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Northeast Region

Audit Report

Followup on Recommendations Made on the Maintenance of Forest Service's Infrastructure

Report No. 08601-02-Hy
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UNITED STATES DEPARTMENT OF AGRICULTURE

OFFICE OF INSPECTOR GENERAL

Washington D.C. 20250



June 14, 2006

REPLY TO

ATTN OF: 08601-02-Hy

TO: Dale N. Bosworth
Chief
Forest Service

ATTN: Sandy Coleman
Assistant Director
GAO/OIG Audit Liaison Staff
Forest Service

FROM: Robert W. Young /s/ Marlane T. Evans (for)
Assistant Inspector General
for Audit

SUBJECT: Followup on Recommendations Made on the Maintenance of
Forest Service's Infrastructure

This report presents the results of the subject audit. Your response to the official draft, dated May 18, 2006, is included as exhibit B. Based on the response, we were not able to reach management decision on any of the report's recommendations. Excerpts of your response and the Office of Inspector General's position are incorporated into the Findings and Recommendations section of the report.

In accordance with Departmental Regulations 1720-1, please furnish a reply within 60 days describing the planned corrective actions and the timeframes for implementing them for each recommendation. Please note that the regulation requires management decision to be reached on all findings and recommendations within 6 months from report issuance.

Executive Summary

Followup on Recommendations Made on the Maintenance of Forest Service's Infrastructure (Audit Report No. 08601-02-Hy)

Results in Brief

We examined Forest Service's (FS) implementation of prior Office of Inspector General (OIG) recommendations to strengthen the controls for maintaining the agency's infrastructure.¹ This also included evaluating FS' controls for maintaining its infrastructure and for compiling and reporting maintenance backlog information. We found that due to the lack of effective processes and controls, FS has reduced assurance regarding the reliability and validity of the deferred maintenance costs recorded in the infrastructure (INFRA) database. As a result, FS officials do not have the information needed to manage the agency's infrastructure and to communicate information about it to oversight bodies. For fiscal year (FY) 2005, FS reported almost \$6 billion in deferred maintenance for general property, plant, and equipment.²

FS' general property, plant, and equipment consist primarily of roads, bridges, dams, recreation sites, buildings, and other structures such as fences. FS defines maintenance to include preventative maintenance, normal repairs, replacement of parts and structural components, and other activities needed to preserve the asset so that it continues to provide acceptable service and achieve its expected life. Deferred maintenance is maintenance that was scheduled to be performed but was delayed until a future period.

Due to inadequacies in FS' control structure, the agency could not ensure that agreed upon corrective actions were consistently implemented and the data recorded in INFRA was accurate. In addition, FS could not ensure that amounts reported for deferred maintenance in the Performance and Accountability Report (PAR) for FY 2004, were adequately supported by FS records.

- FS did not fully implement 5 of our 11 prior recommendations, which were intended to strengthen the reliability and accuracy of data the agency reported for deferred maintenance costs. (The 11 recommendations are detailed in Exhibit A.) As a result, assessments to evaluate the condition of agency assets were not completed and data on dams was not complete and timely. Moreover, the agency had no strategy for reducing its deferred maintenance backlog.

¹ These recommendations were made in two reports: FS Maintenance Backlog (Evaluation Report No. 08801-03-HQ, issued in June 1998 and FS Infrastructure Maintenance on National Forest Lands in the eastern region (Audit Report No. 08099-03-Ch, issued in July 1998).

² This amount was reported as part of FS' FY 2005, financial statements as part of the required supplementary information. The amount was not tested as part of the financial statement audit.

Condition assessment surveys are periodic inspections of property, plant, and equipment to determine their current condition and the estimated costs to correct any deficiencies. FS planned to complete these surveys on a 5-year cycle, which ended September 30, 2005. According to agency data, as of September 30, 2005, FS had not recorded a total of 22,405 condition assessment surveys for the asset categories we selected for review.³ The asset classes we reviewed included: bridges, buildings, dams, fences, recreation sites, roads, and water systems.

FS did not have an effective control structure for validating that necessary inspections of dams were performed and required plans were maintained. Dam inspections provide FS with information on whether these assets are functioning as intended and not posing a threat to people, entities, or the environment. FS records indicated that one of the seven dams we selected for review had not been inspected since August 1999. FS instructions⁴ require emergency action plans for dams to be tested annually. For the dams reviewed, we found the files contained no documentation of when the emergency action plans were last tested. Local forest staff could not recall the last time these plans were tested.

