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Before a Hearing of the

Committee on Science, Space, and Technology

United States House of Representatives

Mr. Chairman and Members of the Committee, I appreciate this opportunity to discuss two audits of the National Ecological Observatories Network (NEON). As requested, I will also address my office's continuing efforts to help ensure that the National Science Foundation (NSF) spends taxpayer dollars effectively and for the intended purpose of advancing scientific research.

As background, NEON is a non-profit organization, funded by NSF in 2011 under a Cooperative Support Agreement to build and operate a continent-wide network of ecological observatories. We initially contracted with the Defense Contract Audit Agency (DCAA) in 2011 to perform an audit of NEON's proposed budget. The following year, we retained DCAA to audit NEON's accounting system. For reference, OIG has often utilized DCAA for audit support given that agency's expertise and our own in-house staff shortages. DCAA conducts these audits independently and provides its conclusions to OIG. Staff members in OIG serve as contract monitors, ensuring that the quality of the work is sound and that the audit is completed as agreed.

I will discuss these audits, as well as related systemic issues, including NSF's overall management and oversight of its high-dollar, high-risk cooperative agreements.

Audit of NEON's Cost Proposal

In 2011, we contracted with DCAA to audit NEON's $433.7 million proposed budget for the construction of the National Ecological Observatories Network, which will take place over a five-year period from August 1, 2011 through July 30, 2016. The objective of that audit was to examine the NEON construction proposal to determine if the proposed budget was prepared in accordance with applicable federal requirements and formed an acceptable basis for negotiation of a fair and reasonable price.

The audit was started in June 2011, and DCAA, the OIG, and NSF management met several times over the next four months to discuss issues that arose during DCCA's attempt to obtain information from NEON. In July 2011, DCAA issued its first of three inadequacy memoranda stating that NEON's $433.7 million proposed budget could not be audited because the proposed budget amounts lacked supporting cost and pricing data. Between July and September 2011, DCAA conducted a number of walkthroughs of the proposal with NEON as it attempted to

assess the support and basis for the estimated costs in the proposed budget. During this time, OIG also met several times with DCAA.

Despite these efforts, NEON was unable to provide adequate support for the cost proposal and in August 2011, DCAA issued a second inadequacy memo. In September 2011, a third audit attempt again found NEON's cost proposal to be inadequate for audit. DCAA reached this conclusion because none of the proposed cost elements for labor, overhead, equipment, and other items reconciled to supporting data. Further, the proposal included more than $74 million in contingency costs, which DCAA found were unallowable under federal requirements, and more than $1 million in unallowable honoraria costs.

In addition, NSF issued the results of its Business System Review for NEON in November 2011. NSF conducts these reviews for large facilities in construction or operation to assess the business practices of awardee institutions. The review for NEON identified "a number of high risk issues" across the eight areas examined, which included financial management, procurement, and property and equipment. We are not certain what actions NSF has taken to ensure that NEON addressed the issues raised in the Business System Review.

On February 17, 2012, NEON submitted a revised budget proposal, which DCAA attempted to audit. Despite working with NEON for several months to proceed with the audit and to clear inadequacies in the proposal, auditors found a total of $154.4 million (nearly 36 percent of the proposed $433.7 million budget) in questioned and unsupported costs. Questioned costs totaled $102.1 and unsupported costs totaled $52.3 million.

The entire $72.6 million of proposed contingency, which DCAA found was unallowable under OMB cost principles, was questioned. It is important to note that even if contingency amounts in the proposed budgets met the definition in OMB guidance, as NSF asserts, there is a second, serious problem with respect to the adequacy of the supporting documentation for the contingency. Beyond contingency, NEON could not provide support for more than $13 million of the $14 million in costs for materials or for nearly $16 million in equipment costs. The questioned costs also included $1.87 million in proposed management fees for unallowable costs.

As a result, auditors issued an adverse opinion in September 2012, stating that the proposal did not form an acceptable basis for the negotiation of a fair and reasonable price. We issued the audit to NSF on September 28, 2012, and recommended that it require NEON to submit a revised budget with adequate supporting documentation for all proposed costs. We also recommended that NSF require NEON to remove unallowable contingency provisions from its proposed budget and discontinue funding contingencies until an awardee could demonstrate a bona fide need for the funds supported by adequate supporting documentation.

