# **Audits & Reviews**

Sixteen audit reports and reviews were issued during the past six months. Three audits of NSF's awardees identified more than \$865,000 in questioned costs, and a review of a \$386 million proposed budget for a large construction project confirmed that the budget included \$88 million in unallowable contingency costs. Our audits of NSF programs and operations recommended improvements in management controls to monitor Independent Research/ Development travel and stronger internal controls to ensure compliance with requirements pertaining to staff retreats. We also recommended that with existing staff, NSF explore more effective ways to conduct oversight of awardees. Finally, during this period, NSF sustained more than \$900,000 of costs questioned in prior audits.

# NSF Needs to Strengthen Management Controls over its Independent Research/Development Program

NSF's Independent Research/Development (IR/D) program allows employees and non permanent staff, such IPAs,¹ to maintain their scientific research and expertise by continuing their research at their home institutions and attending related conferences, and be reimbursed for the travel expenses. In 2010, the total costs for IR/D trips as reported on expense reports were approximately \$1.8 million, and the range per traveler varied from approximately \$225 to \$45,000. Of 250 working days in a year, NSF allows IR/D participants to spend up to 50 days (20 percent) a year on IR/D activities.

Based on a referral from our Office of Investigations,<sup>2</sup> we conducted an audit of NSF's IR/D program. Our audit found that NSF did not have sufficient management controls to monitor the IR/D program. For example, NSF management had not determined the program's total annual cost nor did it prevent individual travelers from exceeding the 50-day limit. Further, NSF has not identified IR/D program goals or quantified the program's outcomes. As a result, NSF did not have the performance measures necessary to evaluate the value of the program to the agency's mission.

NSF has started to improve controls over the IR/D program in response to an OIG Management Implication Report and its own task force, but IR/D travel costs and time were not being monitored consistently across the agency.

### 1. Non permanent staff appointed under the Intergovernmental Personnel Act.

### **HIGHLIGHTS**

Audit of NSF Operations	
Resolution	7
Audit of NSF Awardees	9
Evaluation of NSF's	
Facebook Site	11
Audit Resolution	11
Financial Statement Audit	
Reports	12
A-133 Audits	13

<sup>2.</sup> September 2010 Semiannual Report, pp.14-15, and March 2011 Semiannual Report, p. 30.

We recommended that NSF strengthen management controls over the IR/D program and re-evaluate its current IR/D policy and processes to consider such things as how to reduce IR/D travel costs and whether the 50-day travel allowance should be reduced. NSF agreed to our recommendations.

### Internal Controls Over NSF Staff Retreats Could Be Improved

The Office of Management and Budget directed all Federal agencies to review their policies and controls associated with conference-related activities and expenses. Concurrent with NSF's own internal review, we audited the internal controls governing staff retreats, a subset of conference-related spending.

It is important to note that we did not identify any instances of retreat participants inappropriately claiming reimbursement for meals that were provided. Further, it appeared that retreat planners generally attempted to be cost conscious. However, our review of nine NSF staff retreats held in Fiscal Years 2010 and 2011 disclosed several areas in which NSF could improve its internal control to better ensure cost containment and compliance with applicable standards. First, we identified a lack of support to ensure that retreat sites selected were the most cost effective as required by the Federal Travel Regulation (FTR). As a result, NSF may have overspent on staff retreats. Second, because NSF had not set a standard for how much should be spent on refreshments at retreats, the amount that could be spent varied across the agency and was left to the discretion of individual retreat organizers. We also found that NSF did not have an internal policy to ensure compliance with the FTR and adequate management control over retreat costs. Finally, we were concerned that planners for six of the eight retreats were unable to provide an invoice from the hotel where retreats were held. This was particularly troubling as hotel costs were generally the largest amount of retreat expenses.

Absent sufficient internal controls such as guidance and monitoring, NSF risks overpaying for staff retreats. We recommended that NSF develop policy incorporating the conference planning requirements of the FTR and reevaluate the practice of traveling outside of the Washington metropolitan area for staff retreats. NSF concurred with our recommendations. NSF stated that it is reviewing the results of its internal control study of NSF conference activity and anticipates including the Federal Travel Regulation conference planning guidance as part of the materials.

