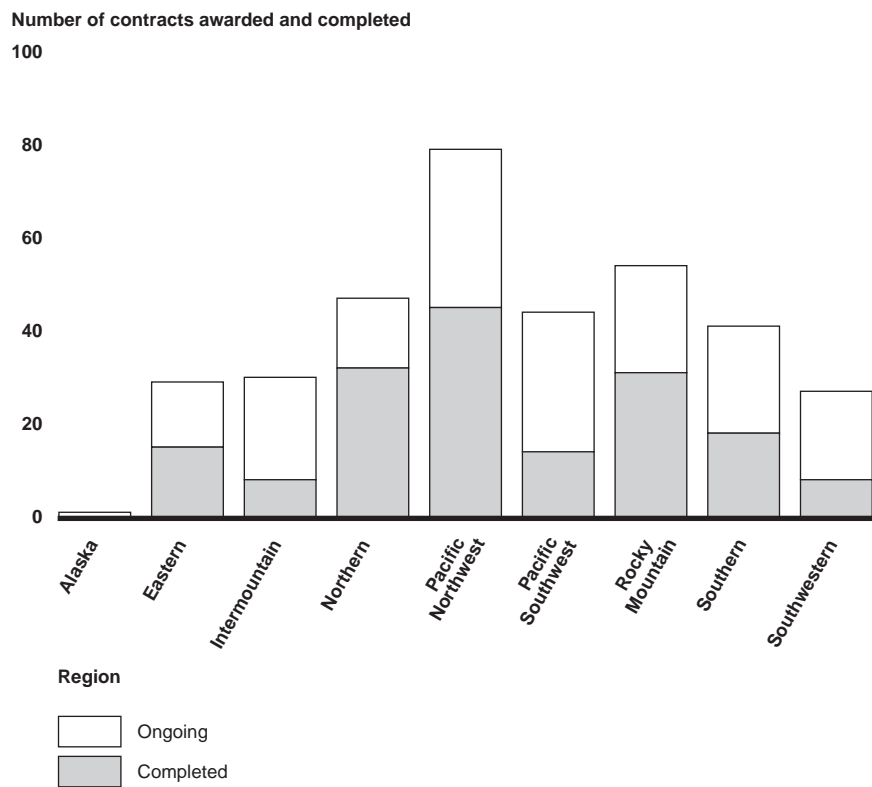
Sources: Forest Service and BLM.

Our count of contracts awarded includes both contracts and task orders because one stewardship project may encompass multiple contracts, and one large contract or “contract action” (e.g., a task order), may be used for several projects. Because the agencies’ tracking systems maintain data by contract or task order, the number of stewardship contracts may not match up with historical information on the number of projects. For BLM, our count also includes the four cooperative agreements that the agency had entered into with nonfederal partners between fiscal years 2003 and 2007, although these make up only a small portion of the total.

Although field units in all Forest Service regions and BLM state offices have used stewardship contracts, the extent of their use varied widely among regions and state offices. For example, while almost 70 percent (16 of 23) of the national forests in the Forest Service’s Pacific Northwest Region had awarded stewardship contracts at the time of our review, less than half (17 of 37) of the forests in the Southern Region had used this

tool.¹⁴ Data below the state office level were not available for BLM. Figures 2 and 3 show the distribution of contract awards by Forest Service regions and BLM state offices through the end of fiscal year 2007, as well as the extent to which these have been completed.

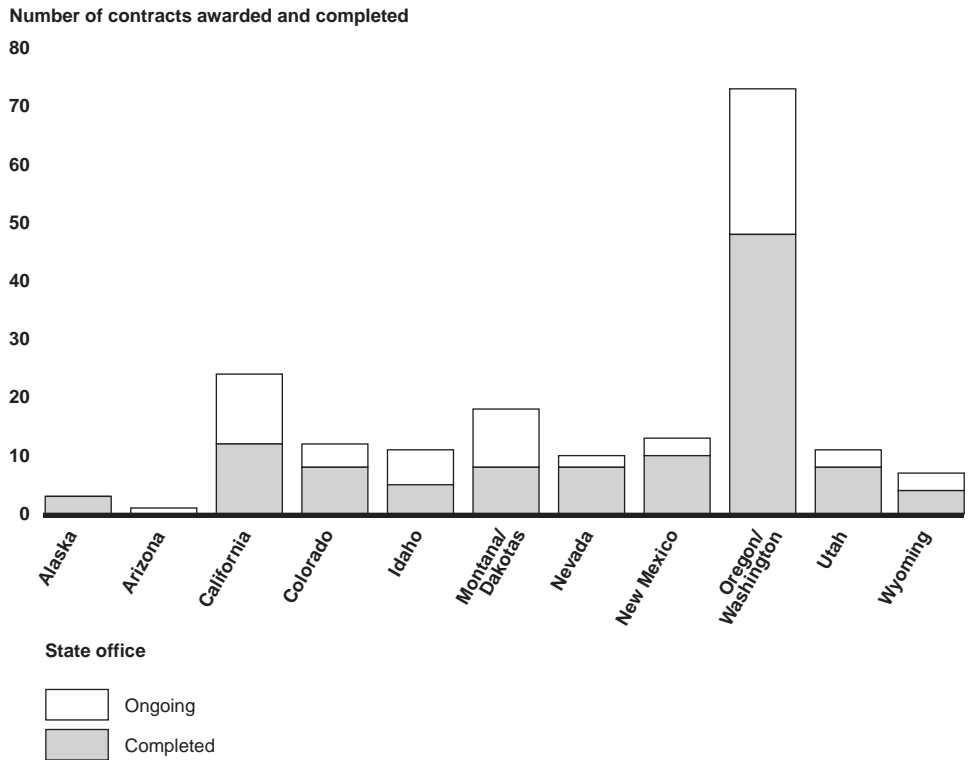
Figure 2: Completion Status of Stewardship Contracts Awarded in Fiscal Years 2003 through 2007, by Forest Service Region



Source: Forest Service.

¹⁴These figures represent individual national forests in each region. Many of these forests are managed together as part of larger administrative units composed of two or more forests.

Figure 3: Completion Status of Stewardship Contracts Awarded in Fiscal Years 2003 through 2007, by BLM State Office



Source: BLM.

The number of contracts alone is not necessarily an accurate indicator of stewardship activity; the duration of the contracts must also be considered. If some locations use multiple-year instead of single-year contracts, the number of contracts may decrease, even though the overall use of stewardship contracting is increasing. This also holds true for completion rates: Locations that use longer-term contracts for projects, such as BLM’s Oregon/Washington State Office, for example, may show lower completion rates despite making substantial progress on the projects. Of the total 535 contracts awarded for both agencies, the Forest Service currently has awarded 2 10-year contracts, in Arizona and southern Oregon, while BLM has awarded 30 10-year contracts: 25 in Oregon, 3 in Wyoming, and 2 in California. The types of long-term contracts used by the two agencies differ, however. Whereas each of the Forest Service’s long-term contracts is with a single contractor, the BLM

contracts are umbrella contracts within which individual task orders are issued, sometimes to different contractors, to accomplish specific tasks.¹⁵ Under this type of contract, BLM issues task orders to meet specific needs as they arise.

The Forest Service reported treating or planning to treat, through stewardship contracts, about 227,000 acres from fiscal years 2003 through 2007. The Pacific Northwest Region reported treating the most acres, while the Alaska Region reported the fewest (with 0 acres accomplished during those years). BLM does not maintain data on stewardship project treatment acreage separately from its other activities, so overall figures for BLM's acres treated through stewardship contracts were not available.

Timber Sold through Forest Service Stewardship Projects Increased from Fiscal Years 2005 through 2007, while BLM Saw a Decrease over the Same Period

The Forest Service sold (i.e., sold for cash or exchanged for services) an increasing amount of timber as part of its stewardship projects from fiscal years 2005 through 2007. The Forest Service's standard unit of measure for wood products is 100 cubic feet, or ccf. Thus, 100 cubic feet of wood would be measured as 1 ccf. In 2005, stewardship projects sold almost 200,000 ccf of timber; by 2007, that amount had grown to about 650,000 ccf. The timber sold during this period represented 8.5 percent of the total timber volume the Forest Service sold during those years. BLM's figures are much smaller, and decline from year to year: In 2005, BLM stewardship projects sold about 38,000 ccf of timber; by 2007 that amount had shrunk to about 17,000 ccf,¹⁶ altogether representing about 7.4 percent of the agency's total timber volume sold during those 3 years. Table 1 compares the volume of timber sold through stewardship contracting as a percentage of the total timber volume sold under each agency's conventional timber program.

¹⁵BLM's use of 10-year umbrella-type contracts with multiple task orders means that the number of contracts is greater than the number of projects carried out by these contracts. For example, in Oregon, one stewardship project is being carried out through 19 different task orders. Each task order is separately funded and has a specified performance period, commonly a year or less.

¹⁶BLM reports its timber volume in board feet rather than cubic feet (1 board foot equals 12 inches by 12 inches by 1 inch). We converted BLM's reported volumes to ccf for comparability with Forest Service volumes; 500 board feet is approximately 1 ccf.

Table 1: Volume of Timber Sold through Stewardship Contracting as a Percentage of Total Timber Volume, by Agency, Fiscal Years 2005 through 2007

Agency	Fiscal year		
	2005	2006	2007
Forest Service			
Timber volume sold (in ccf)	196,079	471,996	655,072
Percentage of all Forest Service timber sold	4	8	13
BLM			
Timber volume sold (in ccf)	37,739	26,603	16,680
Percentage of all BLM timber sold	10	8	4

Source: Forest Service data derived from TSA; BLM data based on episodic field unit reports to headquarters.

A BLM official said that a number of factors could have influenced the decline in the percentage of stewardship timber volume relative to total timber volume over the period. Likely the most important factor is that during this period, stewardship projects increasingly produced lower-value forest materials—including small trees, limbs, and brush, often referred to as woody biomass—rather than commercial timber, a trend the official attributed to a poor timber market. Additionally, he said, BLM has stopped assigning specific targets for field units to achieve on the use of stewardship projects, which may have led to some field units’ reducing their use of the tool. In addition, this official noted that some states have focused on issuing smaller contracts to try to build a contractor base.

In Fiscal Years 2006 and 2007, the Agencies Sold about \$14 Million in Timber through Stewardship Contracting and Retained about \$5 Million in Receipts

The Forest Service reports that through stewardship contracts, products worth at least \$8.2 million were sold (i.e., sold for cash or exchanged for services) during fiscal years 2006 and 2007—representing about 2 percent of the agency’s total timber value sold (including timber sold through traditional timber sales) during those years. This includes timber large enough to be milled into lumber as well as other products, such as firewood and wood for posts and poles. The Forest Service began collecting these data only in fiscal year 2006, when it developed an accrual accounting method to report the value of forest products sold through stewardship contracts. The \$8.2 million figure likely understates the actual value of products sold through stewardship contracting, according to Forest Service officials, because stewardship contracts were not always properly distinguished from conventional timber contracts in the agency’s systems. During the same 2 fiscal years, BLM estimated that the agency sold, through stewardship contracts, products valued at about \$5.9 million

dollars, representing about 7 percent of BLM's overall timber value sold during that period.