In April 2014, NSF informed us that it disagreed with the OIG's recommendations and asserted that NEON had supplied supporting documentation for the proposed costs following the audit. NSF also stated that for years its practice had been to provide a management fee under awards for construction of operation of large facilities.

Audit of NEON's Accounting System

Although auditors had concluded that nearly 36 percent of the costs in its proposed budget were either questioned or unsupported, NSF proceeded with the $433.7 million construction award to NEON, and thus, we commissioned DCAA to audit NEON's accounting system. The purpose of the audit was to determine if the accounting system complied with the grant terms.

As the audit was proceeding, DCAA auditors informed us that management fee had been awarded and used for unallowable costs, including $112,000 for lobbying contracts, $25,000 for a holiday party, $11,000 for coffee services, and $3,000 for Board of Directors dinners (that included alcohol). This formed the basis for two fraud referrals from the auditor to NSF OIG. In response, we investigated the allegations and referred the matter to the United States Department of Justice for possible further investigation and/or prosecution. The Department of Justice declined to accept the case. We have added a review of the award and use of management fees to our FY 2015 audit work plan.

As OIG monitors communicated with DCAA during this audit as part of our oversight responsibility, we learned that an initial draft from the DCAA field office conducting the work cited eight conditions constituting non-compliance with federal and/or NSF requirements. The use of management fee for unallowable costs, such as parties and lobbying was one area raised by the DCAA field office. However, DCAA's final report, provided to OIG on October 3, 2014, included only one finding, which related to NEON's timekeeping practices. The final report did not cite management fee or any of the other areas (aside from timekeeping) raised by the field office. DCAA informed us that it had followed its established process for resolving differences of opinion between members of the audit team.

Throughout the course of this audit, and especially after we learned of the draft containing eight issues, our oversight monitors repeatedly sought information and clarification from DCAA. For example, in March 2014 we met with representatives from DCAA regional and headquarters offices; in early April, following that meeting we asked DCAA to respond to a number of questions including how NEON classified management fee in its budget, whether NEON was required to track use of management fee, what internal controls existed to monitor NEON's use of management fee, and whether management fee was being reported in NEON's accounting system. We followed up on these questions several times and asked additional questions; DCAA responded to us in June.

Also, in April we asked DCAA to give us a separate document to explain two of the most significant issues raised in the draft—contingency expenditures and management fees. In October 2014, DCAA provided a letter of observations, which elaborated on these matters. As to management fees, the letter explained that NSF policy makes it clear that such fee "is permissible if approved by the grants/management officer" and that it was approved for NEON. DCAA further stated that NSF had initially awarded management fees to NEON on a reimbursable basis, and the awardee used the fees to cover unallowable cost that it had already incurred. Subsequent awards involved an upfront management fee with a not-to-exceed amount

for the life of the cooperative agreement. The letter noted that DCAA was not able to find any NSF policy concerning when a fee should be awarded or limits on how it is to be used by awardees.

With respect to contingency expenditures, DCAA recommended that NSF require awardees to separately track, in more than detail than they are currently doing, the use of proposed contingency costs in the budget control log as a condition of the award, and that they provide fully supported bases of estimates for contingencies.

Problems with Budgets Extend Beyond NEON

In addition to the work on NEON, for the past four years we have directed significant attention to proposed construction budgets for three of NSF's other high-risk, high-dollar cooperative agreements for large construction projects. It is essential for cost information for proposed budgets to be accurate, current, and adequately supported because the budget is basis for charging costs to NSF. We found that NSF approved proposed budgets for four major projects, totaling more than $1.4 billion (including NEON), although significant questions existed as to the adequacy of the proposed budgets. As a result, while NSF knows what it will spend on these projects, it is not clear whether it knows what they should cost.

For example, starting in 2010 attempts to audit the $386.4 million proposed budget for the Ocean Observatories Initiative found $88 million of questioned contingency costs that could not be supported adequately after 17 months of audit work. Repeated attempts to establish a sound basis for the $344.1 million proposed budget for construction of the Advanced Technology Solar Telescope (now referred to as DKIST), resulted in a disclaimer of audit opinion in September 2014 after a re-baselined cost proposal was presented in 2012. (The previous proposal had been twice found unacceptable for audit in 2010 due to lack of support for labor and indirect costs and unsupported estimates and outdated vendor quotes.)