## NSF Could Use Staffing Assessments to Change Processes to Provide More Cost Effective Oversight

NSF's Office of Budget, Finance, and Award Management (BFA) is responsible for issuing the thousands of awards NSF makes each year and for monitoring how awardees manage the funds they receive. We examined assessments that NSF conducts to determine the staffing level BFA needs to fulfill these responsibilities.

While we identified a few areas in which improvements could be made in the staffing assessment processes NSF and BFA used, it became clear that even if the processes were perfect, with the current fiscal environment, gaps between

the number of staff needed and the number funded would continue. Thus, we examined the need for NSF to use those processes to seek alternative methods to accomplish its mission and provide oversight in a more streamlined way within its current staffing limits.

Our audit found that BFA did not use the staffing assessments to change its processes to create more cost-effective ways to manage its workload or to prioritize work that adds value and eliminate work that did not advance its mission. In the current environment of increased concern about both accountability of Federal funds and budget constraints, BFA needs to find new and cost-effective ways to ensure that NSF recipients, especially high-risk ones, have the financial capability to properly manage federal funds.

As a result of not having sufficient staffing, BFA reduced the number of site visits to monitor high-risk awardees. Additionally, the number of audits with unresolved questioned costs grew from zero in FY 2003 to 26 in FY 2010. It is important for questioned costs to be resolved swiftly so funds can be returned to the Federal government and financial management deficiencies can be addressed before additional funds are placed at risk.

We recommended that BFA integrate its identification and evaluation of opportunities to streamline its operations into its annual workforce planning process to ensure sound financial management and oversight of awardees based on staffing levels. BFA concurred with the recommendation, stating that it would address the use of streamlining, including risk-based methodologies, in its annual workforce planning process.

# Additional Audit Work Confirms \$88 Million of Unallowable Contingency Costs in Construction Budget

Auditors conducted additional work to determine how contingency costs were estimated in the Consortium for Ocean Leadership's (COL) \$386 million proposed budget for Ocean Observatories Initiative (OOI). COL disagreed with the conclusion of the original audit which questioned \$88 million in contingency costs. COL also asserted that it was directed by NSF to include the contingency amount as allowable equipment costs in its proposed budget.

The additional work confirmed the auditors' original conclusion that the entire \$88 million in contingencies was unallowable. DCAA found no evidence that COL can support its contingencies as required by OMB "with certainty as to time, intensity, or with an assurance of their happening." DCAA stated that while contingencies may be included in Government developed budgets, awardees are not allowed to include unallowable contingencies as allowable costs in the proposal they submit to the Government. COL's costs for pricing, administration, and settlement of awards must comply with OMB cost principles for nonprofit organizations, and there is no exception to how applicable cost principles are determined for an awardee.

In total, \$226 million in unallowable contingency costs have been identified in the proposed budgets for NSF's three large construction projects – the Ocean Observatories Initiative project, the Advanced Technology Solar Telescope and

the National Ecological Observatories Network. We continue to recommend that NSF cease to award unallowable contingency costs. NSF should hold the contingency portion of the budget until the awardee can demonstrate a bona fide need and submit verifiable cost data to support its request for the funds.

The OIG is continuing to work with the Foundation to resolve the recommendations in the three proposal reviews.

# Weaknesses in Financial Management Result in \$451,189 in Questioned Costs

An audit of five awards totaling \$5.2 million at the International Computer Science Institute (ICSI) questioned \$451,189 and disclosed significant compliance and internal control deficiencies in ICSI's financial management of NSF grant funds. As of December 31, 2010, ICSI had 32 awards totaling over \$18.9 million that included two Recovery Act awards over \$600,000. If the compliance and internal control deficiencies contributing to these questioned costs are not corrected, unsupported and unallowable costs could continue to be claimed on current and future NSF awards.

The auditors identified three major deficiencies: inadequate sub-award monitoring, inadequate controls over the timely review and certification of effort reports, and inadequate controls over foreign travel restrictions.