- The INFRA database includes records on assets that are not assigned to a specific FS location (e.g., national forest) and does not identify assets that are not likely to be repaired. This occurred because FS' protocol did not include procedures to ensure the accuracy of data recorded in INFRA. In addition, the agency has no established processes for identifying and segregating records on its sustainable infrastructure (i.e., those assets that are likely to be repaired). As a result, the utility of INFRA as a tool for managing FS' assets is reduced.

In order to best use the funding appropriated to reduce the amount recorded as deferred maintenance, FS officials classify and prioritize the assets to be repaired. For example, deferred maintenance that represents a threat to public health and safety is given top priority for funding. This prioritization is necessary given the sharp decrease in funding. In FY 2004, over \$31.6 million was appropriated for deferred maintenance as compared to the \$9.7 million proposed for FY 2006. As of September 30, 2005, FS reported almost \$6 billion in deferred maintenance costs.

- The amounts FS reported for deferred maintenance in the PAR for FY 2004 could not be easily traced to records in the INFRA database. We identified a difference of more than \$1.2 billion between the amounts reported for roads in the PAR and the INFRA database. This occurred

³ As of September 30, 2005, FS completed condition assessment surveys for 122,727 of the 145,132 assets in the categories we selected for review.

⁴ Forest Service Manual 7517, Emergency Action Plans, effective September 11, 2000.

because the methodology used by agency officials for summarizing the amounts to be reported was not documented. As a result, there is reduced reliability in the amounts reported for deferred maintenance.

**Recommendation
In Brief**

FS needs to develop and implement a system of controls to validate that (1) the agreed upon corrective actions are consistently implemented, (2) the data maintained on dams is complete and timely, and (3) the information recorded in INFRA is accurate. FS should also develop and implement a strategy for identifying and segregating records on the agency's sustainable infrastructure (i.e., those assets that are likely to be repaired). Finally, FS needs to document the methodology used to compile and report deferred maintenance data in the PAR from INFRA.

Agency Response

FS agreed with the report's recommendations, however was unable to finalize the responses to the recommendations. The response is included as Exhibit B.

OIG Position

Based on the response, we were unable to reach management decision on the report's eight recommendations. In response to the report, FS agreed to provide the information needed for management decision, which includes corrective action plans and timeframes for implementing them.

Abbreviations Used in This Report

FS	Forest Service
FSH	Forest Service Handbook
FSM	Forest Service Manual
FY	Fiscal Year
GPRA	Government Performance and Results Act
INFRA	Infrastructure Database
IG	Inspector General
OCFO	Office of the Chief Financial Officer
OIG	Office of Inspector General
PAR	Performance and Accountability Report
USDA	U. S. Department of Agriculture

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Background and Objectives

Background

The U.S. Congress created the Forest Service (FS) in 1905 to provide quality water and timber for the Nation's benefit. Over the years, the public's expectation of what it wanted from the national forests expanded. Subsequently, Congress directed FS to manage national forests for multiple uses and benefits and for the sustained yield of renewable resources such as water, forage, wildlife, wood, and recreation. Multiple uses mean managing resources to best benefit the American people while ensuring the productivity of the land and protecting the quality of the environment.

FS currently manages over 193 million acres of land through the agency's Washington office, 9 regional offices, 155 national forests, and 600 ranger districts. Many on-the-ground activities occur on the ranger districts. The activities include such things as, constructing and maintaining trails, operating campgrounds, and managing vegetation and wildlife habitat.

According to FS' Performance and Accountability Report (PAR) for Fiscal Year (FY) 2004, dated April 2005, FS had \$3.8 billion in general property, plant, and equipment.⁵ General property, plant, and equipment consist primarily of roads, bridges, dams, recreation sites, buildings, and other structures such as fences. As reported in the PAR, maintenance is defined to include preventative maintenance, normal repairs, replacement of parts and structural components, and other activities needed to preserve assets so that they continue to provide acceptable service and achieve their expected life. Deferred maintenance is maintenance that was scheduled to be performed but was delayed until a future period. For FY 2004, FS reported in excess of \$6.5 billion in deferred maintenance for general property, plant, and equipment.

The Office of Inspector General (OIG) reported on aspects of FS' maintenance of its assets in two prior reports. In June 1998, we issued our evaluation of FS' maintenance backlog (Evaluation Report No. 08801-03-HQ). In July 1998, we issued our report on FS' infrastructure maintenance on national forest lands in the eastern region (Audit Report No. 08099-03-Ch).