As for data on the value of contractor services received under stewardship contracts, no Forest Service data were available on a fiscal year basis. Although service values specific to stewardship contracting have been captured in TSA since the beginning of fiscal year 2007, the values are cumulative, by contract, and so cannot be identified by a specific fiscal year. Service values prior to that time are recorded in FPDS-NG, but only for certain stewardship contracts—those in which the value of the services exceeds the value of the timber. Further, the system does not distinguish these contracts from other contracts (e.g., standard procurement contracts), so the system cannot generate data specific to stewardship contracts. For BLM, the value of services purchased under stewardship contracts during fiscal years 2006 and 2007 totaled about \$10.5 million.¹⁷

Both agencies maintain data on the amount of receipts retained from stewardship contracts once the contracts have been closed. The stewardship contracting authority allows the agencies to retain for use on future stewardship projects any money received under a contract or agreement.¹⁸ Although the agencies are not required to return these receipts to the Department of the Treasury's (Treasury) general fund, the agencies report their net amounts to the Treasury. In fiscal year 2005, both agencies reported that they had no net retained receipts from stewardship contracting. The Forest Service reported about \$3.6 million in retained receipts in fiscal year 2006 and about \$1.2 million in fiscal year 2007, with the Pacific Northwest and Southern Regions generating the most receipts. BLM reported about \$31,000 in retained receipts in fiscal year 2006 and about \$107,000 in fiscal year 2007, with the California State Office generating the most receipts.

Although the agencies report their retained receipts, they do not track how the receipts are subsequently spent. The Forest Service's TSA system tracks the amount of receipts collected and retained at the closure of each contract, but it does not track the subsequent expenditure of the receipts. And as we reported in 2007, the Forest Service's elimination of project-level tracking makes it impossible to determine which specific accounting

¹⁷Approximately \$170,000 of this total consists of estimated service values rather than actual values, because actual values were unavailable for a small number of contracts.

¹⁸The retained receipts are available for expenditure without further appropriation.

codes (including the one that designates retained receipts) were used to fund a particular project.¹⁹ BLM tracks the amount of stewardship receipts collected and retained using its Collections and Billing System and, like the Forest Service, reports the amounts annually to the Treasury, but it too does not track the expenditure of retained receipts by project.

**Both Agencies’
Stewardship Projects
Addressed a Variety of
Land Management
Objectives, with
Hazardous Fuel Reduction
Being the Most Common**

The most common objective of stewardship projects, according to information we gathered during our site visits and agency officials’ statements, is to reduce potentially hazardous fuels by removing timber and other vegetation. Removing timber and vegetation can also promote forest health, another important objective. The agencies generally reduce fuel using either mechanical treatments, in which equipment—such as chain saws, chippers, bulldozers, or mowers—is used to cut vegetation, or prescribed burning, in which fires are deliberately set by land managers to restore or maintain desired vegetation conditions. Figure 4 depicts commercial thinning projects—in which the trees removed are large enough to have some commercial value—on national forest land using a delimeter (left) and a grapple skidder (right).

¹⁹GAO, *Federal Timber Sales: Forest Service Could Improve Efficiency of Field-Level Timber Sales Management by Maintaining More Detailed Data*, [GAO-07-764](#) (Washington, D.C.: June 27, 2007).

Figure 4: Commercial Thinning on National Forest Land



Source: GAO.

Although many projects were designed to protect areas in the wildland-urban interface (WUI)—that is, the area where structures and other human development meet or intermingle with undeveloped wildland—other projects included activities such as improving wildlife or fish habitat, reducing exotic and invasive plant species, and studying heritage fruit trees. In fiscal year 2007, for example, the Forest Service reported treating over 34,000 acres of WUI land, restoring 87 miles of streams, decommissioning 29 miles of road, and improving 35 miles of road for the use of passenger cars. BLM does not gather equivalent information at the field level, but its projects also included a variety of activities intended to reduce fuels, create wildlife habitat, restore streamside habitat, or control invasive plants—in one case, using goats to curtail the spread of the blackberry. We visited two stewardship projects in Idaho where both BLM and the Forest Service worked to improve and protect fish habitat. BLM installed culverts and improved roads to protect fish habitat, while the Forest Service restored a stream channel to create habitat for native fish species, including the endangered bull trout, by placing timber products generated from the stewardship contract in the stream to provide protective cover for the fish. This project area is shown in figure 5.

Figure 5: An Idaho Stream, Restored to Improve Fish Habitat



Source: GAO.

During our site visits, we encountered other wildlife improvement projects benefiting, among other species, elk, wild turkeys, and the red-cockaded woodpecker. For example, we visited a project in South Carolina in which the Forest Service created and preserved nesting habitat for the red-cockaded woodpecker, which is a “keystone species” for longleaf pine forests, according to the Forest Service.²⁰ The birds excavate cavities in longleaf pine trees, typically in mature trees suffering from a fungus that softens the tree’s interior. At one project we visited, the Forest Service was harvesting less desirable trees and using the resulting receipts to pay a contractor to cut the remaining stands into a clustered pattern of longleaf pines with nesting cavities. This project area is shown in figure 6.

²⁰ According to the Forest Service, a keystone species is an organism that has a significant influence on the ecosystem it occupies—an influence disproportionately large compared with its abundance. The red-cockaded woodpecker is also listed as endangered under the Endangered Species Act.

Figure 6: Red-Cockaded Woodpecker Habitat Improvement Area on the Francis Marion and Sumter National Forests



Source: GAO.

The Agencies Have Similar Processes for Planning and Monitoring Stewardship Projects but Different Approaches to Implementing Them

The Forest Service and BLM have similar processes for planning stewardship projects—including processes for identifying suitable projects, preparing and approving project proposals, and soliciting and evaluating bids. Both agencies involved stakeholders in planning and monitoring stewardship projects, although the extent of this involvement varied. The agencies differ in their approaches to implementing the projects, however, both in the contract types they generally use and in their efforts to involve small, local businesses.

In Planning and Monitoring, Agency Processes Are Similar, although the Extent of Collaboration with Stakeholders Varies from Project to Project

The Forest Service and BLM have similar processes for planning stewardship projects, including identifying suitable projects, preparing stewardship contract packages, and soliciting and evaluating bids for contracts; they also have similar processes for monitoring the projects. In both agencies, it is generally the field unit staff (e.g., foresters) who initiate stewardship projects, often working with stakeholder groups, and prepare the contract packages. In the Forest Service, the field unit staff generally work as part of an interdisciplinary team—made up of specialists from various disciplines such as engineering, fish biology, and wildlife biology—to identify stewardship projects that need to be done. In BLM, similarly, field unit staff work with other specialists to identify projects that align with the field unit’s resource plan.

Projects were typically identified in areas that needed restoration—such as thinning overgrown stands of trees, installing culverts, or obliterating roads—and had enough timber value to cover at least a portion of the cost of the restoration services. For example, one Forest Service project in Montana was considered a good candidate for a stewardship project because it would accomplish needed fuel reduction work in a WUI and was located in an area with sufficient timber value to cover the cost of the service work. The forest did not have sufficient funding for the total volume of fuel reduction work needed in the area. As another example, a BLM project in Oregon was originally planned as several small, individual service contracts for thinning an overstocked pine plantation—taking out all but the biggest trees. But demand had increased for small-diameter wood (for use as posts and poles) and for wood chips that could be sold as biomass. When BLM officials realized they could sell material that had previously been nonmerchantable, they decided to accomplish the thinning through a stewardship contract.

Officials in both agencies noted that the impetus for planning their first stewardship projects sometimes came from headquarters or from regional or state offices, which directed field units to implement a certain number of projects each year. Headquarters and regional or state office officials said they had done so because field units might otherwise be reluctant to experiment with this unfamiliar tool. In fact, when BLM received the stewardship authority, it provided its field units with a “budgeting carrot” to encourage use of the authority, providing units with extra funding for the accomplishment of stewardship projects.

In some cases, project proposals were not initiated by the agency, but instead were brought to the agency by community groups or organizations. For example, the Forest Service’s Crooked River project—in Idaho

County, Idaho—was brought forward by the nearby community of Elk City, which is surrounded by forest and was concerned about fire risk. The project included watershed improvement activities in addition to hazardous fuel reduction and timber harvesting activities. As another example, in Michigan, a Forest Service stewardship project grew out of a request from a Native American tribe that wanted to obtain pine logs with which to construct a traditional ceremonial roundhouse. When the tribe asked the Forest Service for help acquiring logs for its roundhouse, the Forest Service agreed to develop a stewardship project in which two stands of trees were reserved from acreage already being thinned as part of a larger project. In exchange for about 150 pine logs from those stands, the tribe performed service work, including thinning and removing aspen and balsam fir, making road improvements, and installing a culvert to improve water quality. This project was done through a contract that the Forest Service negotiated with the tribe, as allowed under the Tribal Forest Protection Act of 2004.²¹ Figure 7 shows the roundhouse under construction and the culvert installed as part of the service work conducted in exchange for the roundhouse timber.

Figure 7: Construction of a Ceremonial Roundhouse; Culvert Installed in Exchange for Timber



Source: Frontier Builders, Inc.



Source: GAO.

²¹Pub. L. No. 108-278, § 2, 118 Stat. 868 (2004).

The agencies' processes for preparing and approving project proposals are similar as well. In both agencies, field unit staff develop a written project proposal, which contains information on the project's purpose, scope, and acreage, and the type, volume, and value of products and services involved. The proposals also contain information on the type and extent of outreach and collaboration with stakeholders such as community members, environmental groups, and industry representatives. Officials of both agencies said they generally hold public outreach meetings, which they advertise via newspaper and radio ads, Web site notices, or other means. At these meetings, agency personnel discuss project ideas and goals and inform the public about stewardship contracting's requirements. In the Forest Service, project proposals are submitted to the forest supervisor and then to the regional forester for review and approval. In BLM, proposals are submitted to the state stewardship coordinator for review and then to the state director for approval.

Both agencies use established methods to estimate the value of the timber and the value of the services. Agency staff estimate the timber value using the standard appraisal system that they use as part of ordinary timber sale contracts. This system employs a transaction evidence appraisal method, which involves "cruising" the timber to estimate its volume and then using evidence from recent timber sales in the area to estimate its value. To determine the value of the services, both agencies prepare a government estimate, which is developed by resource specialists (e.g., engineers, silviculturists, and fuel specialists). As part of this process, the agencies conduct market surveys by reviewing online contractor information and examining historical contract award information for the state.

Processes for soliciting bids on stewardship contracts are similar as well. For contracts that primarily involve the sale of timber, the agencies issue a prospectus, with bid forms, and have a sample contract available at the field unit for review by prospective bidders. For contracts that predominantly feature the acquisition of services, the agencies advertise the contract in FedBizOpps—the Web-based database of federal contracting opportunities—and then issue solicitations for bid. The agencies also hold "show me" trips or preproposal or prebid meetings to discuss project specifications with potential bidders, and may amend project requirements based on the comments received at these meetings.

Once they receive bids, both agencies use the best-value process for evaluating the technical proposals submitted by potential bidders for stewardship projects. This process entails having a group—composed of individuals with the requisite skills—evaluate each technical proposal and

assess its strength in each evaluation category. The categories typically include factors such as experience, past performance, strength of the technical approach, type of equipment available, planned use of local workers, and planned use of forest products by local mills or companies. In some cases, the evaluation group assigns numerical scores to the various factors; in other cases, the group uses adjectival ratings (e.g., exceptional, acceptable, marginal, and unacceptable). As an illustration of the factors considered during this process, one Forest Service project in Idaho entailed emplacing more than 100 in-stream structures (e.g., large boulders and trees) to improve bull trout habitat over about 4 miles of stream. A “big plus” in the winning bidder’s technical proposal, according to Forest Service officials, was the plan to have a hydrologist design an on-the-ground survey before the contract package was put together, an act that officials believed would eliminate the need for many contract modifications as the work progressed.

Typically, price is evaluated separately from the other factors. According to the Forest Service’s national stewardship contracting coordinator, forests have different opinions about whether price is equal to or of lesser or greater importance than other factors in determining best value, and forests vary in the weight they assign price. He believes that price should be 50 percent of the determination and that all the other factors should make up the other 50 percent. However, in several locations, agency officials said that over time, as contractors gained experience in completing technical proposals, the differences between proposals had become more and more narrow, until ultimately, price became the de facto deciding factor in contract award.