We recommended that ICSI develop risk-based subawardee evaluation and monitoring procedures, develop policies that mandate the timely review and certification of labor effort, and establish written policies and procedures to address foreign travel restrictions. ICSI agreed with the recommendations.

### \$169,532 in Questioned Costs Found at Johns Hopkins University

An audit at Johns Hopkins University questioned \$169,532 primarily for unsupported sub-grantee costs. As of March 2010, the university had 319 active NSF awards totaling \$195 million. The audit found that Johns Hopkins could improve sub-grantee monitoring of its low risk sub-grantees, including ten sub-grantees amounting to over \$8 million in claimed costs. The auditors believe that the same deficiencies may exist on other Johns Hopkins sub-grantee awards, which could lead to additional unallowable costs being claimed on other NSF awards.

Recommendations included that the Johns Hopkins University return the \$169,532 in claimed costs and establish greater sub-grantee monitoring controls. The university disagreed with the questioned costs and the recommendations.

# More Than \$244,000 in Questioned Costs in Five Awards to University of Notre Dame

An audit of five awards made to the University of Notre Dame questioned \$244,430 of claimed costs. The questioned costs consisted of \$119,330 in unsupported participant support and travel costs; \$44,300 for unsupported and unallowable subaward costs; and \$80,800 in participant support costs that

were re-budgeted without the required prior approval from NSF. The auditors also identified several compliance and internal control deficiencies in financial practices at Notre Dame and its subawardees that, if not corrected, could impact current and future NSF awards.

Notre Dame is taking steps to address these deficiencies including revising its subawardee monitoring and participant support procedures.

#### Evaluation of NSF's Facebook Site Identifies Several Concerns

Our evaluation of NSF's use of its official Facebook site identified three primary concerns: lack of content control; lack of disclaimers; and lack of a policy to "like" external entities. As a result, third parties are able to post comments and links to sites that may include inappropriate content and there is a potential implied endorsement when NSF "likes" certain external parties. We made several recommendations consistent with best practices identified in other federal agencies' Facebook sites including that NSF limit the "like" status to other government agencies and that NSF post a visible disclaimer on its Facebook site. NSF was receptive to our recommendations and has stated that it is developing a policy to address the issues we identified.

### **Audit Resolution**

# NSF Sustains more than \$630,000 in Questioned Costs at the Louisiana Board of Regents

In response to our recommendations, NSF sustained \$631,852 in questioned costs at the Louisiana Board of Regents (LBR). In addition, LBR agreed to expand monitoring of its sub-awardees and to strengthen its policies and procedures for time and effort reporting.

### Field Museum Audit Results in \$123,663 Returned to Treasury

In response to our recommendations, NSF sustained \$123,663 in questioned costs at the Field Museum of Natural History and returned these funds to the U.S. Treasury. In addition, the Field Museum agreed to revise its policy to prevent future claims against expired appropriations and revise its property management policy to ensure proper segregation of duties regarding property management.

# NSF Sustains More than \$150,000 in Questioned Costs at Ohio State University

In response to our recommendations, NSF sustained \$150,995 in questioned costs at Ohio State University. In addition, Ohio State is strengthening monitoring of costs claimed by subawardees and developing new cost sharing documentation standards to address internal control deficiencies identified in the audit.

## **Financial Statement Audit Reports**

Establishing and maintaining sound financial management is a top priority for the Federal government because agencies need accurate and timely information to make decisions about budget, policy, and operations. The Chief Financial Officer's Act requires agencies to prepare annual financial statements which must be audited by an independent entity.

NSF Receives Unqualified Opinion on Financial Statements for the Fourteenth Consecutive Year, but Monitoring of Construction Type Cooperative Agreements Should be Strengthened

Under a contract with the OIG, Clifton Gunderson LLP conducted an audit of NSF's FY 2011 financial statements. Clifton Gunderson issued an unqualified opinion on the financial statements; however, it identified a significant deficiency in monitoring of construction- type cooperative agreements which had been reported in FY 2010 as a component of a significant deficiency related to the monitoring of cost reimbursement contracts.