In light of the serious concerns raised by this work and our recommendations to NSF that it strengthen accountability over the millions of dollars invested in its high-risk construction projects, we watched closely to see what NSF would do to ensure the adequacy of the $467.7 proposed cost for the Large Synoptic Survey Telescope, the first construction project the Foundation considered since our recommendations. NSF's own internal review for the project's costs could not find support for *any* of the 136 transactions it sampled, which included labor charges, fringe benefits, and contingencies. However, NSF is proceeding with this project.

Wider Problems with Cooperative Agreements for Large Facility Construction

As we worked to resolve recommendations in audits of proposed costs for NSF's large facility projects, we identified weaknesses in NSF's pre- and post-award monitoring processes for high-risk projects that compounded our concern that unallowable costs could be charged to awards. At the pre-award stage, NSF does not require a proposal or accounting system audit for high-risk, high-dollar cooperative agreements prior to award. Without such audits, NSF is left making

funding decisions without adequate information to confirm the reasonableness of the cost estimates.

At the post-award stage, NSF does not routinely obtain incurred cost submissions or audits to determine if costs claimed by awardees are allowable. While not required by law or regulation, such submissions and audits are essential tools for ensuring accountability in high-risk, high-dollar projects. In their absence, unallowable costs charged to these awards may go undetected because NSF lacks sufficient visibility over incurred costs.

We raised these systemic concerns in an Alert Memorandum to NSF on September 28, 2012 and recommended that NSF, using a risk-based approach, develop end-to-end cost surveillance policies and procedures for its cooperative agreements to ensure stewardship over federal funds. At a minimum, we recommended that NSF increase monitoring for its largest cooperative agreements valued at $50 million. At the pre-award stage, this would include obtaining updated cost estimates and audits of awardees' proposed budgets and cost accounting systems/estimating practices. At the post-award stage, we recommended that monitoring include requiring annual incurred cost submissions and incurred cost audits.

In response, NSF asserted that its existing practices were sufficient to ensure adequate oversight for such cooperative agreements and disagreed with our recommendations to strengthen accountability.

Status of NSF Action on OIG Recommendations

During the past four years OIG and NSF staff have met on multiple occasions to discuss the OIG's recommendations stemming from a large body of audit effort and NSF's proposed actions to strengthen accountability over its high-dollar, high-risk, cooperative agreements for large facility construction projects. Despite this effort, the actions NSF has proposed to take to address OIG recommendations fall short of the standard necessary to adequately safeguard federal funds and leave millions of dollars at risk.

Therefore, following the audit resolution process under OMB Circular A-50, on May 22, 2014, OIG escalated the unresolved recommendations from this work -- including recommendations in the NEON proposal audit, and the Alert Memorandum -- to the Audit Follow-up Official, NSF's then-Deputy Director. Escalation of OIG recommendations is the final step available to the OIG in an attempt to urge NSF to strengthen accountability and to exercise proper stewardship of federal funds. We took this step in light of the serious risk to federal funds posed by NSF's current processes and practices.

Because the same or very similar recommendations were made in multiple reports, we grouped them together into the following five categories:

- Obtain updated cost estimates and audits of awardee's proposed budget and cost accounting/systems/practices prior to awards for cooperative agreements valued at over $50 million.

- Require annual incurred cost submissions and incurred costs audits for cooperative agreements in excess of $50 million.
- Using a risk-based approach, develop end-to-end cost surveillance policies and procedures for its cooperative agreements to ensure adequate stewardship over federal funds. At a minimum, NSF should implement such increased monitoring for its largest cooperative agreements valued at more than $50 million.
- Remove unallowable contingency from proposed budgets and ensure that internal contingency policies and procedures reflect OMB cost principles.
- Require awardees to properly account for contingency funds consistent with their estimates and separately track budgeted versus actual contingency costs; and retain control over funds budgeted for unforeseeable event and release funds only when the awardee demonstrates a bona fide need supported by verifiable data.