The extent to which stakeholders have been involved in planning stewardship projects varied. For some projects, public interest has been keen, and the agencies have collaborated with large and diverse groups, which in some cases predate the stewardship authority. For BLM’s Weaverville community forest project in California, a diverse group of individuals—representing the community, industry, and environmental groups—was involved in project planning. Similarly, for the White Mountain stewardship project on the Apache-Sitgreaves National Forests in Arizona, a large and diverse group was involved in planning the project; the group includes representatives of environmental and wildlife advocacy groups, state and local governments, industries, a university, and communities. On the Lakeview Sustained Yield Unit in southern Oregon,

the Forest Service and BLM have worked with a group that dates back to the 1950s, when it was a community group that oversaw and reported on the unit's production.²² Today, this group—which includes representatives of several environmental groups as well as industry—works with the agencies to sustain and restore a healthy forest ecosystem that can accommodate human and natural disturbances.

Fear of wildland fire is often the impetus for collaboration. Communities that have experienced large fires are often interested in fuel reduction, whether accomplished through stewardship projects or other means, and increasing numbers of communities around the country are identifying areas needing fuel reduction to reduce the risk of fire. In one area in Montana, for example, that had experienced a large fire in the past, the Forest Service held public meetings about a proposed stewardship project involving fuel reduction and notified interested parties about the meetings through newspaper notices and telephone calls. The Forest Service collaborated with the local rural fire department as well as with community members and environmental groups. According to the district ranger, the public was interested in this project for its fuel reduction benefits, and a prominent environmental group was also in favor of the project. The White Mountain project in Arizona likewise benefited from increased collaboration in the wake of the nearly 500,000-acre Rodeo-Chediski fire. Not surprisingly, individuals who collaborate on stewardship projects are often the same ones who have been involved in developing community wildfire protection plans. In California, for example, BLM worked with community fire safe councils to plan stewardship projects in the WUI.

Although public interest in some projects is intense, for other projects, agency officials said there was little public interest, despite agency efforts to involve community members. For example, a Forest Service official in Colorado said that while the region gets a lot of community interest in some projects, most of the region's stewardship projects are "standard, run of the mill" projects (e.g., small thinning projects) that are not of interest to the community. With these types of projects, this official said, community members sometimes come to meetings but typically have little further involvement.

²²The Lakeview Sustained Yield Unit was established to promote the stability of nearby communities through steady supplies of forest products.

As for monitoring, both the Forest Service and BLM systematically involve stakeholders in programmatic monitoring, but stakeholder involvement in project-level monitoring varies. As noted earlier, the 2003 stewardship authority replaced the requirement for multiparty monitoring and evaluation of each project with a requirement to monitor and evaluate the overall use of stewardship contracting. Accordingly, the Forest Service and BLM jointly contracted with the Pinchot Institute for Conservation to conduct “multiparty programmatic monitoring” of stewardship contracting—that is, nationwide monitoring of the overall use of the stewardship authority.²³ The institute conducts this monitoring primarily through subcontracts with four regional partnership organizations that survey agency staff and project stakeholders (e.g., contractors and community members) about the extent to which local communities were involved in developing stewardship projects. The institute worked with the Forest Service and BLM to develop the survey instrument.

In fiscal years 2006 and 2007, the institute’s regional partners conducted telephone surveys with individuals involved in a sample of Forest Service and BLM stewardship projects. The fiscal year 2007 programmatic monitoring survey included 58 Forest Service stewardship projects and 38 BLM projects. For each of these projects, three individuals were identified for interviews: the agency project manager and two randomly selected external participants, such as community members or contractors. For the Forest Service projects, more than 70 percent of the 67 external (nonagency) survey respondents believed that the development of the stewardship project in which they were involved was “very collaborative” (39 percent) or “somewhat collaborative” (33 percent). Only 6 percent characterized the development as “not at all collaborative.” Similarly, for BLM projects, more than 80 percent of the 37 external survey respondents believed that the development of the stewardship project in which they were involved was “very collaborative” (24 percent) or “somewhat collaborative” (57 percent). Only 5 percent characterized the development as “not at all collaborative.” (For both agencies, the remainder of the respondents said they did not know.)

Although both agencies also monitor the effects of individual projects over time, the extent to which the agencies involve stakeholders in project-level monitoring activities varies. In some locations the agencies have

²³The Pinchot Institute for Conservation, a nonprofit organization, is a center for research and policy analysis supporting sustainable management and conservation of forests.

undertaken extensive and innovative approaches to involving stakeholders in project-level monitoring. For example, at one project in southern Colorado, BLM works with graduate students from the University of Kansas to establish and monitor treatment plots to measure the project's effect on soils, vegetation, tree stand diversity and health, and wildlife use. And at a project in northern California, the Forest Service included in the stewardship contract, as a service item, a requirement that the contractor compile and submit data on the use of machinery—such as harvesting and hauling equipment—on the project. These data are then used by a nonprofit organization to study the carbon offsets on projects. As another example, at the Forest Service's White Mountain stewardship project, a stewardship board monitors the project's social, ecological, and economic effects.

In other locations, the agencies have not have involved stakeholder groups substantially in project-level monitoring. In one region, officials noted that most of the field units manage collaboration as part of the environmental assessment activities required by the National Environmental Policy Act; in other areas, officials noted that there has not been much local interest in engaging in multiparty monitoring.

Both the Forest Service handbook and BLM guidance state that stewardship receipts may be used to defray the direct costs of the local collaborative process—for example, by paying for meeting rooms, facilitation, and travel for stakeholders involved in the monitoring process. Also, the Forest Service handbook allows stewardship receipts to be used to pay for the development of monitoring protocols and items to be monitored, as agreed on within a collaborative group and recommended to the line officer. Both agencies also allow the use of stewardship receipts for project-level monitoring in certain circumstances, such as where there is interest and support from local collaborative partners. However, Forest Service guidance specifies that stewardship receipts may not be used for environmental monitoring—that is, monitoring of a project's effects on air, soil, or water quality—at the project level.

Some collaborators see the prohibition on using stewardship receipts for project-level environmental monitoring as a shortcoming. For example, in a letter to the Forest Service's Washington Office, one group of stakeholders expressed its dissatisfaction with the restriction on the use of receipts for project-level monitoring. The group was concerned that the lack of funding would hobble its efforts to collect information demonstrating the effective implementation and results of projects, thereby preventing the demonstration of ecological and economic benefits

to the watershed. The Forest Service responded that it is required by its land and resource management plans to conduct environmental monitoring of its activities and that it will continue to do so with funds other than stewardship receipts, thereby allowing stewardship receipts to go toward accomplishing work on the ground. Other stakeholders we met with noted their concern that without rigorous project-level monitoring, it will likely be difficult to assess the effects of individual stewardship projects and of stewardship contracting authority as a whole.

In Implementing Projects, the Agencies Differ in the Contract Types They Use and in Their Approaches to Involving Small Businesses

Both agencies use contracts with a mix of timber sale and acquisition provisions, although the Forest Service typically uses contracts emphasizing timber to be sold, while BLM typically uses contracts emphasizing services to be procured. The Forest Service generally uses one of two basic types of stewardship contracts: integrated resource timber contracts (IRTC) and integrated resource service contracts (IRSC). The selection of the contract type to be used depends on the type and merchantability of the product to be sold (generally timber). IRTCs are generally used when the estimated value of the timber to be sold under the contract exceeds the estimated value of the services to be performed. IRSCs are generally used when the ratio is inverted—when the estimated value of the services exceeds that of the timber. In both cases, the difference in value is balanced with an appropriate cash payment.

Several field unit staff said they would prefer to have a single stewardship contract, for ease of use, rather than separate ones (i.e., IRTCs and IRSCs), but Forest Service officials in the agency's acquisition management and forest management programs explained that the contracts are different because they are governed by different legal requirements. On the timber side, the Forest Service's authority to sell timber is governed by, among other laws, the National Forest Management Act of 1976, as amended.²⁴ Acquisitions of goods and services are governed primarily by the Federal Acquisition Regulation (FAR). Administering contracts under these two different authorities requires different training, experience, and workforces. On the timber side, for example, contracting officers are

²⁴The National Forest Management Act of 1976, which extensively amended the Forest and Rangeland Renewable Resources Planning Act of 1974, states that the Secretary of Agriculture is authorized to sell timber—at not less than appraised value—located on National Forest System lands for the purpose of achieving the policies set forth in the Multiple-Use Sustained-Yield Act of 1960 and the Forest and Rangeland Renewable Resources Planning Act of 1974.

familiar with the requirements for planning and administering timber sales, but generally lack the certification required to authorize them to obligate government funds for the acquisition of services. And on the acquisition side, contracting officers may be familiar with procurement requirements but generally do not have much experience with timber sales, and the Forest Service has not had the resources to train them. Having a single contract form would require staff expertise and training in both areas. Accordingly, the Forest Service resorted to having two separate types of contracts, each with its own rules and provisions. Forest Service officials also told us that the Forest Service designed the IRTC so as to minimize the differences between timber sale contracts and stewardship contracts, because purchasers were familiar with timber sale contracts, and the Forest Service expected those same purchasers to play a large role in stewardship contracting.

The Forest Service predominantly uses IRTCs rather than IRSCs. Particularly in timber-rich parts of the country, such as parts of the Northeast and the Northwest, most stewardship projects are done under IRTCs because timber is the main source of revenue to pay for the service work. When it uses IRTCs, the Forest Service often has receipts remaining when the contract has been closed. In Montana, for example, a Forest Service official said that generating retained receipts is a “key aspect” of stewardship contracting because the Forest Service can retain these receipts and use them to accomplish subsequent stewardship work. The Forest Service generally uses retained receipts to pay for services acquired through another stewardship contract—usually a service contract—within the same forest, and typically within the same ranger district, from which the receipts originated. Although retained receipts could be used in another forest or ranger district, the community stakeholders that helped plan and monitor a stewardship project might object to retained receipts being directed elsewhere, according to a Forest Service official.

The Forest Service tends to use IRSCs in parts of the country that have low-value timber. In the Rocky Mountain and the Intermountain regions,²⁵ for example, many of the stewardship contracts are IRSCs (primarily for fuel reduction), because the timber is typically low in value. Accordingly, the regions require substantial appropriated dollars to supplement the

²⁵The Rocky Mountain Region covers Colorado, Kansas, Nebraska, South Dakota, and most of Wyoming; the Intermountain Region covers Nevada, Utah, most of Idaho, and part of Wyoming.

value of the timber and pay for the necessary services such as hazardous fuel reduction.

In contrast to the Forest Service, BLM predominantly uses acquisition contracts (i.e., service contracts) to carry out its stewardship projects. BLM officials typically refer to their stewardship contracts as “service contracts with embedded products.” Because the value of the services acquired typically exceeds the value of the product sold (as with Forest Service IRSCs), BLM generally uses fuel reduction or forest management funds to pay for a portion of the service work. In many cases, these contracts take the form of indefinite delivery/indefinite quantity (IDIQ) contracts—umbrella contracts under which the agency can issue numerous task orders.

Although BLM also has a stewardship contract type that can be used for projects that primarily involve the removal of timber, BLM has generally avoided using stewardship contracting to carry out timber sales. According to several BLM field officials, for example, the general direction from the Washington Office has been that if a project “looks like a timber sale and feels like a timber sale,” then it should be offered it as a regular timber sale, using standard timber sale procedures. This is particularly the case for the heavily timbered lands in western Oregon. In fact, agency guidance allows timber-type stewardship contracts to be used only when the total volume of timber to be sold is less than 250,000 board feet. This restriction, according to a BLM official, effectively prevents the use of timber-type stewardship contracts on even small stewardship projects; instead, a project must either be altered to include services with a value in excess of the timber value or simply offered as a regular timber sale.