- **FS Maintenance Backlog, Report No. 08801-03-HQ, June 1998**

In this review, we evaluated FS' system for compiling its maintenance backlog and assessed the reliability of the data reported. This review was performed at the request of the House Committee on Appropriations, Subcommittee on Interior and Related Agencies.

⁵ This amount was also reported in FS FY 2004 financial statements.

We concluded that FS had no system for compiling maintenance backlog information. Field units were canvassed in response to sporadic external requests, most frequently from Congress. The process used to compile the data was not documented and was inconsistently applied. FS had not prescribed a common definition as to what constituted deferred maintenance. Although we were unable to attest to reported backlog amounts, we did have enough information regarding certain segments of the backlog to conclude that it was not reliable. We also found that FS had not initiated a process for capturing deferred maintenance costs as required by the Federal accounting standards.⁶ Finally, we concluded that FS' management of maintenance could be greatly enhanced if it expanded its strategic plan promulgated pursuant to the Government Performance and Results Act of 1993 (GPRA) to specifically include maintenance.

We recommended that (1) FS establish a common definition for deferred maintenance and a reliable, documented method to compile deferred maintenance data, (2) maintenance be classified as an expanded budget line item to enhance accountability, (3) FS expedite the compilation of maintenance data to fulfill the new accounting standard, and (4) FS expand its GPRA plan to specifically include all significant components of maintenance activity. According to information obtained from the Office of the Chief Financial Officer (OCFO), FS achieved final action (i.e., the completion of the corrective actions) on the report's recommendations on September 25, 2000.

- **FS Infrastructure Maintenance on National Forest Lands in the Eastern Region, Report No. 08099-03-Ch, July 1998**

This audit examined how FS addressed the problem of its aging infrastructure (i.e., buildings, bridges, and dams) located on national forest lands. Officials of FS' Eastern Region expressed concerns that decisions were being made on infrastructure construction and maintenance by unqualified personnel and that accidents involving potentially substandard structures could result in financial liability to FS. In addition, concerns were raised that current inventories of infrastructure maintained by FS and by other Federal and State entities may be incomplete.

We found that while inspections were being performed by qualified personnel in those instances that we reviewed, inspections were not always being made on a timely basis. For example, 19 of the 29 dams⁷ we reviewed on 2 national forests had not received maintenance or safety inspections within the required timeframes. In addition, up-to-date

⁶ Statement of Federal Financial Accounting Standards No. 6: Accounting for Property, Plant, and Equipment, issued November 30, 1995.

⁷ The dams included two high-hazard and two moderate-hazard dams.

emergency action plans, which provide emergency procedures to follow in case of dam failures, were not in place for any of the high and moderate-hazard dams we reviewed.

Because not all structures, such as bridges and dams, were recorded in inventory, FS could not ensure that proper maintenance and repairs were performed on the structures. Some trail bridges, for example, were built by private users on national forest lands without knowledge or input from FS personnel. We also found instances where dams, which already existed on acquired land, were not inventoried; one of these had recently breached, flooding three homes and resulting in a settlement of \$10,000.

We found that operation and maintenance plans, which provide procedures for ongoing maintenance of buildings and dams, had not been completed for the buildings on any of the five ranger districts that we visited on two national forests. Also, these plans were not prepared for 17 of the 29 dams that we selected for review on these 2 forests. As a result, ongoing preventive maintenance operations may not be performed on these structures necessitating higher repair costs at a later date. Finally, we found that national forest offices and ranger districts did not always take adequate action to correct deficiencies found in health and safety inspections and did not provide the required responses to the engineering staff. Although the uncorrected deficiencies we noted entailed relatively low hazards, the lack of followup on inspection reports could result in a failure to correct more critical deficiencies.

We recommended that FS (1) implement controls to ensure that all infrastructure on national forest lands is inventoried as required and that guidance be provided to the forests regarding which dams are to be inventoried, (2) ensure required dam inspections are performed on a timely basis and that emergency action plans are prepared, updated, and tested for high and applicable moderate-hazard dams, (3) implement controls to ensure that operations and maintenance plans are prepared for buildings and dams as required, and (4) implement controls to ensure that health and safety inspections are performed on the required basis and that required corrective actions are taken on reported deficiencies. According to information obtained from OCFO, FS achieved final action on the report's recommendations on August 23, 2000.