On August 8, 2014, the then-Deputy Director decided not to accept any of OIG's recommendations. Following the Deputy Director's retirement, the Acting Chief Operating Officer, as the new Audit Follow-up Official, informed OIG that he would review that decision. On October 16, 2014, the Acting Chief Operating Officer rejected the OIG's recommendation for NSF to require awardees to remove unallowable contingency from their proposed budgets and to ensure that NSF's contingency policies and procedures reflect OMB cost principles. We are awaiting his decisions on the remaining recommendations.

OIG's Sustained Commitment to Ensure Effective Use of Taxpayer Dollars by NSF

We target our work and direct our resources to areas that pose the highest risk of misuse of taxpayer dollars and can lead to funds used inappropriately being returned to the government. To that end, our FY 2015 audit work plan includes incurred cost audits and accounting system audits of more than ten NSF awardees, as well as a focus on the use of management fees. Incurred cost audits are critical to proper monitoring and can reveal instances of noncompliance with federal regulations as well as costs claimed that are unallowable or unreasonable. The audits will provide vital information and also prevent recurrence of any infractions in future periods of the awards. NSF does not routinely require such audits for its high-dollar, high-risk cooperative agreements.

My office also conducts mandatory audit work in fulfilling our mission to detect and prevent waste, fraud, and abuse of taxpayer dollars. This work includes the annual audit of NSF's financial statements and our review of NSF's compliance with the Improper Payments Elimination and Recovery Improvement Act. We also review the results of Single Audits, required of NSF awardees that receive $500,000 or more in federal funds annually, to identify risk areas that warrant follow up by our office.

Another area we are closely monitoring is NSF's planned relocation of its new headquarters.

Our ongoing inspection of NSF's relocation to its new headquarters in Alexandria, VA has identified concerns about missed schedule milestone dates that have occurred, and could continue to occur, as a result of the ongoing impasse between NSF and its union with respect to issues related to NSF's new headquarters, and the possible financial impact of the schedule slippage.

As detailed in our recent alert memo, any delays caused by NSF (rather than by the builder) to the December 2016 completion date could require NSF to pay delay costs in addition to rent costs at NSF's current headquarters. Due to the building schedule's milestone dates that NSF has already missed, the potential cost of any delays, and the potential for protracted negotiations with the union, we have recommended that NSF senior management focus the highest level of attention on this issue. We will continue to closely monitor NSF's move to its new building to inform Congress and NSF.

Our investigations are also directed at helping to ensure that taxpayer dollars are used as intended to advance NSF's mission of scientific research. To this end, we have focused attention on fraud in the Small Business Innovation Research Program (SBIR) and the Small Business Technology Transfer (STTR) program. A primary purpose of these programs is to use small business to meet federal research and development needs, and my office has aggressively pursued companies and individuals who have attempted to fraudulently divert these important funds to their own use. For example, in one recent case a university professor was convicted on seven felony counts including wire fraud, mail fraud, falsification of records, and theft. Among other things, this individual created fraudulent company time sheets, which he backdated and falsely represented as timekeeping records, and created a fraudulent expenditure ledger in which he recorded fictitious expenses to conceal that he spent the STTR funds on his home mortgage and personal credit cards.

In another case, a jury found a company CEO guilty of seven counts including making false statements and claims, and wire fraud. The CEO used approximately $60,000 in STTR funds to pay off his personal credit card debt. It is unconscionable that unscrupulous individuals seek to use scarce research dollars to enrich themselves and we will continue to work to bring such individuals to justice.

Review of NSF Management Fee Awards

In response to issues that have surfaced about management fees, and as mentioned, we included a review of management fee in NSF awards in our Fiscal Year 2015 audit plan. As an initial step to inform our understanding of management fees, OIG staff researched the subject and developed a white paper, which addresses the historical context giving rise to use of such fees, as well as internal and external guidance or authority pertaining to management fees. The paper also provides some initial observations about NSF management fee awards. The second stage of this

audit, which will focus on NSF's process and controls over awarding and managing management fees, should begin in early 2015.