Also unlike the Forest Service, BLM has typically not retained receipts at the end of stewardship projects. Of course, in many areas of the West, BLM-managed land lacks valuable timber that could generate such receipts. In Arizona, for example, BLM-managed lands primarily have piñon pine and juniper, which have little market value and are typically used for firewood. As one BLM official explained, stewardship contracting is a restorative activity that may not have a commercial value. If it does, that value is used to offset part of the cost of the service work.

When retained receipts are generated by BLM projects, typically through projects conducted in California, Oregon, and Washington, their distribution is decided by the BLM state office. Generally, according to BLM officials, the receipts would be directed first toward the project that generated them (if needed), then to the same local area, then to the state,

then to other states that need them. In some locations, where the timber has a high enough value, BLM officials said they want to begin generating more retained receipts. This would allow them to use those receipts on stewardship projects in other areas where the timber values are lower.

Stewardship agreements are another vehicle occasionally used by the agencies. As discussed earlier, the Forest Service had entered into 12 agreements between fiscal years 2003 and 2007; BLM had entered into 4 agreements. The agreements in place are typically cost-share agreements or participating agreements, in which both the agency and the partner derive a mutual benefit. Most of these agreements are for 10 years, and while some are small, others cover an entire region. The Forest Service's Pacific Northwest Region, for example, issued two regionwide agreements—one with the National Wild Turkey Federation and one with the Rocky Mountain Elk Foundation. These regional agreements are essentially “umbrella agreements” that are similar to the IDIQ contracts BLM uses. That is, the regional agreements establish the framework within which a number of projects can be completed through supplemental agreements, similar to the task orders issued under an IDIQ contract.

Agency officials provided several reasons why they sometimes prefer to use agreements rather than contracts to carry out stewardship activities. First, they find agreements to be simpler and more flexible than stewardship contracts. That is, whereas contracts can be a hundred pages or more in length, agreements are generally much shorter—perhaps a dozen pages. Also, changes can be made to agreements more quickly and simply—the partners agree on what changes are needed, write up the changes, and initial them. Second, agreements need not contain all of the many clauses required by contracts (e.g., clauses associated with the calculation of timber rates or the costs of constructing roads). And third, unlike contracts, agreements sometimes bring in matching funds from partnership organizations, thereby allowing the agency to “get more bang for its buck,” as one official said. That is, when partners contribute resources such as volunteer labor, equipment, or funding, work can be accomplished at less cost to the agency. In one stewardship agreement, for example, the Forest Service and a partner (a nonprofit organization) agreed to share the cost (about \$114,000) of a stewardship project designed to reduce hazardous fuels. The Forest Service's share was 56 percent; the partner's was 44 percent. The partner's contribution included services and supplies, as well as \$36,000 from a grant it had received from another nonprofit organization. Agency officials cautioned, though, that agreements do have drawbacks. For example, in some cases a partner organization may not have the skills or experience to perform all the work,

so agency staff may need to spend considerable time overseeing the work to ensure it is done properly. Also, according to agency officials, potentially interested contractors may feel unfairly excluded if a project is awarded to a partner organization through an agreement, rather than being offered for competitive bid. Finally, some agency officials expressed uncertainty about the options available to them in case a partner did not comply with the provisions of an agreement.

One type of agreement that has not been widely used in stewardship projects is the Wyden Amendment agreement, which allows the agency to conduct restoration work on private lands, as long as the work achieves public land management goals. According to Forest Service officials, only one national forest—the Siuslaw, in Oregon—has used a Wyden Amendment agreement to include the treatment of private lands in a stewardship project. Headquarters officials did not know why forests had not made greater use of the Wyden Amendment, but they surmised that forest officials were either unaware of the Wyden authority or had placed a higher priority on getting work done on federal land rather than private land. This is a decision, according to headquarters officials, that forest supervisors must make in determining the best use of limited agency resources.

In addition to using different contract types, the agencies differ in how they approach the objective of involving small local businesses in stewardship contracts. Whereas the Forest Service invites full and open competition on most of its stewardship contracts, both IRTCs and IRSCs, BLM generally sets aside its stewardship contracts for small businesses. Forest Service officials explained that they invite full and open competition on all IRTCs because, like traditional timber sale contracts, IRTCs are exempt from the requirements governing small business set-asides. However, the large timber companies that typically bid on IRTCs often subcontract with small local businesses to do the service work with which the timber contractors are less familiar. In this way, IRTCs help stimulate the local economy, albeit somewhat indirectly. The Forest Service's IRSCs, on the other hand, are subject to the requirements governing small business set-asides. According to the FAR,²⁶ acquisitions of services within a specified range of value (generally from \$3,000 to \$100,000) shall be "reserved exclusively for small business concerns and shall be set aside for small business unless the contracting officer

²⁶FAR 19.502-2.

determines there is not a reasonable expectation of obtaining offers from two or more responsible small business concerns that are competitive in terms of market prices, quality, and delivery.” Nevertheless, Forest Service officials believe that most of the agency’s IRSCs are not set aside for small business, largely because of the dearth of small logging companies in many parts of the country. However, the Forest Service does not maintain data on the number of IRSCs that are set aside for small business, and so cannot gauge its success in involving small businesses.

BLM, in contrast, generally sets aside all of its stewardship contracts (which are typically service-oriented contracts) for small businesses, according to agency officials. A contracting officer from BLM’s Oregon office said that there have consistently been at least two responsible small business firms that were interested in BLM stewardship projects and from which BLM could expect to receive reasonable prices. Accordingly, BLM projects have been set aside for small businesses. Although BLM’s stewardship contracting guidance makes an exception to the set-aside policy in cases where “non-traditional entities (e.g., local governments, nongovernmental entities, and nonprofit organizations) have expressed an interest” in a project, BLM contracting officials told us they set aside all stewardship contracts regardless, because, in their words, “the FAR trumps BLM guidance.”

Despite the Benefits of Stewardship Contracting, Challenges Persist, Especially in the Use of Long-Term Multiyear Contracts, for which the Agencies Lack a Strategy

The agencies cited as key benefits of stewardship contracting the ability to accomplish more work on the ground and to build collaborative partnerships. The primary challenges cited by the agencies are (1) overcoming internal and external resistance to using stewardship contracting, (2) dealing with market uncertainties, and (3) understanding and dealing with the ramifications of using long-term multiyear contracts. The agencies have numerous efforts under way to overcome some of the challenges they face, including conducting training courses and workshops and supporting innovative efforts by entrepreneurs and researchers, but they have not developed strategies to guide the nationwide use of long-term multiyear stewardship contracts and to inform offices’ decisions about the use of such instruments.

The Agencies Cited an Increased Ability to Accomplish Needed Work, along with Increased Collaboration, as Key Benefits of Stewardship Contracting

Agency officials frequently cited the ability to get more work done on the ground as a measure of stewardship contracting's success. "Stewardship contracting is the most valuable tool the Congress has given us in 30 years," said a Forest Service official in southern Oregon. In particular, according to agency officials, the ability to use product value to offset service costs has enabled them to accomplish work that otherwise would not get done, given current funding constraints. A Forest Service district ranger in Montana, for example, said that stewardship contracting enabled the district to perform nearly \$1 million of service work for which the district did not have appropriated funds—an amount equivalent to about 40 percent of the district's entire annual budget. This work included removing 49 stream crossings—roads that crossed streams and thus contributed to stream sedimentation—to help meet state water quality goals. Similarly, a Forest Service official in Wisconsin noted that through stewardship contracting, the forest unit could accomplish some work—including planting large trees and grinding stumps—that it would not have been able to afford to do otherwise. As another example, stewardship contracting is expected to play a big part in helping the Forest Service deal with the problem of trees killed by the mountain pine beetle in Colorado. The Forest Service plans to use stewardship contracting for the removal of dead and dying trees, using the value of the trees to offset a portion of the associated costs. Several environmental group representatives we spoke with likewise praised stewardship contracting for helping the agencies accomplish more needed work.

Forest Service officials also stated that stewardship contracting is financially advantageous in other ways. First, although the agencies often use monies from the Knutson-Vandenberg (K-V) fund to conduct reforestation, using the stewardship authority to conduct these activities allows field units to avoid the overhead charges that the Washington Office assesses on the use of K-V (and other) funds.²⁷ Additionally, retained receipts are subject to fewer limitations on use than K-V funds. Field officials also stated that stewardship contracting enhances their productivity because the revenues stay within the field unit rather than being returned to the Treasury. As a Forest Service official in Wisconsin said, "Anything we get under stewardship contracting is better than a

²⁷The K-V trust fund, established by the Knutson-Vandenberg Act of 1930 (16 U.S.C. §§ 576-576b), was created to collect a portion of timber sales revenue to pay for the reforestation of areas from which timber is cut. The Washington Office annually takes a portion of each field unit's K-V funds and other funds, such as salvage sale and brush disposal funds, to help pay for headquarters and regional office overhead expenses (e.g., rent and utilities).

traditional timber sale because the revenues stay here rather than going to the Treasury.”

Agency officials also pointed out the savings from implementing one contract for a particular project rather than two or more. According to a forester in a BLM field unit in California, for example, the net cost per acre is reduced because BLM staff spend less time developing, advertising, and implementing a single stewardship contract than they would on multiple traditional contracts. Similarly, a Forest Service official noted that prior to receiving the stewardship contracting authority, the Forest Service had to go through a two-step process: first conducting a timber sale to remove merchantable timber and then issuing a separate service contract to remove the remaining material. The official stated that by law, the Forest Service could not mix the two steps. Stewardship contracting has relieved the Forest Service of that burden by having a single contractor do all the work, thereby saving the agency the time and associated cost of preparing two separate contracts.

Agencies also cited the collaborative partnerships they have built through stewardship contracting. These collaborative partnerships have resulted in community support for stewardship projects and allowed the agencies to move forward with projects without the litigation costs and delays that have often confronted typical timber sales and even some hazardous fuel reduction projects. A Forest Service official in Montana, for example, said that the community has become very supportive of stewardship contracting, as have local environmental groups. Another official added that this support is in itself a big success. At first, according to this official, some environmental groups refused to accept stewardship contracting, saying that it was just an excuse to cut more timber. But now, she said, she is hearing less opposition. Similarly, a headquarters Forest Service official said that when stewardship contracting first started, many—including the Forest Service and environmental groups—had concerns that stewardship projects would just be disguised timber sales. But after the Forest Service reached out to stakeholders, including environmental groups, these concerns diminished over time, and stakeholders began to see the value of stewardship contracts in performing needed work.

Several agency officials also credited the collaborative process with building community support for forest restoration projects and allowing the projects to go forward without protest. For example, according to the national stewardship contracting coordinator, comments from national forest officials across the country indicate that the use of stewardship contracting and the collaboration associated with its use have led to fewer

appeals and less litigation at the project level. Several field unit officials reported similar impressions. On one forest in California, for example, 3 of the forest's 22 stewardship projects have been appealed, but none has been litigated. Another field unit, similarly, reported having few or no appeals or litigation associated with their stewardship projects.

Many stakeholders agreed. For example, one member of a project-monitoring group told us he had forestalled litigation by his environmental organization on several occasions because of the trust that the monitoring group had developed with the agency. In fact, some community groups have produced guides to help businesses understand the stewardship contracting process.