In order to best use the funding appropriated to reduce the amount recorded as deferred maintenance, FS officials classify and prioritize the assets to be repaired. For example, deferred maintenance that represents a threat to public health and safety is given top priority for funding. This prioritization is necessary given the sharp decrease in funding. In FY 2004, over \$31.6 million was appropriated for deferred maintenance as compared to the

\$9.7 million proposed for FY 2006. FS reported almost \$6 billion in deferred maintenance costs as of September 30, 2005.

Objectives

Our objectives were to (1) examine FS' implementation of recommendations from our two prior reports on maintenance of the agency's infrastructure and assess the extent to which appropriate corrective actions were applied and (2) identify and evaluate the agency's controls for maintaining its infrastructure and for compiling and reporting maintenance backlog information.

Findings and Recommendations

Section 1. Controls for Maintaining Infrastructure Need Improvement

Due to a lack of effective processes and controls, FS has reduced assurance regarding the reliability and validity of the deferred maintenance costs recorded in the infrastructure (INFRA) database. For FY 2005, FS reported almost \$6 billion in deferred maintenance for general property, plant, and equipment. We found that FS did not fully implement the recommendations from our two prior reports and did not implement controls to validate the accuracy of information recorded in INFRA. Accordingly, FS officials do not have the information needed to manage these resources and to communicate information about these resources to oversight bodies.

Finding 1

Prior Recommendations Not Fully Implemented

FS did not fully implement 5 of our 11 prior recommendations, which were intended to strengthen the reliability and accuracy of data the agency reported for deferred maintenance costs. (The 11 recommendations are detailed in Exhibit A.) This occurred because the agency's processes and controls did not ensure that agreed upon corrective actions were consistently implemented. As a result, assessments to evaluate the condition of agency assets were not recorded and data on dams was not complete and current. Moreover, the agency had no strategy for reducing its deferred maintenance backlog.

- Condition Assessment Surveys Not Recorded

FS did not have an effective control for ensuring that condition assessment surveys were recorded in the INFRA database. Condition assessment surveys are periodic inspections of property, plant, and equipment to determine their current condition and the estimated cost to correct any deficiencies. According to agency data, as of September 30, 2005, FS had not recorded a total of 22,405 condition assessment surveys for the asset categories we selected for review.⁸ The asset classes we reviewed included: bridges, buildings, dams, fences, recreation sites, roads, and water systems.

We previously recommended that FS complete condition assessment surveys to develop the maintenance data needed for its financial statements (Recommendation 3, Evaluation Report No. 08801-03-HQ, June 1998). In response to our recommendation, FS agreed to develop a

⁸ As of September 30, 2005, FS recorded condition assessment surveys for 122,727 of the 145,132 assets in the categories we selected for review.

protocol for each real property program area (e.g., fences, buildings, etc.) for better estimating the maintenance data needed for the financial statements. FS implemented the protocols for conducting the condition assessment surveys in FY 2001 with the goal of completing them within a 5-year period (i.e., by September 30, 2005).

As part of our current review, we interviewed FS officials at all levels (i.e., Washington office, regional offices, national forests, and ranger districts) to identify the methods they employed for monitoring the completion of condition assessment surveys and the recording of this information in INFRA. We found no standard procedures for these activities.

- At the Washington office, program managers for each asset class stated that they reviewed the data recorded in INFRA and followed up with national forest officials when the INFRA data indicated that the forest was not completing the condition assessment surveys on schedule. These program managers, however, could not substantiate this oversight, and we found that they performed no onsite reviews at the region or forest levels to evaluate the accuracy and completeness of information recorded in INFRA.
- We performed work in the Southern and Pacific Northwest Regional Offices. At these locations, we found that program managers for each asset class did not review the data recorded in INFRA. They viewed that accuracy and completeness of the data recorded to be a forest level responsibility.
- At the national forests we visited, program managers stated that condition assessment surveys were not being completed due to competing work priorities. Due to the decreased funding for deferred maintenance and the shrinking number of staff to perform specific tasks, program managers prioritized the work they performed among a vast array of responsibilities. For example, on the Rogue River-Siskiyou National Forest, which combined two forests, the program manager for buildings and water systems was also responsible for dams, bridges, and recreation sites. FS officials explained that, in the past, a program manager was not responsible for so many asset classes.

FS needs to develop and implement a control structure to ensure that condition assessment surveys are recorded in INFRA. This structure should include standard procedures for reviewing and analyzing INFRA data at all FS levels.

