

Audits & Reviews

During this period, our office issued fifteen reports, four of which contained more than \$115,000 of questioned costs. Our efforts to help NSF ensure proper stewardship of its American Recovery and Reinvestment (ARRA) funds are ongoing. At the request of the Recovery and Accountability Board, we conducted an audit to determine whether NSF had a process to perform the limited data quality reviews required of recipients' ARRA reports. We have also begun conducting reviews at selected universities, nonprofits, and contractors that received ARRA funds to determine whether they have the ability to segregate ARRA funding and provide accurate and timely quarterly reporting.

Our audits and alert memos resulted in significant recommendations to improve NSF's contract management; to strengthen controls over labor effort reporting; and to help ensure that federal funds are spent properly. In other work, NSF concurred with our recommendation to develop a performance management process appropriate for its senior executives assigned under the Intergovernmental Personnel Act. We found that the National Science Board was generally in compliance with the Government in the Sunshine Act and made several recommendations to increase the Board's transparency and openness. As a result of our report on NSF's audit resolution process, the OIG and NSF are working together to identify ways to improve audit resolution and follow-up in order to effectively address recommendations in audits of awardee institutions.

Additionally, we reviewed 167 single audits of NSF awardees and requested that NSF coordinate with us during the audit resolution process in certain instances involving significant weaknesses. Finally, NSF's FY 2009 financial statements audit, conducted by an independent CPA firm on our behalf, reported a significant deficiency in contract monitoring for reimbursement contracts. We agreed with NSF's proposed corrective actions for nine of the ten audit recommendations and are awaiting additional information on the remaining recommendation.

Efforts to Ensure Proper Stewardship of ARRA Funds are Ongoing

The American Recovery and Reinvestment Act of 2009 provided additional funding of \$3 billion to NSF, an approximate 50 percent increase over the agency's \$6 billion FY 2009 annual appropriation. As noted in our September 2009 semiannual report, NSF quickly

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established a methodology for awarding these stimulus funds and produced policies and procedures that include new award terms and conditions specific to ARRA awards.

During this reporting period, the attention of both the government and recipients of ARRA awards has shifted to the recipient reporting requirements. Under ARRA, recipients are required to report quarterly on their spending and activities, and on the number of jobs supported by ARRA funds. In addition, under ARRA, NSF is required to establish a data quality plan that articulates its data quality review process that, at a minimum, meets OMB guidance requirements. An effective data quality review process is a major control for helping NSF ensure the accuracy of information its recipients' report.

At the request of the Recovery Accountability and Transparency Board and in conjunction with other members of the Recovery Board working group (whose members consist of the IGs of agencies that received ARRA funding), we conducted an audit to determine whether NSF had a process to perform the limited data quality reviews required of recipients' ARRA reports. We found that NSF is putting in place an adequate process that meets OMB requirements to identify material omissions and/or significant reporting errors. We made several suggestions for NSF to consider as it refines its process for future reporting cycles. Our suggestions included that NSF define "chronic reporting problems" and that NSF develop plans to incorporate ARRA recipient reporting in its continuing risk assessments. Subsequently, NSF noted that it has developed a multi-stage quality control plan for its federal review of recipient reporting and has successfully conducted data quality reviews for the first reporting period. As more reporting periods pass, we will be able to go back and see how well this process is working.

We are currently participating with other members of the Recovery Board working group on two additional reviews of recipient reporting for ARRA. The first is a follow-up on the just described audit of NSF's quality control process over recipient-reported ARRA information. This audit will look at NSF's data quality processes now that two full reporting cycles, including the review and correction of reported data, have been completed. The second is a review of the information that is being collected and reported by the recipients themselves and includes site visits to some NSF awardees to evaluate their reporting processes. By participating in these reviews, we are able to provide suggestions and recommendations for continuous improvement to the newly-developing recipient reporting processes at all levels.

