



U.S. Department of Agriculture



Office of Inspector General
Western Region

Audit Report

Forest Service Stewardship Contracts

Report No. 08601-50-SF
September 2007



UNITED STATES DEPARTMENT OF AGRICULTURE

OFFICE OF INSPECTOR GENERAL

Washington D.C. 20250



DATE: September 28, 2007

TO: Abigail Kimbell
Chief
Forest Service

ATTN: Sandy Coleman
Audit Liaison

FROM: Robert W. Young /s/
Assistant Inspector General
for Audit

SUBJECT: Forest Service Stewardship Contracts

This report presents the results of our audit of Forest Service (FS) stewardship contracts, which allow FS to trade goods for services. Our objective was to evaluate the stewardship contracting operations that FS conducts to meet its land management goals. To meet this objective, we assessed whether there were sufficient controls over the (1) value of forest products removed such as timber, (2) value of services rendered, and (3) use of appropriated dollars assigned to the projects. We also assessed the adequacy of FS' monitoring of stewardship projects. We determined that overall FS had sufficient controls for valuing services rendered and for using appropriated dollars. We also determined that its monitoring was adequate. However, we found that Region 5 implemented an alternate appraisal method in October 2005 that underestimated timber values for its stewardship contracts by \$467,326. See exhibit A for the summary of monetary results.

BACKGROUND

FS faces many challenges in protecting over 192 million national forest acres from threats to conservation, such as wildfires and invasive species. FS' success depends in part on its ability to discover innovative ways to partner with governmental and nongovernmental entities to achieve land management goals. Stewardship contracting is one such tool that helps FS accomplish its resource management goals through collaboration with these entities.

The Consolidated Appropriations Resolution for 2003 grants FS the authority until September 30, 2013, to enter in up to 10-year stewardship contracting projects with private

persons and public or private entities via contract or agreement.¹ These contracts allow FS to trade goods for services. For example, FS may allow a contractor to remove forest products (i.e., timber and biomass) in return for performing work that reduces the risk of catastrophic wildfire. Trading goods for services lets FS offset the cost of services received with the value of timber (or other forest products) removed. Figure 1 shows a contractor de-branching timber using a Dangle Head Log Processor.

FS determines the value of forest products removed and service work performed for a stewardship contracting project. The transaction evidence appraisal (TEA) method is approved as the primary method for estimating the fair market value of timber based on the bid values of past timber sale transactions. In addition, the cost of the service work performed is estimated using methods defined by FS' procurement contracting officers.

Figure 1: Dangle Head Log Processor



As of January 26, 2007, based on the information we collected from FS' Washington office and Regional offices, 240 stewardship projects were approved in FS' Regions.²

OBJECTIVES

Our audit objective was to evaluate the stewardship contracting operations that FS conducts to meet its land management goals. To accomplish this objective, we assessed whether there were sufficient controls over the (1) value of forest products removed, (2) value of services rendered, and (3) use of appropriated dollars assigned to the projects. We also assessed the adequacy of FS' monitoring of stewardship projects.

¹ Public Law 108-7, sec. 323 (Feb. 20, 2003). This law amended FS' pilot program authority, which limited the number of stewardship contracts FS could enter into.

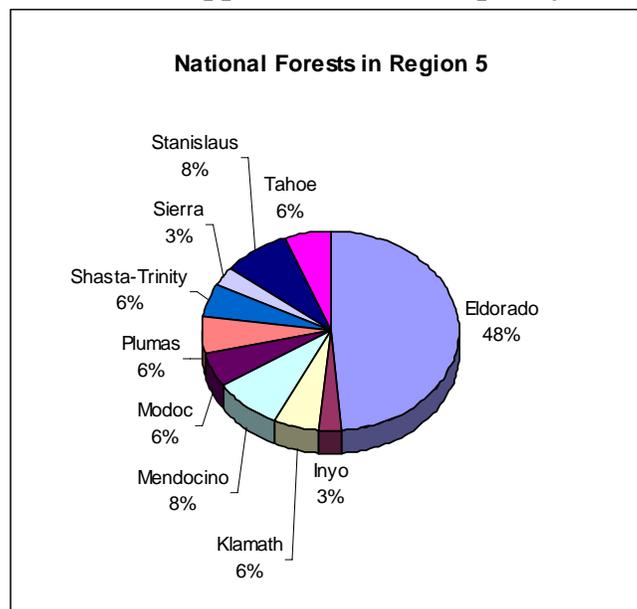
² These projects were approved after the enactment of the 2003 Consolidated Appropriations Resolution.

SCOPE AND METHODOLOGY

Our audit covered stewardship contracting operations for fiscal years (FYs) 2004 - 2007. We performed audit fieldwork at two Regional offices and four national forests from January 2007 through July 2007 (see exhibit B). We selected Region 3 due to the high appropriated dollars estimated for the projects; Region 5 was selected because it had a high number of approved stewardship projects.

