



Public Employees for Environmental Responsibility

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June 4, 2015

Ms. Mary Kendall
Deputy Inspector General
U.S. Department of Interior
1849 C Street, NW
Mail Stop 4428
Washington, DC 20240

Re: Request for Performance Evaluation of U.S. Geological Survey Management of Scientific Collections

Dear Ms. Kendall:

I am writing on behalf of Public Employees for Environmental Responsibility (PEER) to request that your office review whether the extensive biological and other scientific collections assembled by U.S. Geological Survey (USGS) scientists are being properly preserved, inventoried, and funded. Based upon information PEER has received from current and former USGS employees, there are serious concerns that USGS collections have been mismanaged for decades. This mismanagement includes improperly categorizing collections, inappropriately transferring collections to other institutions, and generally minimizing the agency's stewardship responsibilities, ultimately allowing it to bypass federal requirements for the proper management of federal collections.

As a result of these conditions, the prodigious and growing collections assembled by scientists within the world's foremost earth science agency are at risk of being lost or discarded. A significant and irreplaceable portion of our ecological heritage – all amassed at taxpayer expense – may be in jeopardy. Therefore, we are requesting your office to examine how USGS is discharging its stewardship responsibilities to ensure responsible long-term management of these invaluable collections.

Background

With each passing decade, there has been a renewed and mounting focus on collections as critical scientific infrastructure. Yet, USGS management of this resource is governed by its interpretation of a 19th century provision (20 USC § 59) of the 1879 Sundry Civil Act which established the USGS. Its sole provision on this issue states:

“All collections of rocks, minerals, soils, fossils, and objects of natural history, archaeology, and ethnology, made by the National Ocean Survey, the [United States] Geological Survey, or by any other parties for the Government of the United States, when

no longer needed for investigations in progress shall be deposited in the National Museum.”

Since the mid-1990s, however, the National Museum (now the Smithsonian Institution National Museum of Natural History [NMNH]) has not had space to unconditionally accept such collections. In 1996 the NMNH signed a new agreement with the USGS that gave it the right of first refusal for *fossils* and would make those fossils it did not want available to other institutions. However, subsequent revisions have not clarified the responsibilities of the NMNH and USGS particularly regarding ownership and the kinds of collections.

At approximately the same time, USGS inherited hundreds of biologists and ecologists marooned from a failed attempt to create a National Biological Survey. One casualty of this shotgun merger was the large number of plants, animals, and genetic tissues these scientists brought with them and who continued to collect. In the ensuing nearly 20 years, USGS never officially recognized the specimens as scientific collections, nor conducted inventories to determine their content and physical location. Neither did they provide policies or guidelines on what the scientists should do with the collections after the study ended.

It was not until 2009 that the status and management of these collections drew independent official review and analysis in the form of two reports:

- Your Department of Interior Office of Inspector General issued a report entitled *Museum Collections: Accountability and Preservation* (December 2009 C-IN-MOA-0010-2008; <http://www.doi.gov/oig/reports/upload/2010-I-0005.pdf>) which, among other things, recommended that Department of Interior (DOI) agencies consolidate museum collections and reduce the number of repository facilities. In contrast to that recommendation, USGS’ relatively small cultural collections are scattered across six locations, three of which house from one to three objects. Meanwhile, its vastly larger geological and biological collections have yet to be adequately preserved or accounted for, all because the majority are not even recognized as museum collections i.e., objects with scientific significance and worthy of long-term preservation.
- Led by the White House Office of Science and Technology Policy (OSTP), the Interagency Working Group on Scientific Collections (IWGSC) issued a report entitled *Scientific Collections: Mission-Critical Infrastructure for Federal Science Agencies* (<https://www.whitehouse.gov/sites/default/files/sci-collections-report-2009-rev2.pdf>). In its findings, the Working Group declared that –

“These scientific collections are essential to supporting agency missions and are thus vital to supporting the global research enterprise.”

Its key recommendation was that each science agency with collections should “develop realistic cost projections for collection maintenance and operation, and work to incorporate the needed support as stable budget elements.” Although the USGS reported the largest number of scientific collections (mostly geology and fossils) for purposes of

the report, it has historically categorized them as working collections, which are treated as short-term assets with short-term funding requirements.

Following these two reports, both the America Competes Reauthorization Act of 2010 and OSTP memos in 2010 and 2012 reiterated the need for federal agencies to appropriately budget for scientific collections. More recently, the IWGSC generated documents that clearly differentiate between various categories of collections including working and institutional collections. As described below, all these calls for coherent management of scientific collections do not appear to have been heeded within the USGS.

Current Practice

The USGS has no written policies or guidelines for its working collections that have existed since the late 1880s and comprise the bulk of USGS collections, according to the USGS. Similarly, the agency currently has no policies or guidelines for its scientific collections. However, in 2014, USGS adopted a Museum Management Plan for its *museum collections*, a DOI term that includes scientific collections. The bulk of USGS museum collections consist of natural history specimens (97%) with the remainder comprised of fewer than 1,500 cultural objects. The Plan states that one of its goals is to “control growth of collections of accessioned museum property” by not allowing additional specimens of natural history to be accessioned. This plan appears to make space and budgetary considerations – rather than a collection’s scientific value – the controlling factor determining whether it is preserved.