Nevertheless, collaboration has its drawbacks, according to agency officials and others. One drawback is the time it takes to build and sustain a truly collaborative group. For example, members of the monitoring board for the Forest Service's White Mountain project, in Arizona, said they worked together for years to develop mutual trust and respect and to build consensus. Similarly, members of BLM's community forest project in Weaverville, California, said they worked for years before developing a level of trust that allowed the work to proceed without protest. Ongoing collaboration takes time as well. Officials of the Forest Service's Southern Region noted that, in one state, a forest working with community groups was on its third iteration of an environmental assessment for a stewardship project, having redone the assessment to accommodate the group's wishes. In several locations, officials raised the question of how much community collaboration should be expected, especially when projects or communities are small.

Another drawback, according to Forest Service officials, is that collaboration can dilute the effectiveness of a project. Forest Service officials at several project locations noted that community involvement ended up watering down the impact of the stewardship projects because the Forest Service limited the amount of work it did at the request of stakeholders. On one hand, these officials said, the Forest Service was being responsive to community desires in altering its projects, but on the other hand, the projects may not have been as effective as they could have been because they were not appropriately designed. For example, on one project in southern Utah, Forest Service officials and the contractor thought that the compromise reached with an environmental group prevented the project from accomplishing its objective. The project was designed to protect the trees between a wilderness area and a popular campground by thinning them to discourage damage by pine beetles. After

the environmental group appealed the project, the Forest Service agreed to remove fewer trees. As a result, according to these officials, the area will remain susceptible to pine beetles, which officials believe will kill all the trees. Officials added that although the Forest Service achieved some political goodwill by compromising with the environmental group, it accomplished little in terms of resource management. We have previously reported on the advantages and disadvantages of collaboration.²⁸

Challenges Associated with Stewardship Contracting Include Resistance to Its Use, Market Uncertainties, and Potential Consequences of Multiyear Contracts

From the outset of stewardship contracting, both agencies encountered resistance to using stewardship contracting, from both inside and outside the agencies. Within the agencies, unfamiliarity with stewardship contracts made some officials reluctant to use them. One Forest Service official said, for example, that he was familiar with timber contracts but not with all the nuances of acquisition contracts. In general, timber staff were not familiar with acquisition procedures and regulations, while acquisition staff were similarly unfamiliar with selling timber—making both types of staff reluctant to use this new tool. As one Forest Service official explained, the challenge is to get the timber staff and the acquisition staff working together—to bridge the gap between the two different cultures.

Officials' unfamiliarity with the use of the new tool was compounded by the lack of a centrally located source of expertise to which agency staff could turn for assistance or advice. Officials of both agencies remarked on the importance of sharing lessons learned among their respective units. Agency officials noted that the sharing of these lessons need not come in the form of guidance or direction from the Washington Office, however. For example, since BLM's Oregon State Office was designated the "center of excellence" for stewardship contracting, the contracting officers in that office said they have learned many valuable lessons, and staff in other offices have begun turning to these contracting officers for advice and assistance on stewardship contracting issues. Turnover in stewardship coordinator positions, particularly at the national level, has also hampered understanding because institutional knowledge is especially important for helping field staff use new or complex programs or tools. At BLM, the constant turnover in the stewardship coordinator position at headquarters—with four different staff successively filling that position

²⁸GAO, *Natural Resource Management: Opportunities Exist to Enhance Federal Participation in Collaborative Efforts to Reduce Conflicts and Improve Natural Resource Conditions*, [GAO-08-262](#) (Washington, D.C.: Feb. 12, 2008).

between July 2007 and July 2008—has made that office ill equipped to deal with questions from the field. Turnover in the Forest Service’s headquarters stewardship coordinator position also occasionally hampered field officials’ attempts to gain insights and assistance as they used the tool, albeit to a lesser degree.

In other cases, some field units were reluctant to use stewardship contracts because the units were located in areas with high timber values and healthy markets and had sufficient K-V funds (which are generated through timber sales) to carry out needed service work. A Forest Service official in Wisconsin, for example, said that the timber economy has been stable in Wisconsin, giving his ranger district little incentive to use stewardship contracting.

Outside the agencies, resistance has come primarily from contractors and local community officials. As with the agency officials, the learning curve for bidders not acquainted with stewardship contracting was steep. For example, preparing the required technical proposals describing how the contractor would perform the service work was intimidating and time consuming; one contractor likened it to preparing a résumé. Stewardship contracts also called for contractors to do work that they may not have done before, which made some contractors uncomfortable. Several officials told us that contractors were uncertain how to bid on some aspects of service work and, in some cases, did not have the set of skills or the equipment needed to perform it. In Wisconsin, for example, the contractor on a stewardship project to curb the spread of oak wilt said he was leery of bidding on the project at first, as he had no experience or equipment with which to pull stumps—a task crucial to the control of the disease. He ultimately bid on—and won—the contract after agreeing to subcontract the stump-pulling work to a road contractor with whom he had previously worked. Although many contractors overcame their reluctance and bid on projects, bidders’ lack of experience with subcontracting led to higher prices, according to a Forest Service official, because bidders felt greater risk in bidding on unfamiliar work and priced their bids accordingly.

In many cases, county commissioners and other local officials were opposed to stewardship contracting projects because receipts from stewardship projects were not factored into the calculation of timber receipts (and other qualifying receipts) from which the counties received a share. For years, many counties across the country depended heavily on their share (typically 25 percent) of timber sale and other qualifying receipts, but these receipts dwindled substantially with the decline in

federal timber sales in the late 1980s. The Secure Rural Schools and Community Self-Determination Act of 2000 was enacted, in part, to address the decline in federal payments by stabilizing payments to counties that depended on revenues from timber sales on Forest Service and certain BLM lands.²⁹ Under the act, each county could continue to receive a portion of the revenues generated from these lands or could choose instead to receive annual payments equal to the average of the three highest annual revenue payments to the county from fiscal year 1986 through fiscal year 1999.³⁰ Payments under the act ceased in December 2007, but the act was reauthorized in October 2008, with payments to continue through fiscal year 2011.³¹

During our review (before the October 2008 reauthorization), agency officials told us that, regardless of the option that counties had chosen under the Secure Rural Schools Act, county commissioners and other local officials had expressed concerns about stewardship contracting's effect on county revenues—whether immediate or potential. That is, counties that had elected to continue receiving 25 percent of timber and other qualifying receipts were concerned because stewardship receipts were not included in the calculation of timber receipts and thus were perceived to have an immediate detrimental effect on county revenues. And counties that had elected to receive an average of prior-year receipts were also concerned because they thought that if the Secure Rural Schools Act were reauthorized, the formula for calculating payments to counties might be changed to include years in which stewardship projects were conducted in the counties. If so, the counties' portion of receipts would be diminished, again in part because stewardship receipts would not be included in the total from which the counties' share would be calculated. According to a Forest Service official in Montana, there was not a county commissioner in the state who was not concerned about the county's share of receipts diminishing as a result of stewardship contracting. In the Great Lakes forests, similarly, some counties were in favor of the concept of

²⁹Pub. L. No. 106-393, 114 Stat. 1607 (2000). The act covers all National Forest System lands as well as certain BLM lands in Oregon.

³⁰For fiscal year 2007, the number of counties that opted to continue to receive a portion of timber revenues was 139, or 17 percent of the total. Another 679 counties (83 percent of the total) elected the second option.

³¹Pub. L. No. 110-343, § 601 (2008). The reauthorization provided for a new calculation methodology based on factors such as the acreage of certain federally managed lands, previous payments, and per capita personal income. Payments will decrease each year until they are phased out completely by the end of fiscal year 2011.

stewardship contracting, according to Forest Service officials, but also wanted to maximize receipts from timber. In Wisconsin, for example, the Forest Service was planning a stewardship project that the community favored because of concerns about fire risk, but a Forest Service official noted that the county has not embraced stewardship contracting because of its effect on payments to the county. Forest Service officials were worried about how they were going to get the county's support.

Although the agencies are not legally required to obtain the approval of local officials to conduct stewardship projects, these concerns have made some agency staff more cautious about using the tool more widely. In Oregon, BLM officials noted that resistance from county officials has caused BLM to take a conservative approach to developing stewardship contracting in certain areas. For example, one BLM district will not approve a project unless the project has the written support of the county commissioners. Counties' concerns about nine proposed stewardship projects in the district were conveyed to the district manager in a letter from the Association of O&C Counties.³² According to the letter, the association's board of directors had decided to support the nine projects but expressed deep concern about stewardship projects in general because they generate no receipts to be shared with counties.

Market uncertainties posed another set of challenges. Market prices for timber have been volatile, especially lately, with the slump in the housing market; this has made it very difficult to get bids on timber sales in some areas, and this difficulty has spilled over into stewardship projects as well. One stewardship contract on the Superior National Forest in Minnesota, for example, was offered three times, each time at lower timber prices, before it was awarded; another stewardship contract on the same forest was offered twice before being awarded. Forest Service officials expressed hope that once the housing market turns around, the value of timber will increase and make timber sales—and stewardship projects—more attractive to loggers.

Markets for other materials removed through stewardship contracting—primarily biomass and small-diameter trees—are uneven as well. In some areas, particularly near pulp or paper mills, the market for biomass and

³²This association is an interest group that represents the counties in western Oregon within which lie the revested Oregon and California (O&C) Railroad Grant Lands. Counties receive 75 percent of receipts from timber sales on O&C lands, as compared with the 25 percent that other counties typically receive.

small-diameter wood is strong. This was the case in several eastern forests we visited and, according to agency officials, is also true of parts of California and Oregon. In other areas, however, facilities that can accept and process biomass are scarce, and markets for the material are correspondingly weak. In Montana, for example, officials said there is little market for the small-diameter wood and biomass generated from stewardship projects, so these materials are typically burned. Similarly, on many BLM lands, where the value of the wood is low and the distance to biomass markets long, BLM may find it more cost-effective to burn the wood than to use it. In such cases, the paucity of markets for small-diameter materials keeps the cost of the service work high, because contractors cannot defray their costs by selling the resulting materials. We have previously reported that the high costs of harvesting and transporting woody biomass, combined with uncertainties about supply, have hindered market development.³³

Finally, although long-term contracts offer certain benefits to the agencies, field units can find it challenging to provide sufficient funds to award and implement such contracts, particularly while funding other agency activities. Agency officials have touted long-term contracts as providing contractors with some assurance of a long-term supply of materials, thus encouraging investment in equipment or facilities that can economically use small-diameter wood and biomass—products that often have had little or no commercial value. According to the Forest Service handbook, for example, “The use of multi-year contracts is encouraged to provide incentives to potential contractors to invest in long-term landscape improvement projects.” BLM, similarly, stated in a fiscal year 2007 stewardship contracting review that long-term contracts would encourage business development for biomass utilization. Without a long-term contract, an investor can find it difficult to secure the financing necessary to retool or build facilities that can process small-diameter wood or biomass. A contractor in Oregon noted, for example, that constant supply (i.e., through a long-term contract) is the key to encourage investment in equipment. He explained that a single machine can cost more than \$1 million, and a contractor will not invest—nor will a bank lend—such a

³³GAO, *Natural Resources: Federal Agencies Are Engaged in Various Efforts to Promote the Utilization of Woody Biomass, but Significant Obstacles to Its Use Remain*, [GAO-05-373](#) (Washington, D.C.: May 13, 2005); *Natural Resources: Woody Biomass Users’ Experiences Offer Insights for Government Efforts Aimed at Promoting Its Use*, [GAO-06-336](#) (Washington, D.C.: Mar. 22, 2006).

large amount without a reasonable assurance that there will be sufficient ongoing demand for the machine.