During this reporting period we also began conducting reviews at large, medium, and small universities and nonprofits which received ARRA funds to determine whether they have the ability to segregate ARRA funding and provide accurate and timely quarterly reporting. As we conduct these reviews, we will inform NSF of any areas of concern we identify that require guidance or clarification from the agency. We believe that this approach will be valuable in assisting institutions in developing systems to control and report their ARRA funding.

Finally, we are beginning to focus on NSF's efforts to manage its largest ARRA projects. Under ARRA, NSF was appropriated \$400 million for Major Research Equipment and Facilities Construction awards, which NSF has allocated to three facility projects: the Alaska Region Research Vessel, the Ocean Observatories Initiative, and the Advanced Technology Solar Telescope. We have initiated focused reviews of these projects and plan to develop monitoring strategies for each of them. Currently, we are completing an initial survey of the Alaska Region Research Vessel, the first of the major projects to be awarded. Because of the large dollar amounts of these complex awards, we believe that the strategy of an initial in-depth review followed by continuous monitoring, will allow for a proactive and value-added approach that will provide NSF management with insights that will help contribute to the success of these jobs.

Challenges in Contract Administration Continue

The Foundation continues to face challenges in contract administration. As described later in this report, contract monitoring for cost reimbursement contracts was reported as a significant deficiency in NSF's FY 2009 financial statement audit. Cost reimbursement contracts are high-risk because of the potential for cost escalation and because the contractor's costs for performance are paid regardless of whether the work is completed. In FY 2009, NSF obligated approximately \$480 million for contracts for products and services. Of this amount, \$361 million was obligated for cost reimbursement contracts, of which \$270 million allowed for advance payments for three contractors, with the majority going to one contractor. Given the amount of money it expends to procure goods and services, it is imperative for NSF to have the capability and capacity to perform contract administration tasks adequately on its large cost reimbursement contracts.

During this semiannual period, we issued two alert memos to NSF identifying deficiencies in its monitoring of two large cost reimbursement contracts.

Significant Deficiencies Identified in NSF's Administration of Raytheon Contract

We issued an alert memorandum regarding a significant deficiency in NSF's administration of its contract with Raytheon Polar Services Company (Raytheon), which provides services to NSF's Antarctic Program. Specifically, NSF has not had an approved CAS Disclosure Statement for this contract from 2005 to the present. An approved CAS Disclosure Statement is essential because it is the basis for Raytheon classifying and billing costs to the contract. Currently, NSF does not have a clear understanding and agreement with Raytheon as to how Raytheon should classify and charge direct and indirect costs to its contract. As a result, NSF risks paying unallowable costs on this contract. We recommended that NSF request DCAA to audit Raytheon's Disclosure Statement and that NSF strengthen its contract administration to ensure that contractors' Disclosures Statements are audited in a timely manner.

NSF agreed with our recommendations and has contracted with DCAA to perform an audit of Raytheon's CAS Disclosure Statement and an audit of Raytheon's proposed costs for a one-year extension of that contract. Since the

issuance of the alert memo, DCAA found Raytheon's proposal for the extension period was inadequate, citing many areas where the documentation provided did not support the proposed costs. NSF has indicated that it will continue to work with DCAA to ensure that Raytheon provides an adequate cost proposal and Disclosure Statement and will also continue to improve its contract administration.

Significant Deficiencies Identified in NSF's Administration of Contract and Awards with Non-Profit Organization

We issued an alert memo regarding significant deficiencies in NSF's administration of \$1.5 billion in contracts and other awards since 2003 with the Consortium for Ocean Leadership (COL), an entity that resulted from the merger of the Joint Oceanographic Institutions and the Consortium for Oceanographic Research and Education. The Federal Acquisition Regulation (FAR) requires that contractors subject to Cost Accounting Standards submit CAS Disclosure Statements and cost impact proposals before receiving a contract, entering into a merger, or changing accounting practices. Further, the federal agency should determine that the contractor's accounting system is adequate at least every four years. NSF and COL did not fully comply with these requirements.

