

## **Early Edition of the Monday Message: All Good Things Must Come to an End**

It is with a heavy heart that I write to let you all know that as of February 15 I will be leaving the USGS. It has been my honor to have been your Director, and I have truly loved the opportunity to be a part of this agency: its mission, its history, its people. If it just weren't for the fact that this job is 2000 miles away from my family and my home, I would be pleased to stay on as long as I was invited to do so.

I am sorry to be leaving the top-notch Headquarters staff here in Reston – as fine a leadership group as I have ever had the privilege to work with. I am sure I don't have to tell you all this, but Suzette Kimball, your Deputy Director, is worth a million dollars. Be really, REALLY nice to her when I am gone because she will have a lot on her hands. I have also enjoyed getting to know the wonderfully knowledgeable Regional Directors and Science Center Directors around the country. There is no question but that this agency is deep in talent. But most of all I have been enriched by my interactions with you, the USGS staff. I have found almost without exception that you are all committed, thoughtful, open to discourse, passionate about our mission, and hard working. We might not always agree on the best way forward, but we do agree on the goal: making USGS science the absolute best that it can be.

In thinking back over my time here at the USGS, a number of memorable moments came to mind – all good – when I took great pride in being part of this fabulous organization for all we have accomplished over the past few years. So I jotted some of them down in a list for Secretary Salazar:

### **Top Moments at the USGS**

1. We realigned the USGS so that its management corresponds to its strategic plan, its budget, its mission, and its performance metrics. Significantly, major foci for USGS research such as Energy and Minerals, Climate, and Hazards were elevated to the Associate Director level. It is easy for the Director to hold our highest level managers accountable for the success of the organization in the areas most important to us.
2. At the same time, the management structure for the USGS was simplified. One measure of the simplification is that the number of SES and SL positions in upper-level management was reduced by one third.
3. With perhaps too much help from Mother Nature herself, we increased the visibility of USGS. Our earthquake program had always been in the news, but new challenges like the oil spill, hurricanes, white nose syndrome, and Asian Carp allowed different areas of the organization to show their ability to serve the nation, and serve it well. USGS took the spotlight when one of our own, Paul Hsieh, was honored as a Federal Employee of the Year for his role in ending the *Deepwater Horizon* oil spill.
4. We propagated the USGS scientific integrity standards, improved upon them, and applied them across all of DOI, becoming the first Department to comply with the Administration's request that all government agencies have a scientific integrity policy that conforms to OSTP guidelines.

5. We completed designing and building the ground station for Landsat 8 and are on track for a launch on February 11, 2013. This satellite will continue the unbroken 40-year record of global imaging by Landsat for land-use and climate change. More than 9 million Landsat scenes have been distributed to date. Our mission as the nation's land stewards is enhanced through Landsat 8 and retains its historical context.
6. Our hyperspectral survey of the nation of Afghanistan discovered one million metric tons of mineral wealth in more than two dozen world-class deposits of copper, gold, lithium, rare earth elements, and other commodities. In commenting on our work, *Scientific American* speculated that replacing "opium and Taliban strongholds with a mining bonanza" could "change U.S. foreign policy and world stability."
7. We established a Strategic Sciences Planning Group within DOI, co-led by David Applegate, Associate Director for Hazards at USGS, and Gary Machlis, Science Advisor to the Director of the National Park Service, which is available for scenario planning for emergencies that are or could disrupt the vital work of the Department. They are currently performing a scenario for Superstorm Sandy so that communities will be better prepared for the next event.
8. We have become the leader in the Federal government in the use of social media to accomplish our mission. Whether it is crowd-sourcing content for our next generation of topographic maps, sending automatic text message alerts to citizens of flooding rivers, or using Twitter to detect earthquakes internationally in areas where scientific instrumentation is absent, the USGS is recognized by industry experts as the setting the standard.
9. We commissioned a wide-ranging study of all business practices at the USGS, called ACES (Achieving Cost Efficiencies for Science) in order to determine where savings could be found in facilities, operations, contracting, science centers, management, and other areas. We are now implementing the recommendations of the report, returning millions of dollars each year in funding to our basic science mission.
10. We are increasing diversity at the USGS by restoring our internship program to its historic high levels, recruiting a workforce that matches the diversity goals we have set, and creating pathways to full-time positions. This has been accomplished in spite of the overall reduction in the workforce.
11. The USGS obligated 99.95% of its ARRA funding on schedule, completing two new Great Lakes research vessels, modernizing the stream gage network, and achieving a decade or more of progress in the Advanced National Seismic System.
12. We completed building out all eight of the DOI Climate Science Centers. They are all hard at work helping their regions with the science needed to understand and adapt to changing conditions to come.
13. In partnership with the Bureau of Reclamation, we launched the WaterSMART initiative and are undertaking the first national water census on water use and availability in many

years. USGS continues to be the nation's leader in providing accurate, dependable information on water quantity and quality.