Contractors still face risk when entering into a long-term contract with the government, however, because unforeseen budget shortfalls could prevent an agency from funding the contract. Without some additional protection against risk, contractors may be reluctant to make sizable investments in equipment or infrastructure for fear that the government will cancel the contract, thus making the investment unprofitable. Contractors may thus decline to bid on long-term contracts unless the contracts include a cancellation ceiling—that is, an amount the government will pay the contractor if it cancels the contract.³⁴ The FAR authorizes such ceilings to protect the contractor’s investment, with the amount of the ceiling to be agreed on by the government and the contractor before the contract is signed. To ensure that this money is available if needed—and to prevent agencies from making financial commitments beyond the funding Congress has provided—the FAR generally requires that, should an agency include a cancellation ceiling in a contract, the agency must obligate the entire amount of the ceiling at the inception of the contract.

Depending on the size of the contractor’s potential investment, however, this ceiling could be millions of dollars—far exceeding the budget of an individual field unit. Rather than develop a contract that would require a cancellation ceiling beyond its available resources, a field unit would instead have little recourse but to develop a contract with a much lower ceiling—one it could afford—thereby forgoing its hope of attracting significant investment in equipment or infrastructure.

In fact, two Forest Service units have had to make this choice. For the only long-term multiyear contract the agencies have had experience with to date, at the White Mountain stewardship project in Arizona, the cancellation ceiling had little to do with the contractor’s actual investment; instead, it simply represented an amount the Forest Service thought it could afford and the contractor agreed was reasonable. In 2004, the Forest

³⁴The cancellation ceiling applies only to long-term contracts known as multiyear contracts, which represent an agency commitment over several years; it does not apply to multiple-year “options” contracts, which give the agency the option to renew or recompetete the contract after the first year. In general, according to Forest Service and nonagency officials, contractors prefer multiyear contracts when seeking assurance of a long-term supply. As of October 2008, the Forest Service had awarded two long-term multiyear contracts and had advertised a third; BLM had not awarded any long-term multiyear contracts.

Service hired a consulting firm to develop an estimate of the potential cancellation liability associated with a multiyear contract for the White Mountain project. The contracting officer for the project said he was shocked by the resulting estimates, which ranged from nearly \$3 million to more than \$7.5 million. Accordingly, the cancellation ceiling was set at \$500,000. The contracting officer said that this lower amount did not reflect the potential liability estimate based on one of the three scenarios examined by the consulting firm because none of those scenarios materialized. Instead, the contractor used already existing equipment, but the contracting officer told us that he believed it was appropriate to have a cancellation ceiling anyway, to compensate the contractor for his risk in case of cancellation.

Similarly, for a 10-year contract the Forest Service is preparing in order to address fire risk on the Front Range of Colorado, a Rocky Mountain Region official told us that an amount in the range of \$6 million to \$10 million would be needed to attract large infrastructure such as a wood pellet plant—an amount far beyond the region’s funding capability. Instead, the contract announcement will include a cancellation ceiling of \$500,000—the amount the region thought it could afford.³⁵ According to this official, the inability to fund a substantial cancellation ceiling (e.g., \$6 million to \$10 million for construction of a pellet plant) changed the initial premise of the contract. That is, while the long-term contract was initially envisioned as a way to attract investment in industry or infrastructure to expand the use of material resulting from the project, it is now intended simply to treat the forests as cost-effectively as possible within the existing infrastructure.

Other units were also contemplating the use of long-term contracts at the time of our review but were likewise concerned about the potential cancellation ceiling. For example, Forest Service officials in California were considering the use of a long-term multiyear contract but were concerned about how they would fund the cancellation ceiling.

Some contractors may be willing to bid on contracts without cancellation ceilings if there is no substantial investment involved. In July 2008, the Forest Service issued a 10-year contract for the Lakeview stewardship project in southern Oregon. This contract includes a minimum dollar

³⁵The cancellation ceiling represents the maximum cancellation payment the government will include in the contract.

guarantee over the 10-year performance period. According to a Forest Service official, the Forest Service did not include a cancellation ceiling in the Lakeview contract because it was not seeking investment in infrastructure; that infrastructure already is in place. The Lakeview contract was issued in accordance with the terms of a November 2007 memorandum of understanding (MOU)—signed by the Forest Service, BLM, the State of Oregon, a county, and several cities and nongovernmental organizations—that provides a framework within which the signatory parties agree to work together to accomplish forest restoration projects, including fuel reduction projects. The MOU states that the Forest Service and BLM will each offer a minimum number of acres to be treated each year. BLM also plans to issue a long-term contract under the terms of the MOU, but the BLM contract will probably be an IDIQ contract, according to BLM officials.

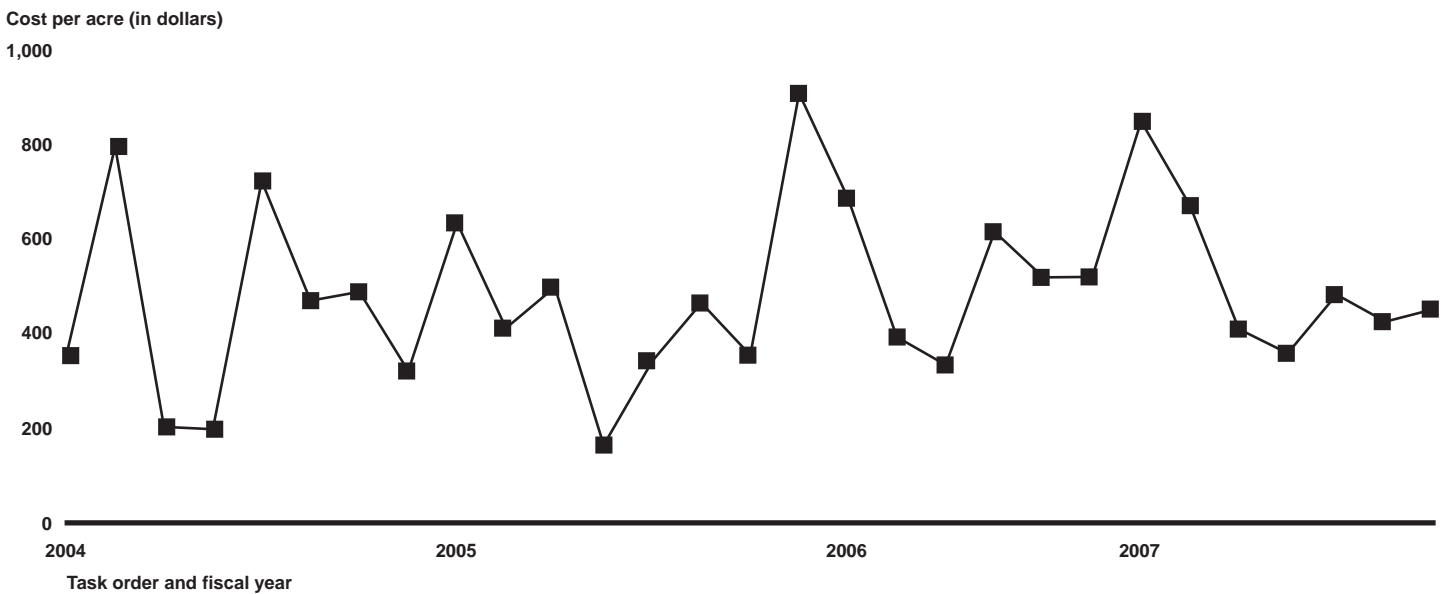
Other agencies also have the authority, under the FAR and agency-specific regulations, to use multiyear contracts, although these contracts typically may not exceed 5 years. Although the FAR requires all agencies to obligate sufficient funds to cover any potential cancellation costs of a multiyear contract, additional requirements apply to certain agencies. For example, according to the Department of Defense’s acquisition regulation,³⁶ if a contract contains a cancellation ceiling in excess of \$100 million but the budget for that contract does not include proposed funding for the costs of contract cancellation up to that ceiling, then the head of the agency must provide written notification to the congressional defense committees and to the Office of Management and Budget before awarding the contract. This written notification must include, among other things, the extent to which cancellation costs are not included in the budget for the contract and an assessment of the financial risks of not budgeting for the potential costs of contract cancellation.

Experience to date with the White Mountain project highlights another potential challenge related to the use of long-term contracts: the difficulty of balancing the need to devote substantial resources to the long-term project in order to furnish a sufficient and predictable supply of materials to the contractor and the need to fund the unit’s other programs and activities—all within a limited budget. With this project, the forest committed to funding contractor treatments on at least 5,000 acres annually, in order to ensure the contractor a sufficient supply of material.

³⁶See Defense Federal Acquisition Regulation Supplement § 217.171.

Although per acre costs were initially high, at the time the contract was developed, the forest expected that within a few years these costs would decrease as growth occurred in the small-diameter wood and biomass industry—allowing the contractor to defray a greater portion of his costs as he found markets for the material. Instead, for the 29 task orders issued between September 2004 and September 2007, these costs have not dropped significantly, as shown in figure 8.

Figure 8: Treatment Costs per Acre, by Task Order, for the White Mountain Project



Source: GAO analysis of Forest Service data.

To live up to its commitment, the Forest Service has continued to fund 5,000 acres of treatment annually—but at a much greater cost than expected, a cost that has taken a substantial toll on the forest’s other programs. These other programs—such as range management, wildlife, hazardous fuels, and vegetation and watershed management—have suffered because the forest has directed considerable funding toward the White Mountain project, leaving little available to carry out other projects that need to be done. In fact, in 2005, the forest received instruction from the region to direct 100 percent of its hazardous fuels and timber dollars toward the White Mountain project, along with 50 percent of its vegetation and watershed management dollars and 40 percent of its wildlife dollars. A forest budget official was particularly concerned about the effect on the range management program, for which she estimated funding was half of what it would have been if it had grown at the same rate as it did for other

forests in the region. Another forest official expressed concern about the fuel reduction work that was not being completed on the forest because the funds for that program were being monopolized by the White Mountain project. In particular, this official noted that the forest's ranger districts that were not included in the White Mountain project area were at a particular disadvantage because they experienced no direct benefit from the project, whereas other districts had at least a portion of their lands being treated (those that fell within the project area).

This project has had a similar effect on other forests within the region, according to forest and regional officials. As the region has redirected funds toward the White Mountain project, these other forests have become resentful of the disproportionate amount of funding the project has received. The Apache-Sitgreaves forest has "reached a crossroads," one official said, in terms of the White Mountain project's viability; if the per acre costs remain high, the forest will have to decide whether to continue funding the project, particularly in light of the effect it is having on other programs in the forest.

Agencies Are Addressing Stewardship Challenges through Various Means, Including Training and Technology, but Have Not Developed a Strategy for the Use of Long-Term Contracts

The agencies have numerous efforts under way to overcome some of the challenges they face, including conducting training courses and workshops to help overcome resistance to the use of an unfamiliar tool and supporting innovative efforts to find cost-effective uses for small-diameter materials. However, they do not have a strategy in place for the use of long-term contracts, in terms of where such contracts should be used and how they should be funded. As a result, field offices must make decisions about whether to enter into long-term contracts without fully understanding the inherent risks and trade-offs, thereby potentially jeopardizing the stability of their other programs or, on the other hand, forgoing an opportunity to achieve cost-effective restoration.

To overcome resistance to stewardship contracting, the agencies have provided—jointly and individually—training for their staff and for contractors. For example, the two agencies jointly formed a cadre of officials that developed a training program that covered both acquisition and timber contracting and addressed both IRTCs and IRSCs. According to a Forest Service official, the staff who work on acquisition contracts and the staff who work on timber sale contracts usually do not work together, so it was refreshing to have both types of staff involved in discussions and learning about stewardship contracting. The Forest Service has posted the training materials on its Web site.