As a result, NSF does not have a clear understanding or agreement with COL about the cost accounting practices that are being used to charge costs to NSF's contracts and other awards. Therefore, NSF might be paying for unallowable costs. Specifically, we suggested that NSF request an audit of COL's Disclosure Statements since 2007. We encourage NSF to continue to address the issues we identified and to continue its efforts to improve the overall quality of its contract administration.

Labor Effort Audits at Five Universities Disclose Internal Control Weaknesses

In 2005 the OIG began conducting a series of audits to evaluate whether universities' internal controls are adequate to properly manage, account for, and monitor salary and wage costs; and to determine whether these costs are allowable in accordance with federal costs principles. During this reporting period, we completed the final five audits in this series, to bring the total number of university systems reviewed to sixteen. Later this year we plan to issue a summary report describing the more significant problems found in this series of audits to assist NSF and universities in improving oversight and reporting of their labor effort charges.

It is critical for university labor effort systems to be sound since NSF annually provides more than \$1.2 billion for salaries and wages to universities, approximately one-third of the annual NSF grant expenditures at these universities. This figure will increase over the next few years with the addition of ARRA funds.

These audits have continued to identify key weaknesses including the lack of a suitable means to validate the labor charged to NSF grants and understanding of the effort certification process. In addition, the audits identified noncompli-

ance with federal and university effort reporting requirements, ineffective oversight, inadequate effort reporting training and insufficient justification of labor cost transfers between awards.

The systemic internal control weaknesses identified raise concerns about the reliability of the effort reports universities use to support labor costs charged to NSF grants. As a result of these deficiencies, NSF may have paid for unallowable costs or for work that did not benefit its grants. Specific information about the five audits completed in this reporting period follows.

Systemic Internal Control Weaknesses Over Effort Reporting Found at University of Delaware

Although the University of Delaware had established a federal grants management program, our audit disclosed systemic weaknesses in the effort reporting program. Specifically, our review of 30 sampled employees with total FY 2008 NSF salary charges of \$696,648, found that the university's system did not ensure salaries and wages charged to NSF awards reasonably reflected actual work performed on the sponsored projects. The significant nature of these deficiencies raises concerns about the reasonableness and reliability of the remaining \$6.6 million in FY 2008 labor charges to NSF grants and the \$33.3 million salary portion of Delaware's other \$115 million of Federal award expenditures. For example:

- Six employees lacked an understanding of their responsibilities for labor effort reporting. As a result, they could not accurately validate the charges made to NSF grants.
- Twenty one of 74 effort reports, representing \$192,795 in labor charges were certified up to 600 days after the university's mandated turnaround time. The longer it takes to certify reports, the less reliable the effort reports may be.
- The system was not programmed to capture or upload certain transactions. As a result, \$14,435 of our sampled efforts were not approved.
- Seven employees incorrectly charged administrative time or excess salary payments to NSF grants. As a result, the audit questioned \$21,522 in salary for charges that did not directly benefit the NSF grants.
- Delaware's internal audit of its effort reporting systems identified similar control weaknesses including late certifications and lack of a policy defining what constitutes suitable means of verification.

These weaknesses occurred primarily due to inadequate oversight in both daily operations and periodic independent reviews of the system. We recommended that NSF work with the University's cognizant agency to ensure that Delaware addresses the weaknesses found in the audit; specifically that it develops policies to comply fully with federal regulations, requires labor effort training, and improves its oversight of the effort reporting process. In response to both its internal audit and to our review, Delaware has taken actions to improve its effort reporting system.