- Controls for Dams Not Adequately Implemented

We found that FS did not have an effective control structure for validating that necessary inspections of dams are performed⁹ and required plans are maintained. Dam inspections provide FS with information on whether these assets are functioning as intended and not posing a threat to people, entities, or the environment. Maintenance of required operating plans provides FS with the information needed to keep the dam operating safely and effectively. Up-to-date emergency action plans provide FS with the names of individuals to contact in case of emergency, such as dam failure.

In our prior report to the Regional Forester for the Eastern Region, we recommended a number of actions to strengthen controls regarding the inspection of dams and the maintenance of required plans. Specifically, we recommended that the Regional Forester initiate controls to ensure that: (1) required dam inspections are performed on a timely basis with priority being given to high and moderate-hazard dams (2) emergency action plans are updated and tested for all high and the appropriate moderate-hazard dams and (3) operation and maintenance plans are prepared and maintained as required (Recommendations 2a, 2b, and 3, Audit Report No. 08099-03-Ch, July 1998). The Regional Forester agreed to implement measures to strengthen these controls. As part of our current review, we found that these controls were included in FS manuals and handbooks making them applicable to all regions and national forests.

As part of our current review, we performed onsite reviews of seven dams on three of the four national forests visited. The seven dams included: (1) two high-hazard and one moderate-hazard dams on the George Washington-Jefferson National Forest (2) three low-hazard dams on the National Forests in Texas and (3) one low-hazard dam on the Rogue River-Siskiyou National Forest.

- Dam Inspections. The record of inspection for one of the two high-hazard dams did not support that the inspection was timely performed; the most recent inspection had been performed in August 1999. FS instructions¹⁰ require high-hazard dams to be inspected annually. For the second high-hazard dam reviewed, the report indicated a timely inspection; however, the inspection included no cost information to address the earth erosion and outlet channel obstructions caused by Hurricane Isabel.
- Emergency Action Plans. FS instructions¹¹ require that emergency action plans be prepared for all high-hazard and some moderate-hazard

⁹ FS requires that engineers perform inspections of dams. By comparison, condition assessment surveys are not always completed by engineers.

¹⁰ Forest Service Manual (FSM) 7516.21, Operation and Maintenance Inspection Schedule, effective September 11, 2000.

¹¹ Forest Service Handbook (FSH) 7509.11, Dams Management Handbook, Chapter 50, Emergency Action Plans, effective August 5, 1993.

dams. Instructions¹² also require that emergency action plans for dams to be tested annually. Although, we found that emergency action plans were on file for the two high-hazard and one moderate-hazard dams reviewed, the files contained no documentation of when the emergency action plans were last tested. Local forest staff could not recall the last time these plans were tested.

- Operation and Maintenance Plans. FS instructions¹³ require the local forest officials to prepare and update operations and maintenance plans for all dams, regardless of hazard level. Once prepared, plans for all high-hazard and some moderate-hazard dams are to be updated annually. Plans prepared for all remaining dams should be updated on a 5-year cycle. As part of our current review, we found that the operation and maintenance plans for one high-hazard, one moderate-hazard, and three low-hazard dams were not signed, dated, and approved by the forest supervisor. Information on file could not substantiate when the plans were first prepared or last updated. The files contained no operation and maintenance plans for the remaining high-hazard and low-hazard dams.

- No Strategy for Reducing Maintenance Backlog

We previously recommended that the FS amend its strategic plan to expand upon its objective dealing with capital infrastructure, so that it will encompass all maintenance activities (Recommendation 4, Evaluation Report No. 08801-03-HQ, June 1998). FS agreed with this recommendation and as part of the revision to its Strategic Plan in October 2000 agreed to develop and implement a national infrastructure management strategy to meet safety standards and reduce the maintenance backlog. We found, however, that the Strategic Plan for FY 2004 to 2008 no longer includes any strategy related to the reduction of the maintenance backlog. According to FS officials, the agency decided to write a narrowly focused Strategic Plan to meet the goals of the agency with the scarce resources they are provided. FS, however, needs to continue to develop quantitative measurements to foster improved management of maintenance, since according to agency records the maintenance backlog was almost \$6 billion as of September 30, 2005.

FS does not have a system of controls to validate that agreed upon corrective actions are consistently implemented. As a result, FS officials did not record a substantial number of condition assessment surveys by the agency-imposed timeframe of September 30, 2005. In addition, the FS did not identify that

¹² FSM 7517, Emergency Action Plans, effective September 11, 2000.

¹³ FSH 7509.11, Dams Management Handbook, Chapter 20, Operation and Maintenance Plans, effective August 5, 1993.

controls for dams were not adequately implemented and overlooked the need for a strategy related to reducing the maintenance backlog.