Also, the Forest Service plans to address difficulties between the timber and acquisition sides by establishing centers of excellence that would provide advice and assistance to staff as needed. In the Forest Service, acquisition staff often have not been actively involved in stewardship contracts. Although an acquisition official said that the agency had planned to train some timber staff to act as acquisition contracting officers, with the requisite certification to obligate government funds, it has since abandoned that idea because of the expense and time it would take to provide the initial and recurrent training. The agency's new plan, according to this official, is to establish several centers of excellence, staffed with individuals who can provide advice and assistance on acquisition issues and can act as contracting officers when necessary.

BLM already has in place such an arrangement: In 2007, the Washington Office designated the Oregon State Office as the agency's center of excellence for contracting. In this capacity, the Oregon office handles contracts for all of BLM's western states, including Alaska, that are valued at more than \$100,000. The Oregon contracting officers put together stewardship contracting packages and review the final contracts; they also attend preproposal meetings and provide advice to contractors and BLM personnel. Nevertheless, the operational side of stewardship contracting (e.g., outreach, collaboration, design, and contract administration) is still performed by the field offices.

To help overcome resistance by contractors, agency officials said they provide training to contractors and work with them one on one to help them understand stewardship contracting. For example, procurement task assistance centers are located in several states; these centers work with contractors (at no charge) to help them understand contract formats and requirements. The biggest hurdle, according to a BLM official, is getting contractors to feel comfortable with preparing technical proposals.

Forest Service officials also said they try to incorporate into stewardship contracts service work that is familiar to contractors, to encourage them to gain experience with this new tool. Some officials noted that "starting small" with stewardship projects can be a strategy to improve contractors' chances for success. An official of one forest, for example, said that keeping stewardship projects small—in acres and in value—has been a good way for both the forest and the contractors to gain experience. And on another forest, a contracting official said that bundling similar types of work in a contract has been a successful strategy. This strategy can benefit smaller companies that lack the equipment or financial resources to bid on a large project or a project that includes dissimilar tasks.

As for county commissioners' concerns about the loss of county timber receipts, agency officials said they try to involve county officials in stewardship project planning efforts and talk to officials about the local benefits of stewardship projects. In Wisconsin, for example, Forest Service officials said they have talked with county officials about the benefits of stewardship contracting, such as the stable employment that stewardship contracting would bring to the counties despite the counties' not receiving any portion of the stewardship receipts. In some cases, county officials have been willing to support stewardship contracting. In Minnesota, for example, a Forest Service official described county officials as "cautious but willing" to support stewardship contracting because of the potential for an increase in employment and the associated multiplier effect of people spending their salaries in the local area.

Also, the agencies are working to find cost-effective uses for small-diameter materials and biomass. To stimulate the market for small-diameter wood and biomass, and thereby reduce the amount that contractors must be paid to remove this material, the agencies are working with various contractors, entrepreneurs, universities, and other organizations to develop cost-effective and sometimes innovative uses for these materials. In some cases, agency officials have worked with stewardship contractors to find new markets for these materials, including nearby facilities that use wood chips for heat or power plants that can burn the materials—alone or mixed with coal. In another case, one national forest is working with an entrepreneur and a nearby university on the development of a process known as torrefaction, in which wood chips are slowly heated until the wood reaches a near-charcoal state, making it easier to store, transport, and use in certain applications.

In some cases, the agencies have provided grants to spur investment in research or development of innovative uses for biomass. The Forest Products Laboratory, for example, provided a \$250,000 biomass grant to support the construction of a pressure treatment facility that will treat material processed from the White Mountain stewardship project in Arizona.³⁷ This facility uses a chemical product to preserve material for exterior use.

³⁷Established in 1910 by the Forest Service, the Forest Products Laboratory provides grants for research on various aspects of wood use, such as pulp and paper products, housing and structural uses of wood, and wood preservation.

Although numerous agency officials cited the potential of long-term multiyear stewardship contracts to help stimulate markets for wood products, neither agency has developed strategies for funding the associated cancellation ceiling—one of the two primary challenges associated with multiyear contracts. As noted earlier, the purpose of obligating the cancellation ceiling at the inception of the contract is to prevent agencies from making financial commitments beyond the funding Congress has provided. Yet rather than identifying strategies for funding these cancellation ceilings, several Forest Service officials told us they believe their agency should be exempt from having to obligate these funds at the outset of the contract. One official said that the cancellation ceiling is unnecessary altogether, because contracts already contain a standard clause allowing the contractor to be reimbursed if the government cancels the contract for its convenience. Other Forest Service officials disagreed that the standard clause offers sufficient protection, stating that the contractor needs the protection afforded by the cancellation ceiling—but added that requiring the agency to obligate the funds at the inception of the contract needlessly ties up agency funds that could be used to conduct additional work. These officials believe that the agency should not have to obligate the funds unless and until it cancels the contract. The Forest Service has sought legislative relief from the up-front funding requirement, but none had been enacted as of October 2008.

In the two instances in which a cancellation ceiling has been established for a long-term multiyear contract—for the White Mountain contract in Arizona and the proposed Front Range contract in Colorado—agency staff derived cancellation ceilings that reflected not the amount needed to attract significant investment in infrastructure, but rather the amount each unit believed it could afford. Without a national strategy on the use of long-term multiyear contracts, including a clear agency position on the need for appropriate cancellation ceilings and guidance on how to fund them, agency units may continue to establish such “affordable” levels—potentially driving away interested investors who are concerned that they

do not have sufficient contractual protection—or may forgo the use of long-term contracts entirely.³⁸

Forest Service officials also held different opinions about whether an agency could avoid the cancellation ceiling entirely by using options contracts, which do not require an up-front cancellation ceiling, while still stimulating infrastructure investment. A May 2007 opinion from the Department of Agriculture’s Office of General Counsel held that it is unnecessary to use multiyear contracts at all; the opinion suggested that the agency use options contracts instead. However, others in the agency said that options contracts do not afford contractors enough assurance of a long-term supply and, as such, do not assist them in obtaining loans for equipment or plant construction—a fundamental objective of using long-term multiyear contracts. Accordingly, options contracts may be best suited for areas with existing infrastructure (e.g., lumber mills or pulp and paper mills).

The other challenge associated with long-term contracts is maintaining sufficient funding to support an ongoing long-term project at levels sufficient to provide the contractor with a steady supply of material while at the same time funding other important activities. The implications of this challenge are also highlighted by the previously discussed experience of the White Mountain project. This is not to say the project has been unsuccessful; to the contrary, numerous agency officials as well as environmental and other stakeholders praised the quality of the work and the ecological results. Nevertheless, as a result of funding its commitment on the White Mountain project, the forest has struggled to adequately finance its other programs—a cautionary lesson for other agency units contemplating long-term stewardship contracts of their own. Certainly, other units may decide that the need for a particular long-term project is so great that they are willing to reduce funding for various other programs in order to pay for it. However, the agencies have not developed strategies for the use and funding of long-term multiyear contracts. Without such a strategy—based on a systematic analysis of lessons learned from long-

³⁸Recently proposed legislation would, if enacted, allow the Forest Service to use a newly authorized source to obligate funds covering a portion of the cancellation ceiling. Senate Bill 2593 would authorize the establishment of a fund—the Collaborative Forest Landscape Restoration Fund—to be used to pay up to half the cost of carrying out and monitoring ecological restoration treatments proposed on national forest land; these costs include the obligation of funds to cover cancellation costs associated with contracts carrying out such treatments. As of October 2008, the proposed legislation had not been enacted.

term projects already undertaken and accompanied by guidance on selecting and implementing such projects—individual units may make choices about using long-term contracts without fully understanding their implications.

Conclusions

Halfway through its currently authorized 10-year life span, stewardship contracting has shown promise in helping the Forest Service and BLM accomplish their land management objectives. The agencies have taken advantage of the ability to trade goods for services to defray the cost of needed thinning and other service work, and they have worked closely with community groups to design projects that meet community needs.

One element of stewardship contracting has not been widely explored, however: the authority to enter into 10-year contracts. Although we frequently heard that this authority is essential in helping develop markets for timber, woody biomass, and other materials (by allowing the agencies to provide potential contractors and industry operators more certainty of supply), the suitability of long-term multiyear stewardship contracts to encourage investment in infrastructure has yet to be demonstrated. And the experience of the one forest that has implemented a long-term multiyear contract shows the potential pitfalls of this tool, as the forest has had to scale back its other programs in order to adequately fund the long-term project. The stakes are further raised by the need for a potentially sizable up-front obligation of funds to protect both the contractor's and the government's interests. Although two additional long-term multiyear contracts are in process and officials in several field units said they are contemplating the use of such contracts, the agencies have not developed national strategies that describe the role of long-term multiyear contracts and lay out the agencies' positions on issues such as when such contracts are appropriate, how many should be in place, where they should be located, and how they will be funded. Without such a strategy, the agencies may fail to capitalize fully on the potential of stewardship contracting. For example, field units may have little choice but to settle for affordable cancellation ceilings, rather than ceilings sufficient to encourage substantial investment in industry or infrastructure to use the products from the stewardship project.

Regardless of the contracting mechanisms used or their duration, the agencies must maintain complete and reliable data if they are to effectively evaluate their use of stewardship contracting and provide details on its use to Congress and the public. Currently, the agencies' data reside in myriad automated and manual systems that are often not linked. Further, the

agencies do not systematically capture nationwide information specific to agreements, nor does the Forest Service capture data on the number of contracts that are set aside for small businesses. Not only do such data deficiencies keep the agencies from assessing the true costs and accomplishments associated with stewardship contracting—especially in comparison with other tools that might achieve the same goals—but they also prevent Congress and the public from making informed judgments about the value of this land management tool, which will become increasingly critical as expiration of the stewardship authority draws closer and Congress evaluates its renewal.

Recommendations for Executive Action

We are making three recommendations to improve the agencies' use of stewardship contracting.

To ensure that the commitment of federal funds under long-term contracts is appropriately targeted, especially given the potential trade-offs involved, we recommend that the Secretaries of Agriculture and the Interior develop strategies for the use of long-term multiyear contracts that address, on a nationwide basis, the criteria agency officials can use to evaluate whether, in any given case, such a contract would be an appropriate mechanism to assist the agency in meeting its land management objectives. The strategy should address options for funding such contracts in a manner that considers trade-offs with respect to other land management activities and should be based on a systematic analysis of lessons learned from long-term projects already undertaken.

Additionally, to ensure ease of reporting and accurate accounting of activities undertaken through stewardship contracts and agreements, we recommend that the Secretaries

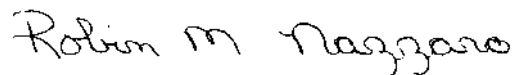
- implement, as part of their efforts to improve their stewardship contracting databases, improvements that will increase data interfaces among the various systems that contain stewardship data and will ensure accuracy and completeness in the data maintained and, as part of these same efforts,
- implement improvements that will accurately account for products sold and services received under stewardship agreements.

Agency Comments

We provided the Departments of Agriculture and the Interior with a draft of this report for review and comment. The Forest Service and the Department of the Interior generally agreed with the findings and recommendations in the report. The Forest Service's and Interior's written comments are reproduced in appendixes II and III, respectively.

We are sending copies of this report to interested congressional committees, the Secretaries of Agriculture and the Interior, the Chief of the Forest Service, the Director of the Bureau of Land Management, and other interested parties. We will also make copies available to others upon request. In addition, the report will be available at no charge on the GAO 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 or nazzaror@gao.gov. Contact points for our Offices of Public Affairs and Congressional Relations may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix IV.



Robin M. Nazzaro
Director, Natural Resources
and Environment

Appendix I: Objectives, Scope, and Methodology

Our objectives were to determine (1) the extent to which, and for what purposes, federal agencies are using stewardship contracting; (2) what processes the agencies use in planning, implementing, and monitoring stewardship projects to manage resources; and (3) what successes and challenges the agencies have experienced in using stewardship contracting. Our review was limited to the Forest Service and the Bureau of Land Management (BLM), the two agencies with stewardship contracting authority.