14. We established a prototype of Earthquake Early Warning in California. Selected users now have advanced notice before the destructive shaking arrives from an earthquake.
15. We produced reports to help inform Secretary Salazar's decisions, such as the one on uranium resources, water, and ecosystems that aided when he withdrew more than one million acres for 20 years from additional mining claims around the Grand Canyon and another report on science gaps in the Arctic which the Secretary requested in advance of decisions on offshore resource development.
16. We published the first two of the biological carbon sequestration reports, for the Great Plains and the West, both landmark studies of the biosphere's capacity to store carbon now and into the future.
17. We institutionalized a role for DOI within the federal STEM education plan. We argued strongly that DOI should have a major role in STEM engagement, given the natural laboratory setting for STEM instruction on federal lands and the importance of STEM education to the missions and workforce of Fish and Wildlife Service, Reclamation, Parks, BOEM, and other agencies, in addition to USGS.
18. Along with Jane Lubchenco, I edited a special issue of the *Proceedings of the National Academy of Sciences* that collected much of the science that was learned during Deepwater Horizon. I also authored or coauthored four of the articles in the issue. While the oil spill may be over, it is important that the lessons not be forgotten.
19. We performed excellent science on behalf of our DOI partner agencies. The brilliant scientists at our National Wildlife Health Center in Madison, WI developed a vaccine for plague and a low-cost delivery system that will protect black-footed ferrets and their prey, prairie dogs, helping the recovery of ferret, once thought to be extinct. Our scientists are also making major advances in the pathology of white nose syndrome.
20. We also performed excellent science that furthered the mission of other federal agencies. EPA Administrator Lisa Jackson specifically mentioned USGS scientist David Krabbenhoft's work on the mercury cycle as having been important in the recent EPA rulemaking that limits emissions from coal-firing power plants.
21. Our science is also advancing US energy independence. We provided ecosystem science on landscape scales in support of industrial wind and solar energy facilities to help avoid wildlife impacts. In addition to being the recognized authorities on undiscovered conventional oil and gas resources, our energy group is internationally regarded as world leaders in assessing undiscovered unconventional shale oil and shale gas resources. We participated in demonstrating the feasibility of producing gas from methane hydrates and have the first assessments of recoverable resources from these types of deposits. The USGS has also produced assessments of geothermal energy for the Western US.

As extensive as this list is, it still fails to capture many of those personal moments when I was so touched by my interactions with the USGS staff and by our ability to use the USGS to simply do good. For example, a personal highlight was the opportunity to honor Jack Townshend for his 69 years of government service. And I never will forget traveling with Ken Hudnut to the Santa Monica Mountains to rename Ballard Mountain (former name: Negrohead Mountain) in honor of John Ballard, the first African-American to settle in the Los Angeles area and homestead the mountain. With that simple act by the Board of Geographic Names, we were able to undue more than a century of injustice and give immense pride to the hundreds of descendants of John Ballard who didn't even know they had such a famous forefather. I also enjoyed my interactions with the stellar team that the President assembled here in Washington. Working with Energy Secretary Steve Chu, US Coast Guard Admiral Thad Allen, Sandia Laboratory Director Tom Hunter, and NOAA Administrator Jane Lubchenco on the *Deepwater Horizon* oil spill made us "brothers in arms." My trip to Antarctica with NSF Director Subra Suresh, Lori Garver, Deputy Director of NASA, and Carl Weiman, Associate Director for Science at OSTP, to improve interagency coordination was one of those "bucket list" experiences. I was overwhelmed by the passion and dedication of USGS scientist Katie Dugger, an expert on Adelle penguins, who camped out on the ice with a teacher-volunteer in primitive conditions to study her "subjects." I was humbled to stand on the South Pole 100 years after the first conquest by Amundsen.

I am timing my departure so that I can witness the launch of Landsat 8 on February 11, a very significant event for the USGS, and after that ride off into the western sunset. As of February 16, Suzette Kimball will be the Acting Director, and Bill Werkheiser will be Acting Deputy Director. I shall miss you all. A committee of the National Academy is poised to move on making recommendations for my successor, and I know that Secretary Salazar will leave you in good hands. Of course until then, I remain your director, and we have much to accomplish before I depart.

Best wishes to you all,

Marcia