State University of New York - Stony Brook Not Using Suitable Means of Validating Labor Charged to NSF Grants

An audit of the State University of New York - Stony Brook's labor effort reporting system found that employees did not have first-hand knowledge as required by federal regulations when they certified effort reports on NSF grants. Specifically, employees who were not in a position to know whether work was performed, certified 14 of 30 employees' effort reports which represented \$235,737 or 33 percent of NSF salaries reviewed. In addition, Stony Brook's effort reporting system was not fully integrated to include all academic, administrative, and research effort for both sponsored and all other work activities. Six of 30 sampled employees did not include all activities on their effort reports.

The systemic nature of these control weaknesses calls into question the accuracy of the \$8.1 million for labor costs that Stony Brook charged to its NSF awards in FY 2008 and the salary portion of \$125.4 million in other federal awards may be similarly insufficiently supported.

We made several recommendations including that Stony Brook improve policies and procedures, require labor effort reporting training, and fully integrate effort reporting systems. Stony Brook agreed with the first two recommendations but asserted that its systems met federal requirements.

University of Nevada - Reno Is Not Complying Fully with Effort Reporting Requirements

An audit at the University of Nevada - Reno determined that, while the university had improved its effort reporting system, it was not in compliance with all federal, NSF, and university effort reporting requirements. For example, contrary to federal requirements, the university's electronic reporting system did not appropriately provide faculty effort reports that consistently reflected all compensated work activities. The instances of noncompliance raise concerns about the reliability of the \$2.2 million of FY 2008 labor charges to NSF grants as well as the reliability of the labor costs claimed on the university's other \$78 million of federal awards.

Recommendations to address these deficiencies included that Reno improve its policies to ensure compliance with federal and NSF requirements, and that the university require effort reporting training. The university generally concurred with the recommendations and has taken steps to address them.

University of Wisconsin - Madison Needs to Strengthen Controls over Charging Labor to NSF Grants

The audit found that Wisconsin generally had a sound grants management program. Prior to our audit of its FY 2007 labor effort, Wisconsin implemented a new effort reporting system. The new system improved compliance with federal and NSF requirements; however, our review identified remaining weaknesses, the most significant of which were inadequate oversight of the effort reporting process and inadequate training of personnel involved in the labor effort reporting process. Wisconsin has not performed a comprehensive review of its past

or current system. In FY 2007, Wisconsin received approximately \$719 million in Federally-sponsored projects, of which \$125 million was funded by NSF; \$31 million of the NSF funding was for labor.

We made several recommendations including that Wisconsin develop clear written policies for periodic oversight of its effort reporting process and require effort reporting training. The university generally agreed with our recommendations.

Washington University in St. Louis Needs to Enhance Oversight of its Effort Reporting System

An audit of Washington University's (WUSTL) labor effort reporting system found that overall the university had adequate systems to ensure that the time charged to an NSF award represented the actual time spent on that award. The audit did not disclose any significant deficiencies.

However, the audit did identify several areas of concern WUSTL should address to enhance implementation and oversight of its effort reporting. For example, during the period audited, the university did not require effort report training at all of its campuses, and the effort reporting system was not fully integrated to include all academic, administrative, and research effort. Thus, effort reports might misstate the actual effort charged to the various activities. The implementation of a new electronic reporting system is expected to resolve this issue.

We recommended the University address these concerns to ensure reliability of the \$6.3 million in labor costs to NSF awards charged in FY 2008, as well as the labor costs claimed on \$432 million of other federal awards. During the course of the audit, the university addressed the concerns identified.

Significant Grant Audits

Our grant audits completed this period found that two NSF awardees, a university and a non-profit, had material internal control deficiencies in subrecipient monitoring in addition to other deficiencies. Awardees that pass federal funds through to subrecipients must monitor subrecipients to ensure that their financial systems are adequate to manage the federal money they receive. NSF risks paying subrecipient costs without the assurance that the costs are permissible if such monitoring is insufficient.

