

**Statement of Suzette Kimball
Nominee for the Position of
Director of the U.S. Geological Survey
United States Department of the Interior
Before the
U.S. Senate Committee on Energy & Natural Resources**

October 20, 2015

Chairman Murkowski, Ranking Member Cantwell, and Members of the Committee, I am honored to appear before you today as President Obama's nominee to be the Director of the U.S. Geological Survey. I would not be able to appear before you today without the encouragement of my family and the love and support of my husband, Curt Mason, who rescheduled major surgery so he could be here with me during my first hearing and who is here supporting me today. I am also grateful to my other family: the employees of the USGS. Every day, I am inspired by their dedication of time, talent, energy, and intellect. It has been a privilege to serve as their Acting Director, and it is an honor to be offered the opportunity to lead this outstanding organization.

I was raised to not only value public service but also see it as a responsibility to our country. I am one of those whose hearts beat faster watching the troops passing in review, hearing the Washington Post March, seeing the flag, or riding in a small town 4th of July parade, which is one of the privileges I have enjoyed living in West Virginia. My father and brother both had military careers; my mother was a teacher; both my uncles were in the civil service; and most of my cousins have served in the military or civil service, or are educators. For me, public service is the family business.

Unlike many of the Department of the Interior nominees who have come before this Committee, I cannot point to a childhood steeped in outdoor experiences that set the stage for my career path. With the exception of our family vacations at the beach, I tended to spend my spare time in the library. And despite the focus on science brought by my father, a physicist and engineer with the Army Signal Corps, and my mother, who taught health sciences, I started my academic career in English literature. But as I approached my senior year, I had the singular good fortune to take a geology course from an extraordinary educator, Dr. Gerry Johnson, and my world view changed. His compelling lectures brought to life the extraordinary forces that shaped the earth and engaged my imagination and passion for understanding the processes that drive earth systems and the impacts of natural events.

My Master's degree program focused on field geophysics and impressed upon me two things that have been valuable in my tenure at USGS: I studied the transport of contaminants in ground water which shifted my focus from the purely theoretical sciences to an appreciation for the applications that science can bring to the human environment. Almost all the issues addressed

by USGS science incorporate two fundamental aspects: understanding how physical processes drive both the physical and biological systems; and how that basic knowledge can be applied to management or policy decisions. Second, at the time I received my M.S., very few women were graduating with degrees in geophysics. Having experienced being a minority in my field of study, I am compelled to reach back – to provide opportunities for the next generation of scientists, especially from underserved communities, to create a mentoring culture and an inclusive workplace.

My PhD program at the University of Virginia provided the third transformative experience that will serve me well if confirmed as the USGS Director. UVa's earth science program was presented in an integrated environmental sciences context that forced one out of narrow academic boundaries and required competence in a spectrum of disciplines. My particular research area, coastal beaches and barrier islands, is the poster child for an integrated approach. The questions that are posed of a USGS scientist today also transcend traditional academic fields and ask us to understand not only the geologic foundation and the operative physical processes, but also the potential impacts to the biological systems and to the human environment. My academic training and subsequent professional positions at the Virginia Institute of Marine Science (another integrated program) and back at UVa are particularly suited to understanding and advocating for a comprehensive, multidisciplinary science program.

I have had the good fortune to work in both academia and in the federal government, both of which satisfy my public service ethic. Immediately prior to USGS, I worked for the National Park Service, first as a research scientist and, ultimately, as the Associate Regional Director for Resource Stewardship and Science in the Southeast. This experience, besides having the opportunity to work in some of the most beautiful places in the country, gave me an intrinsic understanding of the pressures that land managers face and the types of information that can be most useful to them considering the types of decisions that need to be made. Given that USGS sits in the Department of the Interior with some of the world's most respected land and resource management agencies, I believe this experience will give me a unique perspective to create a coordinated science framework to support and partner with the entire Department.

I came to the USGS in 1998. Since then I have had the opportunity to see the breadth and depth of this organization from many perspectives. First as Regional Executive for Biology, then as Regional Director, Associate Director for Geology, Deputy Director and Acting Director, I have been able to be engaged with all parts and all mission areas of this organization and to participate in some of the transformative enterprises of this great agency. Recently, I participated in a celebration of the first USGS streamgage, still in operation 125 years later, on the Rio Grande in Embudo, New Mexico. I also joined USGS employees to acknowledge and celebrate 50 years of work at the Northern Prairie Wildlife Science Center and 40 years of operation at the National Wildlife Health Center. One of my most rewarding activities this year was the christening and commissioning of the Research Vessel *Arcticus*: the culmination of more than 15 years of effort

to revitalize the Great Lakes research fleet to bring it to modern safety standards and state of the art capabilities that support the \$7 billion Great Lakes fishery.

While celebrating our history and our iconic monitoring systems, I have also had the opportunity to work with a group of our scientists to design and deliver a Center for Innovation in the Earth Sciences which takes advantage of private sector capabilities and advances in technologies for the 21st century and beyond. I have been able to work with local communities to bring community-driven water sampling projects to fruition as exemplified by the USGS partnership with the Yukon River Intertribal Watershed Council, connecting with Alaskan native communities; and on the international landscape to address critical mineral and rare earth concerns, global mapping and data sharing, and hazards response. I was privileged to watch the flawless launch and deployment of Landsat 8, which continues a 44-year history of earth observations. And I have had the opportunity to apply my own research expertise in coastal systems and catastrophic storms as we responded to such events as Hurricane Katrina and Hurricane Sandy.