Scope of Evaluation Request

In light of the above, PEER requests that your office undertake a review as to whether USGS is properly managing its collections – especially its biological collections – in a manner that best serves its scientific mission. We would urge your office to specifically examine the following:

- ***Working Collection Black Hole.*** USGS classifies the vast majority of its collections as “working collections” which carries with it no obligation to manage or preserve. USGS practices also appear to violate DOI Museum Property Directive #1 which states that all working collections must be periodically evaluated to determine if they should be museum property. Tellingly, we are unaware of a single case where USGS has reclassified a working collection as museum property, including its vast holdings of fossil collections that are to the museum community considered as scientific collections.
- ***Lack of Consistency and Clarity.*** The USGS fails to clearly differentiate between working collections, museum property, and scientific collections. Nor is there an apparent attempt to reconcile definitions of museum property (DOI Museum Program) and scientific collections (White House OSTP) with its definition of working collections. For example, there is no official justification for categorizing fossil collections as working collections. This has crucial ramifications because it also defines the level of stewardship responsibilities for the agency with working collections having the least amount.

Although the USGS has historically considered its collections of geology and paleontology as working collections, it categorized them as scientific collections in the federal survey of scientific collections (2009). Similarly, the 2014 USGS Museum

Management Plan lists two natural history collections that have been re-categorized as “working scientific collections” because they had not yet been accessioned as museum property by the time the Plan was written. Yet USGS does not explain how specimens that were once museum property are no longer that only because of an arbitrary date.

- **No Inventory.** The USGS has no complete inventory of the content and physical locations of the different categories of its collections. For its widespread and growing biological collections, the USGS still lacks any remotely accurate inventory. As a result, few of these research archives are accessible to other researchers to re-examine these materials, let alone accessible to the public. At the very least, the USGS should be able to provide a current complete list of such collections.
- **Biological Blinders.** The USGS has no policies or even guidelines for storing or otherwise handling biological collections. USGS biologists are given no direction as to what they are supposed to do with the collections they create. Nor do its biologists understand why their scientific collections are not supposed to grow while the demands for research supported by such collections grows unabated.
- **Communications Breakdown.** The USGS does not brief new scientists about the rules governing management of collections. Nor are these scientists provided with any copy of the policy, guidelines, or standard operating procedures that pertain to the management of working collections. In fall 2013, the USGS established a Collections Steering Committee to advise agency leadership on the curation, coordination, and management of a full spectrum of objects collected in the conduct of USGS scientific investigations. Yet, none of the committee’s progress has been conveyed to USGS staff.
- **Loans and Dispersals.** By all appearances, USGS has given away huge collections to non-federal museums or university programs, without participation or oversight from the NMNH. The legal basis for handing these collections over to universities remains unclear as is whether the USGS is actually transferring ownership to these outside entities. In some cases, collections were made on National Park Service lands yet have been discarded or turned over to non-NPS repositories, which is contrary to NPS and DOI regulations. These collections include, but are not limited to, thousands of fossils that were turned over to the University of California, Berkeley, and the Virginia Museum of Natural History.
- **Is There a Budget for Collections?** Requests under the Freedom of Information Act have failed to produce any record that evidences an attempt by the USGS to budget for the management of its collections. Nor has the USGS been able to produce any analyses or cost-comparisons to evaluate the different “costs” to manage geological and biological collections, or working collections and museum property. Without adequate planning and appropriate budgeting, it is no wonder that the USGS is managing its scientific collections on a catch-as-catch-can basis.
- **Flouting DOI Museum Property Accountability Standards.** An investigation of the USGS Museum Management Program is warranted in light of several questionable actions. Some examples include:

- Maintaining an FTE for 5 years to manage the agency's tiny cultural collections of fewer than 2,000 objects while providing no funding to defray costs for its biological collection, even though this vast collection constituted the bulk (98%) of USGS museum property;
- Suspension of program activity for periods of years, one result being the "loss" of museum property when several collections were re-categorized as working collections in 2014 due to repeated failure to accession them as museum property; and
- Providing repository support using funds formerly allocated to the salary of a now retired USGS museum professional -- this means that USGS does not benefit from the direct management and oversight of their collection by USGS staff, as had been the situation formerly.

Conclusion

While some of the issues raised by this request may seem a tad esoteric, in the minds of the scientists within the agency they go to the heart of the USGS's scientific mission. The ability to preserve and document the raw material supporting scientific conclusions, and fund collection care is a key component of whether USGS is doing "good science" and following accepted professional practices.

Unless your office undertakes this requested evaluation, there is a very real danger that decades of important scientific specimens will be destroyed, lost, or given away. Without this evaluation there appears to be scant chance that the USGS will be induced to provide room for scientific collection growth or support for their safekeeping.

Until the OIG review is completed, we ask that you direct the USGS to immediately halt all current or pending actions that would turn over management of USGS collections to others. This includes, but is not limited to, a pending repository agreement with the University of New Mexico.

In short, your office's re-engagement in this area is the best chance we have of protecting the entire scientific legacy of the USGS.

Sincerely,

Jeff Ruch
Executive Director

Laura Dumais
Staff Counsel