In Region 3, we selected five stewardship projects for review in the Lincoln, Coconino, and Apache-Sitgreaves national forests based on the high estimated appropriated dollars (\$4.5 of \$5.3 million region-wide). In Region 5, we selected five stewardship projects for review in the Eldorado National Forest because it had the largest number of approved stewardship projects (17 of 35 approved stewardship projects region-wide).

Chart 1: Approved Stewardship Projects



After we identified problems with Region 5's alternate appraisal method (Transaction Evidence Appraisal Residual Value, or TEARV,³ we expanded our review within Region 5 to include all stewardship contract timber appraisals conducted using this method. We determined that there were a total of nine stewardship contracts awarded where TEARV was used to appraise the timber.

To accomplish our audit, we performed the following procedures:

- Reviewed all laws and regulations pertaining to stewardship contracting and approved timber appraisal methods,

³ TEARV was implemented by the Region in October 2005.

- Interviewed key FS Washington office and Regional office staff, including the assistant director of forest management and the timber program section head about FS' appraisal process,
- Interviewed key national forest staff to determine the forests' process of valuing stewardship contracts,
- Analyzed contract and appraisal documentation pertaining to our sampled stewardship projects to evaluate controls over valuation methods,
- Reviewed invoices and other documentation to determine whether appropriated dollars were properly used, and
- Reviewed monitoring reports to assess the adequacy of FS' monitoring over stewardship projects.

We conducted this performance audit 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.

AUDIT RESULTS

Finding 1: Region 5 Applied Rollback Factor Inappropriately in TEARV

In October 2005, FS' Region 5 implemented a timber appraisal method (TEARV), which incorrectly calculated the advertised value of its timber. This occurred because the rollback factor⁴ was inappropriately applied to costs rather than values in the appraisal calculation. As a result, between 2005 and 2007, all nine stewardship contracts awarded using TEARV were underestimated by a total of \$467,326. Although in total the timber sold for more than the estimated value, two of the nine contracts were bid and awarded at the advertised rate.

FS directives for stewardship contracting require that timber appraisals be conducted using methods specified in the Timber Sale Preparation Handbook (handbook).⁵ The handbook states, "The transaction evidence appraisal (TEA) system is approved as the primary method for appraising [timber] values," which is based on the bid rates of past competitive timber sales occurring during a specified time (base period).

In a TEA system, the appraisal process starts with the weighted-average bid values of past sales (predicted bid value). To arrive at indicated advertised timber values,⁶ the predicted bid value is first adjusted for differences between the conditions of the base period sales (i.e., costs and

⁴ The rollback factor allows FS, among other things, to set advertised rates at a level that generates sufficient competition (i.e., a downward adjustment) to establish an actual fair market value for its timber.

⁵ FSH 2409.18, ch. 40 (Nov. 9, 2005).

⁶ This represents the estimated timber value.

values) and the sale being appraised. Then, the predicted bid value is further adjusted by applying a rollback factor.

Regional foresters may approve other appraisal methods as needed. For example, Region 5 developed TEARV to use when there were an insufficient number of past competitive timber sales to calculate a predicted bid value. To arrive at estimated timber values using TEARV, the appraisal process begins with the log delivered values⁷ of the timber species and subtracts total costs (which includes cutting, de-branching, and loading trees). Then, the log delivered value is further adjusted downwards by applying a rollback factor to costs.

Although TEARV is an alternate timber appraisal method, its design should be consistent with TEA since this system was approved as the primary method for appraising timber values. So, within TEARV, the rollback factor should have been applied to the net log delivered value instead of costs. However, for all nine stewardship contracts, Region 5 applied the rollback at the wrong place in the calculation, thereby underestimating its timber value by \$467,326 (see exhibit C). For example, project G’s timber was appraised at \$281,393 using the Region’s TEARV but should have been appraised at \$347,688 by applying the rollback in a manner consistent with TEA.

Table 1 illustrates a simplified TEARV model for project G that compares the Region applying the rollback to costs rather than net log delivered value.

Table 1: Comparison of Rollback Application

Calculation	Project G		Difference
	Application Against Costs	Application Against Net Log Delivered Value	
Log Delivered Value ¹	\$1,435,590	\$1,435,590	
Less Costs ²	-\$1,049,270	<u>-\$1,049,270</u>	
Net Log Delivered Value		\$386,320	
Less 10% Rollback (Costs)	<u>-\$104,927</u>		
Less 10% Rollback (Net Value)		<u>-\$38,632</u>	
Indicated Advertised Timber Value	\$281,393 ³ =====	\$347,688 =====	-\$66,295 =====
(1) Actual log delivered value may differ from FS’ appraisal due to rounding and any subsequent adjustments to value. (2) Costs x total species volume on FS’ appraisal summary. (3) FS’ estimated timber value obtained from its appraisal summary.			