To identify the extent and nature of the agencies' use of stewardship contracting authority, we obtained data from Forest Service and BLM officials on the number of such projects, as well as other project information such as project acreage, timber volume and value, and the value of contracted services. We also obtained data on retained receipts from the agencies' financial accounting systems. Neither the Forest Service nor BLM maintains comprehensive national data on all aspects of stewardship contracting; in some cases, reliable agency data were available for only certain years, and in other cases the agencies could provide only estimates. Further, because the agencies have adopted ways of collecting and reporting data independent of one another, equivalent data were not always available for both agencies during the same time period.

We assessed the reliability of the data by conducting interviews with headquarters, regional, and state office officials who enter data into the systems, maintain them, and prepare reports using system data. We also obtained information on the standards, procedures, and internal controls in place for collecting, reporting, and verifying data, in order to assess their accuracy and completeness. In some cases, data are maintained in systems whose reliability GAO has previously assessed; in such cases, we relied on these earlier assessments in evaluating system reliability. For example, certain Forest Service data on acreage treated under stewardship contracts are reported through the National Fire Plan Operations and Reporting System; we reviewed a 2007 GAO report that assessed this system and determined that it is sufficiently reliable for our purposes.¹ Similarly, both agencies track some financial data on stewardship contracting through their departmental accounting systems—the

¹GAO, *Wildland Fire Management: Better Information and a Systematic Process Could Improve Agencies' Approach to Allocating Fuel Reduction Funds and Selecting Projects*, GAO-07-1168 (Washington, D.C.: Sept. 28, 2007).

Department of Agriculture's Foundation Financial Information System and BLM's Federal Financial System. We reviewed previous work done by GAO and an independent auditor and determined that the data produced from these systems are sufficiently reliable for our purposes.² We did not perform any electronic testing of data. Ultimately, we determined that the various sources of agency data provided sufficiently reliable data for certain years, as well as for broad trends across years, but did not provide data sufficiently reliable to allow comparisons between the agencies in all areas, as noted in the body of the report. Finally, we interviewed Forest Service and BLM officials about their progress in designing or modifying systems to improve their data and better track information associated with stewardship contracting projects.

Because neither agency maintains nationwide data that describe the objectives or characteristics of individual stewardship projects, we obtained information on project objectives and characteristics by interviewing headquarters and field officials and conducting site visits to projects in seven of the nine Forest Service regions and 7 of the 11 western states in which BLM has state offices. We reviewed (either by visiting in person or discussing with agency officials) a nonprobability sample of 26 Forest Service projects and 9 BLM projects.³ We selected projects to represent variety in geographic location, type of restoration work, size (in acreage as well as in value), and stage of implementation, as well as in the stewardship contracting authorities used. Table 2 shows the locations of the Forest Service projects we reviewed and the projects' objectives; table 3 shows similar information for the BLM projects we reviewed.

²GAO, *Federal Timber Sales: Forest Service Could Improve Efficiency of Field-Level Timber Sales Management by Maintaining More Detailed Data*, [GAO-07-764](#) (Washington, D.C.: June 27, 2007).

³Results 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.

Table 2: Forest Service Stewardship Projects Included in GAO’s Review

Location	Project name	Project objectives
Northern Region		
Bitterroot National Forest (Montana)	Hayes Creek	Hazardous fuel reduction
Lolo National Forest (Montana)	Knox Brooks	Hazardous fuel reduction, road reconstruction, bridge and culvert replacement
Nez Perce National Forest (Idaho)	Crooked River	Stream restoration to benefit fish
Southwestern Region		
Apache-Sitgreaves National Forests (Arizona)	White Mountain	Hazardous fuel reduction, community economic development
Cibola National Forest (New Mexico)	South Monighan Grande	Hazardous fuel reduction
Cibola National Forest (New Mexico)	South Monighan Pequeño	Hazardous fuel reduction
Intermountain Region		
Dixie National Forest (Utah)	Upper Santa Clara	Hazardous fuel reduction, campground improvement
Pacific Southwest Region		
Eldorado National Forest (California)	Grizzly Flats	Hazardous fuel reduction
Eldorado National Forest (California)	Last Chance	Hazardous fuel reduction
Mendocino National Forest (California)	Alder	Hazardous fuel reduction, carbon sequestration research
Shasta-Trinity National Forests (California)	Post Mountain	Hazardous fuel reduction
Pacific Northwest Region		
Fremont-Winema National Forests (Oregon)	Bull	Hazardous fuel reduction, road closures
Fremont-Winema National Forests (Oregon)	Burnt Willow	Hazardous fuel reduction, community economic stability
Fremont-Winema National Forests (Oregon)	Kava	Hazardous fuel reduction, riparian restoration, prescribed fire
Fremont-Winema National Forests (Oregon)	Trail	Postfire restoration, road closures, stream rehabilitation
Siuslaw National Forest (Oregon)	Siuslaw Basin Partnership	Watershed restoration across federal, state, and private lands
Southern Region		
Francis Marion and Sumter National Forests (South Carolina)	Price's Bottom	Hazardous fuel reduction, wildlife habitat improvement, prescribed fire
Francis Marion and Sumter National Forests (South Carolina)	Wando River	Hazardous fuel reduction, wildlife nesting habitat
Eastern Region		
Chequamegon-Nicolet National Forests (Wisconsin)	Argonne Old Growth	Old growth management, culvert replacement, dam replacement, noxious weed control
Chequamegon-Nicolet National Forests (Wisconsin)	Day Lake	Hazardous fuel reduction near a wildland-urban interface

Appendix I: Objectives, Scope, and Methodology

Location	Project name	Project objectives
Chequamegon-Nicolet National Forests (Wisconsin)	Oak Wilt	Disease and noxious weed control
Ottawa National Forest (Michigan)	Cisco Camp/ Redlight Creek	Vegetation management, construction of traditional Native American roundhouse, culvert replacement
Superior National Forest (Minnesota)	Karibou	Hazardous fuel reduction
Superior National Forest (Minnesota)	Nira	Road decommissioning
Superior National Forest (Minnesota)	Peeler	Hazardous fuel reduction, road decommissioning, noxious weed treatment
White Mountain National Forest (New Hampshire)	Discovery Trail	Recreation trail construction, educational signage and materials

Source: GAO analysis of Forest Service data.

Table 3: BLM Stewardship Projects Included in GAO’s Review

Location	Project name	Project objectives
California		
Redding Field Office	Weaverville	Trail building, stream improvement, control of invasive species, study of heritage fruit trees
Colorado		
Royal Gorge Field Office	Arkansas Mountain	Hazardous fuel reduction
Idaho		
Cottonwood Field Office	Corridors	Hazardous fuel reduction
Montana		
Missoula Field Office	Hayes Restoration	Forest health improvement, prescribed burning
New Mexico		
Rio Puerco Field Office	Picnic	Hazardous fuel reduction, habitat restoration
Oregon		
Lakeview District	Gerber Stewardship	Hazardous fuel reduction, road improvements, habitat restoration
Medford District	Camp Stewardship	Forest health improvement, road decommissioning, spring protection
Medford District	Penny Stewardship	Hazardous fuel reduction, community development
Utah		
Kanab Field Office	Buckskin-Powerline	Hazardous fuel reduction

Source: GAO analysis of BLM data.

To assess agency processes for planning, implementing, and monitoring stewardship projects, we reviewed national guidance issued by each agency, including guidance for such processes as conducting timber

appraisals, advertising and awarding contracts, and establishing and maintaining monitoring processes. We also reviewed federal contracting requirements, including those contained in the Federal Acquisition Regulation. In addition, we interviewed national program officials with each agency, as well as officials of the Pinchot Institute for Conservation, the agencies' contractor for the multiparty monitoring and evaluation effort, to obtain information and opinions on agency processes for conducting stewardship projects.

During our site visits, we selectively reviewed projects' contracting and financial files to obtain information on the planning, contracting, and monitoring processes each agency uses, and interviewed Forest Service and BLM project officials at each location, including regional stewardship coordinators, project managers, timber sale contracting officers, acquisition contracting officers, and others. At several sites we also met with the contractors performing the stewardship activities in order to obtain their perspectives on the projects, including the agency processes they observed for advertising, awarding, and overseeing the projects. And finally, at some locations we met with stakeholders, such as community groups, researchers, local citizens, and representatives of timber industry and environmental groups, in order to obtain their perspectives on the use of stewardship contracting.

To identify the successes and challenges the agencies have experienced using stewardship contracting, we interviewed agency officials, contractors, and stakeholders at many projects we visited to obtain their views on the successes and challenges associated with stewardship contracting, including the factors they believe contributed to these successes and challenges, and the measures taken to overcome the challenges. We also reviewed selected project contracting and financial files and stakeholder documents to assess the extent to which projects offered examples of successes or challenges faced by the agency units in using stewardship contracting. Finally, we reviewed national program guidance and spoke with national program officials in each agency to identify actions the agencies had taken to overcome the challenges we or others had identified.

We conducted this performance audit from August 2007 through October 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe

that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Comments from the Forest Service



Forest
Service

Washington
Office

1400 Independence Avenue, SW
Washington, DC 20250

File Code: 2400/1580/6320

Date: October 10, 2008

Robin M. Nazzaro
Director, Natural Resources and Environment
Government Accountability Office
441 G. Street, NW
Washington, DC 20548

Dear Ms. Nazzaro:

Thank you for the opportunity to review and comment on the draft Government Accountability Office report GAO-09-23, "Federal Land Management: Use of Stewardship Contracting Is Increasing, but Agencies Could Benefit from Better Data and Contracting Strategies". The Forest Service generally agrees with the GAO findings and recommendations and has no additional comments on the report. If you have any questions, please contact Sandy T. Coleman, Assistant Director for GAO/OIG Audit Liaison Staff, at 703-605-4699.

Sincerely,



ABIGAIL R. KIMBELL
Chief

cc: Tom Peterson
Richard Fitzgerald
Sandy T Coleman
Jesse L King
Clarice Wesley
Ronald Hooper

Appendix III: Comments from the Department of the Interior



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

OCT 24 2008

Ms. Robin M. Nazzaro
Director, Natural Resources and Environment
Government Accountability Office
441 G Street, N.W.
Washington, D.C. 20548-0001

Dear Ms. Nazzaro:

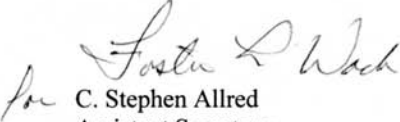
Thank you for the opportunity to review and comment on the Government Accountability Office draft report entitled "*Federal Land Management: Use of Stewardship Contracting Is Increasing but Agencies Could Benefit from Better Data and Contracting Strategies*," (GAO-09-23).

The Department of the Interior concurs with the findings and recommendations for executive action and believes these will help us improve how we administer the stewardship contracting authority.

The enclosure provides technical comments on the draft report.

If you have any questions, please contact Scott Lieurance, Chief, Division of Forests and Woodlands, at (202) 452-0316 or LaVanna Stevenson-Harris, BLM Audit Liaison Officer, at (202) 785-6580.

Sincerely,


for C. Stephen Allred
Assistant Secretary
Land and Minerals Management

Enclosure

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Robin M. Nazzaro, (202) 512-3841 or nazzaror@gao.gov

Staff Acknowledgments

In addition to the individual named above, Steve Gaty, Assistant Director; Sandra Davis; and Pam Tumler made key contributions to this report. Mark Braza, Nancy Crothers, Carol Henn, Rich Johnson, Ty Mitchell, and Bill Woods also made important contributions to this report.

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