University Needs to Strengthen its Controls over Subrecipient Monitoring

An audit of five awards amounting to \$14.9 million in costs and \$1 million in cost sharing claimed by the University of Missouri at Columbia found significant internal control deficiencies in the areas of subaward and payroll costs. Specifically, subaward costs charged to three of the NSF awards representing \$9.1 million or 61 percent of the total costs claimed on all five awards audited, were not adequately monitored. The University's subaward monitoring policies were

not followed and were not sufficiently comprehensive. As a result, the University's internal controls over subaward costs do not provide assurance that the expenditures claimed by the subawardees are accurate, valid, and allowable.

In addition, some labor cost transfers were not consistently approved and supported with proper documentation. Also, effort reports were not recertified after changes were made, which increases the risk that irregularities that affect NSF and other federal grant funds may not be detected.

The audit recommended that Missouri strengthen its policies to ensure adequate supervisory review of subaward risk assessments and that the university require adequate justification for all labor cost transfers.

The University agreed with the recommendations pertaining to labor cost transfers and agreed that the subaward risk assessment process should be reviewed by supervisory personnel, but asserted that its monitoring of subawards was adequate. NSF is working to resolve the findings and recommendations contained in the audit report.

Limited Subrecipient Monitoring Noted at Non-Profit Organization

An audit of \$74.8 million in costs claimed by Network for Earthquake Engineering Simulation (NEES) Consortium found that NEES had addressed many financial management issues identified in prior audits; however, it performed limited sub-award monitoring on its nineteen subawards amounting to \$64 million (86 percent) of the total costs claimed on the award.

The audit found that the Consortium needed to improve its subaward monitoring process and document its process for approving fringe benefit and indirect cost allocations; cash drawdowns; timekeeping for labor costs allocations; and participant support costs.

NSF has recomputed the award; therefore, the auditors did not make recommendations to the Consortium, but made several suggestions to NSF to enhance the pre-award and overall award portfolio management processes. The suggestions included ensuring that new awardees have a risk-based subaward monitoring process prior to award and properly documenting financial policies and procedures.

Significant Internal Reports

NSF Takes Steps to Address Challenges of Rotating Executive Workforce

To maintain a world-class scientific workforce, NSF supplements its permanent, career workforce with a variety of non-permanent staff. All of the non-permanent appointments are federal employees, except for Intergovernmental

Personnel Act (IPA) assignments, who remain employees of their home institution. At the time of our audit, “rotating directors”, in the form of IPA assignees, filled over a quarter of NSF’s executive-level, science positions.¹

The Senate Committee Report accompanying NSF’s 2010 appropriations bill expressed “deep concern” with systemic workforce management issues at NSF. While noting the benefits of NSF’s rotational director model in bringing the agency fresh scientific insight and perspective, the report also cited its potential for creating gaps in management oversight. We conducted an audit to determine if NSF has a rotator model in place that ensures effective personnel-management performance and oversight at its executive level

Based on our limited assessment, we found that NSF generally has the components of an effective personnel management system and followed Office of Personnel Management and government-wide requirements. Nothing came to our attention to indicate that NSF’s personnel management system was ineffective. With the exception of performance management, NSF applied the components of effective personnel management to both its permanent and temporary staff and IPAs in the same manner.

However, differences exist in NSF’s management of various appointments at the executive level. Specifically, NSF does not include IPAs in its formal performance management system even though they function in the same capacities as NSF’s federal executives. Additionally, we noted that IPAs may not have prior working knowledge of the federal government culture or of federal government management processes because they are rotating into NSF from universities and other institutions.

As a result, NSF’s rotating director model presents challenges to effective personnel-management performance and oversight. Because IPAs do not have a written record of performance, NSF risks not holding them accountable, as it does its federal employees, in accomplishing NSF’s mission and goals. Also, the fact that IPAs do not always have prior knowledge of, or experience with, the federal workplace culture or federal government management processes gives them a steep learning curve when they arrive at NSF.