Recommendation 1

Develop and implement a system of controls to validate that the agreed upon corrective actions are consistently implemented.

Recommendation 2

Develop and implement controls to validate that condition assessment surveys are recorded. These controls should include standard procedures for entering data into INFRA and for reviewing and analyzing this data at all FS levels (i.e., Washington office, regional offices and national forests).

Recommendation 3

Develop and implement controls to validate that required inspections of dams are timely completed, emergency action plans are tested, and operations and maintenance plans are complete and up to date.

Recommendation 4

Develop and implement a strategy to address the deferred maintenance backlog and to identify goals and objectives for managing deferred maintenance.

Agency Response.

FS generally concurred with these four recommendations. However, the agency was unable to finalize the responses to the recommendations.

OIG Position.

To reach management decisions, FS needs to provide details of its proposed corrective action plans and timeframes for implementing these corrective actions.

Finding 2**Controls Needed to Enhance the Utility of INFRA Data**

The INFRA database includes records on assets that are not assigned to a specific FS location (e.g., national forest) and does not identify assets that are not likely to be repaired. This occurred because FS' protocol did not include procedures to ensure the accuracy of data recorded in INFRA. In addition, the agency has no established processes for identifying and segregating records on its sustainable infrastructure (i.e., those assets that are likely to be repaired). As a result, the utility of INFRA as a tool for managing FS' assets is reduced.

FS officials acknowledged that the data recorded in INFRA is not completely accurate; however, they also asserted that the resolution of data discrepancies is a work in progress. More emphasis should be placed on ensuring that the data recorded in INFRA is accurate. In our June 1998 report on the maintenance backlog, we concluded that FS had no systematic way to compile maintenance backlog information. In response to our prior recommendation, FS agreed to develop a protocol for each asset class for better estimating the maintenance data. As reported in Finding 1, FS implemented protocols with the goal of completing assessments of the condition of agency assets by September 30, 2005. However, we found that a significant number of these surveys were not completed.

In order to best use the funding appropriated to reduce the amount recorded as deferred maintenance, FS officials classify and prioritize the assets in three categories. Deferred maintenance that represents a threat to public health and safety is given the top priority for funding. This category is followed by assets that impact the FS' ability to carry out its mission and finally by assets that have adverse consequences to natural resources. The prioritization is necessary given the sharp decrease in funding. In FY 2004, over \$31.6 million was appropriated for deferred maintenance as compared to the \$9.7 million proposed for FY 2006. FS reported almost \$6 billion in deferred maintenance costs as of September 30, 2005. We concluded that further refinement to FS' processes for recording, classifying, and prioritizing deferred maintenance is needed. Our current audit tests disclosed that the INFRA database includes records on assets that are not assigned to a specific FS location and does not identify assets that are not likely to be repaired.

- Location of Assets Not Assigned

Based on data recorded in INFRA as of September 30, 2005, we identified 551 assets listed as unassigned for the asset categories we

selected for review.¹⁴ FS officials explained that these assets could be traced to a particular national forest; however, they became unassigned when FS consolidated the 132 national forest INFRA databases to 1 shared database in July 2005. In addition, FS officials explained that someone at the national forest level may have incorrectly entered information into INFRA. Although all assets categories we reviewed had assets identified as unassigned most of the assets were in two classes (i.e., recreation sites and fences). Assets in these two classes accounted for 423 of the 551 unassigned assets.

- INFRA Does Not Identify Assets Which Most Likely Will Not Be Repaired

Given the reduction in deferred maintenance funding, we concluded that most likely, certain deferred maintenance costs will not be funded. In addition, FS needs to develop plans for classifying and prioritizing maintenance projects for its asset classes. These plans would be similar to facility master plans which address capital improvement and maintenance needs for buildings. For example, fences represent the second largest asset class with critical deferred maintenance. As of September 30, 2004, FS reported almost \$440 million in deferred maintenance the agency considered critical for fences. Of the \$440 million, over \$102 million was for resource protection, the lowest ranked category for deferred maintenance funding. The lowest ranked category is the least likely to be repaired.

FS needs to strengthen controls in order to enhance the usefulness of data recorded in INFRA. This should include a comprehensive strategy to identify and segregate records on the agency's sustainable infrastructure in INFRA.

Recommendation 5

Implement controls to validate that the information recorded in INFRA is accurate.

Recommendation 6

Develop and implement a strategy to identify and segregate records on FS' sustainable infrastructure (i.e., those assets that are likely to be repaired) in INFRA.