As of September, 30, 2011, NSF had 14 active cooperative agreements totaling about \$1.9 billion that included about \$334 million in contingency funds, or 18 percent of the total award amount. For FY 2011, cooperative agreement awardees had received NSF funds of approximately \$151 million in contingency costs, which are at heightened risk to be disallowed once subject to audit.

Specifically, the auditors noted issues in the following areas:

- DCAA issued inadequacy memoranda for two awardees with unallowable contingency costs.
- DCAA audited the supporting documentation of proposed contingency costs and identified eight deficiencies in an awardee's accounting system and estimating practices that could result in misstated costs, and therefore deemed the awardee's accounting system and estimating practices unacceptable for award.
- There are no systemic barriers to prevent awardees from drawing down on the contingency funds budget without prior NSF approval.

In summary, the DCAA's audits and other internal control testing collectively indicate that there is significant risk concerning cooperative agreements with budgeted contingency funds in terms of the validity of cost proposals, the allowability of contingency funds budgeted, and the adequacy of NSF's control over the use of contingency funds. Although NSF does not concur with the significant deficiency, it is committed to developing a mutually acceptable solution.

The auditors also issued a Management Letter in conjunction with the financial statement audit report. The purpose of this document is to communicate findings that are not included in the audit report but are important to ensuring a sound overall internal control structure and require management's attention.

The FY 2011 Management Letter identified six findings, some of which incorporated elements of prior years' findings related to NSF's operations and financial reporting controls. The Management Letter reported that NSF's policies for awarding and administering grants and cost reimbursement contracts continue to need improvement. The auditors made several recommendations, including that NSF fully implement its cost surveillance oversight procedures and continue improving its control over cost reimbursement contracts, and continue to evaluate the effectiveness of its internal control procedures over processing grant transactions.

NSF generally concurred with the recommendations in the Management Letter and is working to resolve the findings. The FY 2012 financial statement audit will evaluate NSF's actions in response to the recommendations.

Annual Evaluation of NSF's Information Security Program Completed

NSF Corrects Weakness from 2010 FISMA Review, but Improvements Needed in IT Operating Environment and Disaster Recovery Plans for Antarctic Program

The Federal Information Security Management Act (FISMA) requires an annual independent evaluation of an agency's information security program. Under a contract with the OIG, Clifton Gunderson LLP conducted this independent evaluation for FY 2011. Clifton Gunderson reported that NSF has an established information security program and has been proactive in reviewing security controls and in identifying areas to strengthen its controls; however, some improvements are needed. NSF concurred with the report and has made progress in addressing the findings. The agency's corrective action plan will be reviewed as part of the FY 2012 evaluation.

#### A-133 Audits

64 Percent of Single Audit Findings Identify Significant Concerns with Awardees' Ability to Manage NSF Funds

OMB Circular A-133 provides audit requirements for state and local governments, colleges and universities, and non-profit organizations receiving federal awards. Under this Circular, covered entities that expend \$500,000 or more a year in federal awards must obtain an annual organization-wide audit that includes the entity's financial statements and compliance with federal award requirements. Non-federal auditors, such as public accounting firms and state auditors, conduct these single audits. The OIG reviews the resulting audit reports for findings and questioned costs related to NSF awards, and to ensure that the reports comply with the requirements of OMB Circular A-133.

The 114 audit reports reviewed and referred<sup>3</sup> to NSF's Cost Analysis and Audit Resolution (CAAR) Branch this period covered NSF expenditures of \$1.01 billion during audit years 2008 through 2011, and resulted in 77 findings at 43

<sup>3.</sup> We also reviewed and rejected one report based on audit quality deficiencies. Upon receipt of the revised report, the Federal Audit Clearinghouse determined that another federal agency had oversight, and there was no need for us to conduct additional review.

NSF awardees. Four awardees received qualified or adverse opinions on their compliance with federal grant requirements, including 1 awardee who received a qualified opinion on compliance for a program which included NSF Recovery Act expenditures. Forty-nine of the 77 findings (64 percent) were identified as material weaknesses or significant deficiencies in internal control over compliance, calling into question the awardees' ability to adequately manage their NSF awards. Six findings identified by the auditors, including 2 material weaknesses, resulted in \$191,639 in questioned costs to NSF awards, of which \$181,191 was caused by lack of adequate supporting documentation of the amounts charged to NSF awards.