NSF has acknowledged the challenges that arise from its use of rotating executives and has taken some steps to mitigate these challenges. For example, NSF’s attempts to “pair” rotators with an experienced career executive to facilitate their acclimation to the federal government environment. However, NSF could do more to address the challenges associated with the rotating director model. We recommended that the NSF Director develop a performance management process appropriate for IPAs and that NSF continue current plans and efforts to integrate IPA executives into the agency. NSF concurred with our recommendations.

¹ For our purposes, we included assistant/office directors, executive officers/deputies, division directors, and division deputies/executive officers in our definition of executive-level science staff. We did not include the NSF Director, Deputy Director, or staff at the AD-5 level.

National Science Board Generally in Compliance with Sunshine Act

The purpose of the Government in the Sunshine Act is to open the government's deliberation processes to the public. The Act applies to the National Science Board and requires that the Board's meetings be open to the public, with the exception of meetings that qualify for ten narrow exemptions. Our audit of the National Science Board's compliance with the Sunshine Act found that the Board was in full compliance with the Act, from January 1, 2007, to August 6, 2009, when it made decisions to close selected sessions of upcoming Board meetings. We did not find any instance where the Board had specifically decided to close a meeting that should have been held open to the public. In addition, for most open meetings, the Board complied with the Sunshine Act's procedural requirements, including proper public announcement of meetings within the statutory time frames.

However, our audit raises some concerns. Most notably, the Board could not produce complete transcripts or recordings, as required, for 9 of the 28 closed meetings we reviewed. We also found several instances where the Board made impromptu adjustments to meetings by adding items to the discussions without following all of the Act's requirements for such changes.

We recommended that the Executive Officer of the National Science Board ensure that closed meetings are properly recorded and transcribed, evaluate ways to improve the current process for setting agenda items, update the Board Office's Sunshine Act policies and procedures, and ensure that all Board members and pertinent staff receive periodic training on Sunshine Act requirements. The Board Office generally agreed with our recommendations.

Improvements Needed in NSF's Audit Resolution Process

Audits conducted by the OIG of institutions receiving NSF funds are one mechanism available to NSF to effectively oversee its awarded funds. The process of resolving audit recommendations and following up to ensure that institutions implement corrective action is an important tool to address current issues and to prevent future issues at NSF-funded institutions. Therefore, a robust audit resolution and follow-up process is critical to ensure that institutions receiving funds from NSF take the necessary corrective actions to properly manage that funding. We found that NSF's policies and procedures for resolving audit recommendations were not adequate to effectively address recommendations in OIG audits of awardee institutions. As a result, deficiencies in how institutions manage their NSF awards, which were identified in audits, may continue or worsen, increasing the risk that NSF funds may not be used as intended.

Specifically, NSF's audit resolution policies and practices do not recognize the shared responsibility between the agency and the OIG for resolution of external audits, as required by OMB. Therefore, NSF may negotiate what we would deem to be incomplete or ineffective corrective action plans in our assessment of 19 of 34 sampled audits. In addition, NSF does not consistently follow-up to ensure that awardee institutions implement corrective actions.

We recommended that the NSF Director, in conjunction with the Inspector General issue an overarching policy directive that recognizes audit resolution as an agency priority and a shared responsibility between NSF management and the OIG. We also recommended revisions to the agency's audit resolution and follow-up policies, procedures, and practices. The agency generally agreed with our recommendations, and NSF and the OIG are working together on ways to improve audit resolution and follow-up.

Audit Resolution

California Institute of Technology Implements OIG Recommendations to Improve Labor Effort Reporting

At the request of California Institute of Technology (Caltech) officials, we conducted a follow-up review of Caltech's implementation of recommendations we made in our March 2007 audit of its labor effort reporting process. We found that Caltech had corrected all the internal control weaknesses we identified. Caltech took a number of actions including updating its policies and procedures to better document the review and approval of labor costs, and requiring officials involved in the labor effort process to receive periodic training.