Region 5’s timber program section head agreed that within TEARV the rollback should have been applied against net log delivered value to be consistent with the handbook’s application of

⁷ Log delivered value is the price a mill is willing to pay for timber.

the rollback in TEA. Subsequently, the section head stated that on November 6, 2006, the Region modified TEARV to apply the rollback factor in a manner consistent with national direction. We were also informed that the Region notified the national forests by email concerning this change. However, we found that for the next stewardship contract appraised—2½ months after the November modification—one forest continued to inappropriately apply the rollback to costs.

Exhibit C illustrates the differences in advertised timber values for each of the nine stewardship contracts when the rollback is applied against costs versus net log delivered value. New Regional guidelines approved on July 20, 2007, state “After the total cost center value [costs] is subtracted from the log delivered value . . . a rollback factor is applied.”⁸

Region 5 Did Not Compile Base Sales in Accordance with the Handbook

Also, Region 5 did not compile the base period sales in accordance with the handbook when appraising timber values.⁹ The handbook requires that the base data be compiled from timber sales sold competitively (when available). However, the Region did not use both stewardship and timber sale contract bid data to establish a base, which may have skewed the appraised values (i.e., indicated advertised timber values).¹⁰ This practice was incorporated in Regional guidelines which state, “Stewardship projects are kept separate in the base.”¹¹

Region 5’s timber program section head stated that combining the bid data of timber removed under its stewardship contracts with the bid data of timber sale contracts would be like “mixing apples and oranges.” The section head reasoned that the bidding for stewardship contracts is higher and riskier than bidding on timber sale contracts due to the service work performed under stewardship contracts. In addition, the section head believed that the log delivered values used in TEARV represent historical sales transactions.

The Regional office should comply with FS’ handbook regarding the compilation of base data. However, if FS Washington office believes mixing stewardship data and regular sales data in the base is inappropriate, it should document this and provide instructions to the Regional offices accordingly.

Recommendation 1:

Ensure all Regions using alternate appraisal methods have calculation models that are consistent with FS’ Timber Sale Preparation Handbook.

FS Response: In its written response to the draft report, dated September 27, 2007, FS stated that the Washington office will send a letter to all regions instructing them to use calculation methods that are consistent with FS’ Timber Sale Preparation Handbook for timber value appraisals. FS also stated that the Washington office will review calculation methods in timber

⁸ Region 5 Handbook 2409.22, ch. 48, sec. 48.23 (Jul. 20, 2007).

⁹ FSH 2409.18, ch. 40 (Nov. 9, 2005).

¹⁰ We were unable to determine the precise effect of the Region’s actions because we would need to estimate variables (e.g., costs, timber values, market conditions, etc.) that could not be accurately established at the time of our fieldwork.

¹¹ Region 5 Handbook 2409.22, ch. 48, sec. 48.4 (Jul. 20, 2007).

value appraisals to ensure that all regions are following direction. FS' estimated completion date for these actions is September 30, 2008.

OIG Position: We accept FS' management decision on this recommendation. For final action, FS needs to provide documentation to the Office of the Chief Financial Officer (OCFO) that the agreed upon action has been taken.

Recommendation 2:

Instruct Region 5 to establish base period sales according to FS' Timber Sale Preparation Handbook.

FS Response: In its written response to the draft report, dated September 27, 2007, FS stated that the Washington office will send a letter to Region 5 instructing it to establish base period sales according to the FS' Timber Sale Preparation Handbook. FS' estimated completion date for this action is January 31, 2008.

OIG Position: We accept FS' management decision on this recommendation. For final action, FS needs to provide documentation to OCFO that the agreed upon action has been taken.

Recommendation 3:

If FS Washington office believes mixing stewardship data and regular sales data in the base is inappropriate, document this and provide instructions to the Regional offices.

FS Response: In its written response to the draft report, dated September 27, 2007, FS stated that it will review the direction for base period data for transaction evidence appraisals, consider the need for other specific Washington office instruction, and provide clarifying instructions to the regional offices if necessary. FS' estimated completion date for this action is January 31, 2008.

OIG Position: We accept FS' management decision on this recommendation. For final action, FS needs to provide documentation to OCFO supporting its decision in this matter.

CONCLUSION

Your September 27, 2007, response to the draft report has been included as exhibit D of this report. We have accepted FS' management decision for all of the report's recommendations.

We appreciate the assistance and cooperation of your staff during our review.