The USGS has also made substantial progress to advance issues discussed by this committee during my last hearing: we have begun to undertake a national landslide assessment, beginning in Oregon, California, North Carolina and Colorado; we have made progress to implement a national Earthquake Early Warning System, with initial implementation sites in California and Washington; we have upgraded and repaired volcano monitoring systems; we have collected IFSAR data for more than 63% of the state of Alaska and created almost 2000 new topographic maps; we have brought new hyperspectral technologies on board to map mineral distributions and have implemented new life cycle analyses to critical mineral assessments; we have advanced the national assessment of groundwater availability through regional studies of principal aquifer systems; we have developed new strategies to contain the Asian Carp and other invasive species; and we have contributed to the science needed to understand critical systems, such as the sagebrush steppe and the implications of the California drought. In these efforts, we continue to appreciate the support of Congress and this committee, which has introduced legislation that recognizes the importance of these scientific endeavors.

I have heard some say that Federal workers are not pulling their weight. I see just the opposite at the USGS: in small things, like offering to take extra furlough days in order to save their colleagues from financial hardship, or staying late to collect that last sample -- or big things, like dedicating their careers to providing the information that is used by decision makers and the public to save lives, enhance quality of life, sustain communities, and support the resources everyone needs. Two weeks ago I participated in the annual Partnership for Public Service Samuel J. Heyman awards ceremony, which recognizes extraordinary achievements by federal workers. A remarkable USGS scientist, Dr. Lucile Jones, received the Citizen Services Medal in recognition of her work to make complex seismic risk assessments understandable to the public and to design "Shake-out" exercises to help communities and individuals prepare for earthquake hazards. The most recent Shake-out, conducted on October 15, 2015, had over 23 million

participants nationwide. Lucy is but one of our 8500 dedicated employees working to safeguard public safety and provide decision-makers with the information needed to manage critical resources and sustain community growth and resilience. USGS employees are dedicated: I am honored each year to present record numbers of 40-year service awards – and in past years we have recognized 50 and 60 years of service. Even after they retire, many of our scientists keep working as volunteers, publishing their research and mentoring younger scientists. This has always been a great strength of the USGS: the loyalty and dedication to mission that keeps our employees working productively when they are 70, 80, or 90 years old and the mentoring culture that nurtures the next generation of scientists.

USGS is an unusual Federal agency in many ways. The longevity of careers here is remarkable (my 15 years puts me less than halfway through the average USGS scientist's career) but also noteworthy, unlike many of our sister bureaus at Interior, we do not issue regulations nor do we manage resources. Without a regulatory or management mandate, the USGS provides impartial science that meets the demands of the changing world around us. USGS scientists work to describe and understand the Earth, its processes, and its living resources, providing reliable, timely scientific information that serves the Department of the Interior, the Nation, and the world. Field investigations, direct observations of natural science processes, and monitoring and data collection at scales from local to national and even global are the foundation of USGS research. The scientific nature of the USGS, its national perspective, and its non-regulatory role enable USGS science to be both policy relevant and policy neutral.

Since its founding in 1879, the USGS has made enormous contributions to the health and wellbeing of the country – and the world. Created to understand the resource base of the nation during the excitement of frontier exploration during the 19th century, the USGS continues to evolve as scientific understanding and technology evolves. Achievements include the science that has delineated the mineral and energy resource base of the Nation; that helps protect lives and livelihoods from the effects of earthquakes, wildfires, volcanic eruptions, landslides, and floods; that continues to provide safe public water supplies; that supports restoration of ecosystems throughout the United States; and that provides assistance to other nations for resource and hazard issues. The diversity of scientific expertise within the USGS enables it to carry out large-scale, multi-disciplinary investigations that build our knowledge about the Earth and give decision makers at all levels of government, and citizens in all walks of life, the science information they need.

Our growing and expanding society faces pressing issues that science can and must help address –issues like ensuring sustainable development of energy and mineral resources, dealing with climate change, coping with natural disasters, and ensuring water and food security. We live in a global economy; understanding the worldwide distribution of both resources and risks is essential to the country's security and economic health.

Looking to the future, we need to continue those efforts for which we have unique capabilities and on which the public relies, such as the streamgauge network, but we also need to look at ways to be relevant to the public's emerging needs. Consequently, we are engaging our sociologists

and economists to an ever increasing degree in our studies in order to bring our science to the American people; we are providing new tools and technologies to protect public health and safety, whether that is earthquake early warning, or our focus on environmental health including the impacts of extractive resource development; we are providing new tools for communities to become sustainable and resilient in the face of challenges such as changing climates or demands affecting water use and availability; and if we are to also be resilient and sustainable, we need to engage young scientists to be part of our future.

We have a 136-year long and storied history at USGS, and still a lot of work and contributions to make in the next 136 years.

I am deeply grateful that Secretary Jewell and President Obama have chosen to nominate me to lead this outstanding scientific organization. If confirmed, I look forward to working with you to address the challenges facing our Nation.

Thank you for the opportunity to appear before you. I will be happy to respond to your questions.