Georgia Institute of Technology Strengthens Controls Over Labor Effort Reporting

The Georgia Institute of Technology (Georgia Tech) has taken steps to address the internal control weaknesses for justifying and approving after-the-fact transfers of labor costs between federal awards that we identified in our June 2009 audit. Georgia Tech took a number of actions to strengthen monitoring and the oversight of labor effort reporting process, such as requiring written justification and approval for labor cost transfers between awards and for changes to monthly workload allocation reports.

Cornell University Strengthens Controls Over Certification of Labor Effort

Cornell has implemented several corrective actions in response to our June 2009 audit, which found that employees at Cornell did not comply with federal regulations when they certified effort reports without having first-hand knowledge or a suitable means of verifying that the work was performed and that the work benefitted NSF awards. Cornell has revised its policies to include definitions of what constitutes a suitable means of verification and is requiring that officials involved in effort reporting process receive periodic training.

Purdue University Enhances Labor Effort Training

Purdue has taken several actions to enhance labor effort training for both business office staff and principal investigators (PIs) and took additional steps to correct effort reporting issues related to proposal writing and graduate student teaching efforts. Also, NSF has sustained \$12,630 in questioned costs in

incorrect charges for proposal writing and teaching effort to NSF grants which we identified in our 2009 audit. Finally, Purdue created a new position in Sponsored Program Services to provide additional oversight of the effort reporting process.

Arizona State University Strengthens Effort Reporting Procedures

Arizona State officials significantly strengthened their effort reporting system by implementing more stringent certification procedures, requiring follow-up to ensure timely certification of reports, and establishing an independent process to periodically review its reporting system to ensure compliance with federal, NSF, and university requirements. NSF sustained the \$29,700 in costs questioned by the audit, as well as an additional \$2,284 in unallowable costs identified during audit resolution.

A-133 Audits

Single Audits Identify Material Weaknesses and/or Significant Deficiencies at 49 NSF Awardees

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.

For the 167 audit reports reviewed and referred to NSF's Cost Analysis and Audit Resolution (CAAR) Branch this period,² covering NSF expenditures of \$3 billion during audit years 2006 through 2009, the auditors identified 152 findings at 76 NSF awardees. Four awardees received qualified opinions on their financial statements and 12 had adverse, qualified, or disclaimers of opinions on their compliance with federal grant requirements.

The auditors identified material weaknesses and/or significant deficiencies in 50 reports (66 percent of reports with findings), indicating substantial concerns about the awardees' ability to manage NSF funds. 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 financial and/or progress reports.

² We reviewed 4 additional reports but rejected them due to audit quality issues. Once we receive the revised reports, we will review them, and if acceptable, refer them to NSF for resolution.

We also examined 73 management letters accompanying the A-133 audit reports and found 46 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, and ineffective segregation of duties. These deficiencies affected control processes that are essential to ensuring stewardship of NSF funds and preventing fraud and abuse.

We provided the results of each audit report to NSF and, where appropriate, highlighted our concerns related to opinions or findings. In certain instances, such as reports which contained significant deficiencies or material weaknesses repeated for three or more consecutive years and/or reports which identified \$100,000 or more in questioned costs to NSF awards, we requested that NSF coordinate with us during the audit resolution process. NSF coordinated with us as requested prior to completing resolution of five reports. NSF also resolved two reports without coordinating with us as requested. Both of these reports contained significant deficiencies which had been repeated for at least four consecutive years, and had been designated “OIG special interest.” We previously reported on our efforts to reach agreement with NSF officials on the process for resolving recommendations for A-133 reports for which we have requested coordination.³ As noted in our prior discussion of the audit resolution process, staff from NSF and OIG are currently working together to improve the audit resolution and follow-up process.

Audit Timeliness and Quality Deficiencies Found in 55 Percent 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 102 audit reports for which NSF was the cognizant or oversight agency for audit,⁴ and found that 46 fully met federal reporting requirements.