¹⁴ As of September 30, 2005, FS had a total of 145,132 assets in the categories we selected for review according to data recorded in INFRA.

Agency Response.

FS generally concurred with these two recommendations. However, the agency was unable to finalize the responses to the recommendations.

OIG Position.

To reach management decision, FS needs to provide details of its proposed corrective action plans and timeframes for implementing these corrective actions.

Section 2. Deferred Maintenance Reported in Accountability Report

Finding 3

Controls Needed to Ensure Amounts are Supported by FS Records

The amounts FS reported for deferred maintenance in the FY 2004 PAR could not be easily traced to records in the INFRA database. We identified a difference of more than \$1.2 billion between the amounts reported for roads in the PAR and the INFRA database. This occurred because the methodology used by agency officials for summarizing the amounts to be reported was not documented. As a result, there is reduced reliability in the amounts reported for deferred maintenance.

We found that for all asset classes, except for roads, the amounts reported in the PAR could be traced to amounts recorded in the INFRA database. We also found that FS calculates deferred maintenance costs for developed recreation sites as a percentage of the costs for buildings, water systems, and wastewater systems. However, the methodology for performing this calculation and compiling the PAR data from INFRA was not documented in agency procedures.

Our audit tests disclosed that the more than \$1.2 billion difference for roads could be tied to the amounts reported for roads (i.e., Level 1 and 2 roads). The amount reported for these roads is based on the results of a statistical sample. The amount is recorded in INFRA, but we found that the amount could not be easily traced. To demonstrate that the amounts were recorded in INFRA, FS officials had a FS contractor write a special computer program to extract the information from INFRA. In addition, although FS officials had summary information on the results of the statistical sample, they could not produce the underlying supporting data to substantiate the results of the sampled roads.

Recommendation 7

Document the methodology used to compile and report deferred maintenance data in the PAR from INFRA. Develop and implement controls to ensure that this methodology is consistently applied.

Recommendation 8

Document the methodology used to determine the deferred maintenance amounts for developed recreation sites. Develop and implement controls to ensure that this methodology is consistently applied.

Agency Response.

FS generally concurred with these two recommendations. However, the agency was unable to finalize the responses to the recommendations.

OIG Position.

To reach management decision, FS needs to provide details of its proposed corrective action plans and timeframes for implementing these corrective actions.

Scope and Methodology

Our review focused on interviewing appropriate FS and OCFO officials, examining pertinent documentation, reviewing applicable policies and procedures, evaluating program operations in FY 2005, and observing the conditions of selected assets. The fieldwork was performed from February to November 2005. We performed work at the FS Washington office and OCFO in Washington, D.C. and at selected regional offices and national forests.

Our audit was conducted in accordance with Government Auditing Standards established by the Comptroller General of the United States.

OCFO

At OCFO, we interviewed management officials to obtain an understanding of OCFO's process for evaluating FS responses on actions taken in response to the 11 prior recommendations. We examined documentation OCFO maintained to support that the agreed upon corrective actions were taken. Finally, we evaluated whether the actions taken were consistent with actions agreed upon by FS and OIG.

FS Washington Office

At the FS Washington office, we interviewed program management officials to obtain an understanding of the controls FS implemented to maintain its infrastructure and to compile and report maintenance backlog. We also obtained and reviewed FS' FY 2005 direction for property maintenance information management, dated February 2005. This protocol provided direction to the regions and national forests on the information to be collected and recorded for meeting the minimum requirements to address the agency's reporting needs for property inventory and maintenance information. The protocol also provided reference to the applicable FS manuals and handbooks.

Using data recorded in INFRA as of March 31, 2005, we judgmentally selected asset classes to review and regions and national forests to visit. The selected asset classes included: (1) bridges, (2) buildings, (3) dams, (4) fences, (5) recreation sites, (6) roads, and (7) water systems. We selected these asset classes based on the amount of deferred maintenance recorded and the types of assets examined in our prior reviews. Using the same criteria, we selected the following regions and national forests to visit. Within the asset classes, regions, and national forests, we selected specific assets to test the accuracy of the information recorded in INFRA.

Region	National Forest
Southern Region	National Forests in Texas
	George Washington-Jefferson National Forest in Virginia
Pacific Northwest Region	Rogue River-Siskiyou National Forest in Oregon
	Okanogan-Wenatchee National Forest in Washington

Regional Offices

At the regional offices, we interviewed program management officials to gain an understanding of the controls used for maintaining infrastructure and for compiling and reporting maintenance backlog data to the FS Washington office. This included, understanding how the regional offices coordinate with the national forests to identify, prioritize, and estimate the costs of deferred maintenance projects and evaluating regional office oversight of the national forests to ensure adequate maintenance of the infrastructure.