Historical backdrop and concerns

Our look at this area found that management fees have long been provided to Federally Funded Research and Development Centers (FFRDCs) based on a recognition that these centers -- which are typically non-profit entities almost wholly dependent on government funding -- might need to incur costs that could not be reimbursed by the government. The fee was designed as a mechanism or tool to ensure that an FFRDC's "ordinary and necessary" but otherwise nonreimbursable business expenses would be covered to maintain the entity's financial viability. Such expenses might include working capital and interest payments.

Through a series of reports, beginning in the 1980s, GAO identified a number of issues relating to management fees. For instance, in a 1982 report it described concerns about the term "fee," which GAO explained is normally associated with the for-profit rather than the non-profit world. According to GAO, "[f]ees paid to for-profit organizations are viewed as contributions to profits, whereas fees paid to nonprofit organizations are considered necessary to provide required operating capital and to cover certain nonreimbursable expenses." The report noted that as early as 1969, GAO recommended that the Office of Management and Budget adopt governmentwide guidelines clearly limiting management fees to the amount needed to enable organizations to accumulate a reserve to provide for operational stability and to pay prudent business expenses not otherwise reimbursable. The need for concrete guidelines to prevent fees from being used inappropriately was reiterated in two reports that GAO issued in 1995 and again in 1996 and 2008.

NSF policy and practice

NSF's grant policy documents allow for management fees if they are contemplated in the proposal solicitation and in certain instances when they are not. Management fees are to be negotiated, after consideration of a number of specified factors, and may not exceed fifteen percent of the total project costs provided by NSF (excluding the fee).

In correspondence to Senators Charles Grassley and Rand Paul dated October 1, 2014, NSF elaborated that it considers several points in deciding whether a fee is warranted in the first instance. These include "addressing unreimbursed costs deemed ordinary and necessary for operations," as well as "attract[ing] qualified organizations," and "utili[zing] . . . fee as a performance incentive." The Foundation also stated that it views the fees as discretionary funds, and does not require awardees to report on their management fee expenditures.

Use of Management Fees by Other Federal Agencies

Although we have not conducted formal benchmarking, our background research found that the Department of Defense has an FFRDC management plan, which permits management fee awards for ordinary and necessary business expenses necessary to "maintain a healthy company." The

plan contemplates an annual review of these fees, which involves examining whether actual uses were consistent with prior representations and justifications. We also found that the National Aeronautics and Space Administration is promulgating a rule that prohibits that agency from awarding profit and fee under grants and cooperative agreements. In its Federal Register notice, NASA has explained that this includes management fee. We were unable to find any explicit government-wide guidance or authority concerning management fees that sheds further light on this subject.

Initial observations about NSF management fee awards

Although our review is now entering its second phase, which will involve a deeper look at how NSF has awarded the fees and how they were used, we are able to make some initial observations which will warrant further scrutiny as the review proceeds. NSF management fee recipients have other sources of income besides NSF awards:

- Some of the factors that NSF appears to consider in determining whether to award a management fee (such as fee to attract organizations and to provide a performance incentive) appear to be inconsistent with the historical purpose of such fees, which is to cover ordinary and necessary business expenses to maintain an entity's financial viability.
- NSF's view that management fees represent discretionary funds is also at odds with this historical purpose.
- At least one awardee, NEON, has used management fees for questionable expenditures.

As previously noted, an in-depth review of management fee will be undertaken as part of my office's ongoing efforts to help ensure that NSF is spending taxpayer funds effectively. This work will endeavor to fully assess the risk environment and, based on what we learn, will result in appropriate recommendations to address that risk.

Conclusion

We have been urging NSF for the past four years to strengthen accountability over its high-dollar, high-risk cooperative agreements for its large facility construction projects. NSF applies its highest level of attention and scrutiny to determine the scientific merit of the projects it decides to fund. It is imperative that NSF apply the same rigorous attention and scrutiny to its financial management of these projects, prior to requesting NSB approval for award. The stakes are too high for the Foundation to continue its current practice of requesting NSB approval and making awards before it ensures that project costs are reasonable, are supported by adequate documentation, and will use taxpayer dollars efficiently.

Our work reflects my office's sustained commitment to helping NSF be an effective steward of taxpayer dollars and, and we look forward to our continued partnership with NSF and the Congress to this end.