Awardees' lack of internal controls and noncompliance with federal requirements included: untimely and/or incorrect reporting of time and effort; inadequate support for salary/wages, equipment, travel, and indirect costs charged to awards; inadequate monitoring of subrecipients; inability to prepare the financial statements; and late submission of financial and/or progress reports.

We also examined 37 management letters accompanying the A-133 audit reports and found 16 deficiencies that affected NSF. Auditors issue these letters to identify internal control deficiencies that are not significant enough to include in the audit report, but which could become more serious over time if not addressed. The deficiencies included inadequate tracking, managing, and accounting for NSF costs, ineffective segregation of duties, and inadequate subrecipient monitoring. These deficiencies affected control processes that are essential to ensuring stewardship of NSF funds and preventing fraud and abuse.

# Desk Reviews Find Audit Quality and Timeliness Issues in More than One-Third of Single Audits

The audit findings in A-133 reports are useful to NSF in planning site visits and other post-award monitoring. Because of the importance of A-133 reports to this oversight process, the OIG reviews all reports for which NSF is the cognizant or oversight agency for audit, and provides guidance to awardees and auditors for the improvement of audit quality in future reports. In addition, OIG returns reports that are deemed inadequate to the awardees to work with the audit firms to take corrective action.

We reviewed 51 audit reports<sup>4</sup> for which NSF was identified as the cognizant or oversight agency for audit, and found that 31 fully met federal reporting requirements. Twenty reports (39 percent), including 6 of the 17 reports with ARRA expenditures, contained audit quality and timeliness issues. The quality issues we identified included 6 reports in which the Schedule of Expenditures of Federal Awards did not provide sufficient information to allow for identification of awards received from non-federal "pass-through" entities or did not adequately describe the significant accounting policies used to prepare the schedule. Of the 6 reports which included audit findings related to compliance with federal requirements, 3 reports (50 percent) failed to adequately present the required elements of the finding to assist auditee management in correcting the reported deficiency, and 3 reports failed to adequately present the required elements of

<sup>4.</sup> The audits were conducted by 45 different independent accounting firms.

management's plan to correct the deficiencies reported. In addition, 4 reports failed to include all of the report language required by the American Institute of Certified Public Accountants (AICPA) and OMB Circular A-133, and 3 reports were submitted after the due date required by OMB Circular A-133. Finally, 4 of the reports repeated errors which we had identified to the awardees and auditors during reviews of prior years' reports.

We contacted the auditors and awardees, as appropriate, for explanations of each of the potential errors. In most cases, the auditors and awardees either provided adequate explanations and/or additional information to demonstrate compliance with federal reporting requirements, or the error did not materially affect the results of the audit. However, we rejected one report due to substantial non-compliance with federal reporting requirements. We issued a letter to each auditor and awardee informing them of the results of our review and the specific issues on which to work during future audits to improve the quality and reliability of the report.

# OIG Quality Control Review Finds Significant Audit Deficiencies In Single Audit by Public Accounting Firm

Quality Control Reviews consist of on-site reviews of auditor documentation in support of Single Audits. Quality control reviews are an important tool for determining whether Single Audits met government auditing and reporting requirements, and for helping to improve future audit quality.

During this period, we issued a report of our quality control review of the Single Audit of an NSF awardee. We found significant audit quality deficiencies in the audit and instructed the auditors to conduct additional work. The audit quality deficiencies in the single audit performed at WNET.ORG and Subsidiaries (WNET) resulted in a failure to appropriately identify and test for compliance with the requirements applicable to Allowable Costs, Subrecipient Monitoring, and the Schedule of Expenditures of Federal Awards. The auditors agreed with our recommendation to conduct additional test work in these areas. We will review the additional work during the next period.

### **OIG Follow-up Actions on Quality Control Reviews**

Our follow-up review of the audit of Drilling, Observation and Sampling of the Earth's Continental Crust (DOSECC)<sup>5</sup> found that the additional work performed by the auditors generally met applicable Federal requirements.

<sup>5.</sup> September 2011 Semiannual Report, pp. 29-30.