National Forests

At the national forests, we interviewed program management officials to gain an understanding of the procedures they used to identify, classify, prioritize, and estimate the costs of projects that require maintenance. For the assets selected for review, we analyzed condition assessment surveys and inspection reports to corroborate the information recorded in INFRA. Finally, we performed site visits to observe the condition of the selected assets.

Exhibit A – Followup on OIG’s 11 Prior Recommendations

Exhibit A – Page 1 of 2

Rec. No.	11 Prior Recommendations Addressed by these Reports	Management Decision Yes/No	Final Action Yes/No	Recommendation Implemented Yes/No	Finding Number
FS Maintenance Backlog, Evaluation Report No. 08801-03-HQ, June 1998					
1	Develop a standard definition for deferred maintenance, such as that put forth by the Federal Accounting Standards Board and prescribe a uniform documented method to compile maintenance data until such time that INFRA can meet this need.	Yes	Yes	Yes	
2	Work with the Office of Management and Budget and the House and Senate Appropriations Committees to establish an expanded budget line item specifically for maintenance	Yes	Yes	Yes	
3	Expedite the completion of the condition assessment surveys to develop the maintenance data needed for FS’ FY 1998 financial statements.	Yes	Yes	No	Finding 1
4	Amend the GPRA Strategic Plan to expand upon the objective dealing with capital infrastructure so that it will encompass all maintenance activities.	Yes	Yes	No	Finding 1
FS Infrastructure Maintenance on National Forest Lands Eastern Region, Audit Report No. 08099-03-Ch, July 1998					
1a	Implement procedures to ensure all forest infrastructures, particularly bridges and dams, are inventoried.	Yes	Yes	Yes	
1b	Implement oversight procedures to ensure that national forest personnel comply with FS inventory guidelines for dams and the requirement to maintain project files.	Yes	Yes	Yes	
2a	Initiate controls to ensure that required dam inspections are performed on a timely basis with priority given to high and moderate hazard dams.	Yes	Yes	No	Finding 1

Rec. No.	11 Prior Recommendations Addressed by these Reports	Management Decision Yes/No	Final Action Yes/No	Recommendation Implemented Yes/No	Finding Number
2b	Implement controls to ensure that emergency action plans are updated and tested for all high hazard and the appropriate moderate hazard dams.	Yes	Yes	No	Finding 1
3	Implement controls to ensure that operation and maintenance plans are prepared and maintained as required.	Yes	Yes	No	Finding 1
4a	Implement controls to ensure that health and safety inspections are performed and documented annually.	Yes	Yes	Yes	
4b	Implement controls to ensure that responsible officials perform appropriate follow-up on inspection reports and provide responses to the reports as required.	Yes	Yes	Yes	

Exhibit B – Agency Response

Exhibit B – Page 1 of 1



United States
Department of
Agriculture

Forest
Service

Washington
Office

1400 Independence Avenue, SW
Washington, DC 20250

File Code: 1430
Route To:

Date: May 18, 2006

Subject: Response to Official Draft Office of Inspector General (OIG) Audit Report No. 08601-02-HY, "Follow-up on Recommendations Made on the Maintenance of Forest Service's Infrastructure"

To: Phil Cole, Director, Rural Development and Natural Resources Division, Office of the Inspector General, USDA

Thank you for the opportunity to review and comment on the official draft OIG Audit Report No. 08601-02-HY, "Follow-up on Recommendations Made on the Maintenance of Forest Service's Infrastructure." The Forest Service takes its responsibility for ensuring the management, control, and maintenance of the agency's infrastructure serious and continuously works to improve its Infrastructure programs.

The Forest Service generally concurs with the recommendations in the draft report. However, was unable to finalize the responses to the recommendations. Please issue the final report and the agency will follow the process to reach management decision as outlined in DR 1720-001.

If you have any questions, please contact Sandy Coleman, Assistant Director for GAO/OIG Audit Liaison Staff, at 703-605-4699 or Art Seggerson, OIG Audit Liaison, at 703-605-4983.

/s/ Jesse L. King
JESSE L. KING
Associate Deputy Chief for Business Operations/Chief Financial Officer

cc: Misty C Alvarez
Art Seggerson



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