Exhibit A – Summary of Monetary Results

FINDING NUMBER	RECOMMENDATION NUMBER	DESCRIPTION	AMOUNT	CATEGORY
1	1	Underestimated timber on appraisals for nine stewardship contracts reviewed in Region 5	\$467,326	FBPTBU- Management or Operating Improvements/Savings
TOTAL MONETARY RESULTS			\$467,326	

Exhibit B – Audit Sites Visited

AUDIT SITE	LOCATION
<u>Region 5</u> Pacific Southwest Regional Office	Vallejo, CA
Eldorado National Forest	Placerville, CA
<u>Region 3</u> Southwestern Regional Office	Albuquerque, NM
Lincoln National Forest	Alamogordo, NM
Coconino National Forest	Flagstaff, AZ
Apache-Sitgreaves National Forest	Springerville, AZ

Exhibit C – Comparison of Rollback Applications

Exhibit C – Page 1 of 1

STEWARDSHIP PROJECT	APPLICATION AGAINST COSTS	APPLICATION AGAINST NET LOG DELIVERED VALUE	DIFFERENCE	AWARDED BID AMOUNT
Project A	\$61,981	\$75,651	(\$13,670)	\$82,000
Project B	\$142,162	\$161,744	(\$19,582)	\$152,163
Project C	\$495,274	\$553,129	(\$57,855)	\$512,416
Project D	\$414,924	\$431,971	(\$17,047)	\$420,024
Project E	\$189,756	\$216,475	(\$26,719)	\$194,500
Project F	\$157,759	\$202,814	(\$45,055)	\$157,759
Project G	\$281,393	\$347,688	(\$66,295)	\$281,393
Project H	\$171,882	\$251,772	(\$79,890)	\$310,973
Project I	\$84,528	\$225,741	(\$141,213)	\$481,804
Total	<u>\$1,999,659</u>	<u>\$2,466,985</u>	<u>(\$467,326)</u>	<u>\$2,593,032</u>

Exhibit D – Agency Response



United States
Department of
Agriculture

Forest
Service

Washington
Office

1400 Independence Avenue, SW
Washington, DC 20250

File Code: 1430
Route To:

Date: SEP 27 2007

Subject: Response to the Office of Inspector General (OIG) Audit Report No. 08601-50-SF,
"Forest Service Stewardship Contracts"

To: Robert W. Young, Assistant Inspector General for Audit, Office of Inspector
General, USDA

Thank you for the opportunity to review and comment on the official draft OIG Audit Report No. 08601-50-SF, "Forest Service Stewardship Contracts." The Forest Service generally concurs with the recommendations in the report. Please refer to the enclosed response to recommendations.

If you have any questions, please contact Sandy T. Coleman, Assistant Director for GAO/OIG Audit Liaison Staff, at 703-605-4983.


JESSE L. KING
Chief Financial Officer

Enclosure



Caring for the Land and Serving People

Printed on Recycled Paper



USDA Forest Service (FS)

Office of Inspector General Audit Report No. 08601-50-SF
FS Stewardship Contracts
Issued: September 25, 2007

Official Draft Recommendations

OIG Recommendation No. 1: Ensure all regions using alternate appraisal methods have calculation models that are consistent with FS' Timber Sale Preparation Handbook.

FS Response to Recommendation No. 1: The Forest Service concurs with this audit recommendation.

Region 5 modified its calculation method on November 6, 2006 to ensure consistency with the FS' Timber Sale Preparation Handbook. It posted the modified calculation method on its web site and notified its national forests by email of this change. On July 20, 2007, Region 5 formalized its modified calculation method in its appraisal handbook supplement, which is consistent with the FS' Timber Sale Preparation Handbook.

The FS WO will send a letter to all regions instructing them to use calculation methods that are consistent with the FS' Timber Sale Preparation Handbook for timber value appraisals. The FS WO will review calculation methods in timber value appraisals to ensure that all regions are following direction.

Estimated Completion Date: September 30, 2008

OIG Recommendation No. 2: Instruct region 5 to establish base period sales according to the FS' Timber Sale Preparation Handbook or other FS Washington office instruction.

FS Response to Recommendation No. 2: The Forest Service concurs with this audit recommendation.

The FS WO will send a letter to Region 5 instructing it to establish base period sales according to the FS' Timber Sale Preparation Handbook.

Estimated Completion Date: January 31, 2008

Exhibit D – Agency Response

OIG Recommendation No. 3: If FS believes mixing stewardship data and regular sales data in the base is inappropriate, document this and provide instructions to the Regional Offices.

FS Response to Recommendation No. 3: The Forest Service will review the direction for base period data for transaction evidence appraisals, consider the need for other specific FS WO instruction, and provide clarifying instructions to the regional offices if necessary.

Estimated Completion Date: January 31, 2008

Informational copies of this report have been distributed to:

Office of the Chief Financial Officer

Director, Planning and Accountability Division

(1)

Office of Management and Budget

(1)

Government Accountability Office

(2)