Fifty six reports reviewed had timeliness and quality issues. Eighteen reports were submitted after the submission deadline. Audit quality issues identified included 21 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. In addition, there were 20 reviews that contained quality issues which had been previously identified for the same awardees and auditors.

³ September 2009 Semiannual Report, pp. 16-17.

⁴ The “cognizant or oversight agency for audit” is defined as the federal agency which provided the largest amount of direct funding to an awardee.

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 four reports 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.

Efforts in Response to National Single Audit Sampling Project, Recovery Act, and Improper Payments Improvement Act

We previously reported ongoing efforts to improve the quality and oversight of single audits in response to the recommendations of the National Single Audit Sampling Project and on our participation in OMB workgroups.⁵

We continue to work with OMB to revise the Council of Inspectors General on Integrity and Efficiency standards for conducting quality control reviews and desk reviews. We are also working with OMB to address the impact of ARRA and the Improper Payments Improvement Act on single audits.

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 Twelfth Consecutive Year, But Monitoring of Cost Reimbursement Contracts Needs to be Strengthened

Under a contract with the OIG, Clifton Gunderson LLP conducted an audit of NSF's FY 2009 financial statements. Clifton Gunderson issued an unqualified opinion on the financial statements; however, the auditors reported a significant deficiency in contract monitoring on cost reimbursement contracts. As noted earlier, NSF obligated \$361 million for cost reimbursement contracts in FY 2009, of which \$270 million in contracts allowed advance payments for three contractors, with the majority going to one contractor. Cost reimbursement contracts are high-risk because of the potential for cost escalation. Advanced payment contracts are considered to be a higher risk because contractors are paid before the work has begun. Without improvements in these areas, NSF cannot ensure the reasonableness and accuracy of costs paid on these contracts.

⁵ Previously reported in September 2007 Semiannual Report, p. 17, and September 2009 Semiannual Report, p. 18.

Specifically, the auditors noted issues in the following three areas:

- Delays in securing Incurred Cost Audits for NSF's largest and riskiest contracts, and not properly monitoring the receipt, audit, and approval of Cost Accounting Standards (CAS) disclosure statements.
- Inadequate and ineffective contract oversight procedures, including the evaluation of contractor's accounting systems prior to awarding cost reimbursement type contracts.
- NSF's Contracting Manual requires additional procedures for cost reimbursement contract administration.

It is essential for NSF to improve in these areas in order to ensure the reasonableness and accuracy of costs paid on contracts, particularly on contracts considered to be high-risk.

The auditors made 10 recommendations for NSF to incorporate more comprehensive risk-based policies and procedures for contract monitoring and focus cost surveillance on cost reimbursement contracts. We agreed with NSF's proposed corrective actions for nine of the recommendations and are awaiting additional information on the remaining recommendation to determine whether it can be resolved.

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 2009 Management Letter identified seven findings, some of which incorporated elements of prior years' findings related to NSF's operations and financial reporting controls. The Management Letter reported continuing improvements needed to NSF's policies for awarding and administering grants. The auditors repeated their prior recommendation that NSF revise its Site Visit Review Guide for assessing institutions with high risk awards to provide specific guidance for reviewers to document their review steps and the results. The auditors made several other recommendations including that NSF review supporting source documentation before approving payments to problem institutions placed on special payments, and that NSF monitor audit resolution activity to ensure that the deadlines are met.

NSF agreed with twelve of the fourteen recommendations in the Management Letter. For example, NSF plans to implement a revised process to incorporate a limited review of actual costs for grantees on special payment plans and to update its contracting manual and other guidance. The FY 2010 financial statement audit will evaluate NSF's actions in response to the recommendations.

Annual Evaluation of NSF's Information Security Program Completed

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 2009. 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 provided a corrective action plan, which will be reviewed as part of the FY 2010 independent evaluation.