Statement of Dr. Ned Mamula, Nominee for the Position of Director of the United States Geological Survey at the Department of the Interior Before the Energy and Natural Resources Committee, United States Senate May 14, 2025

Chairman Lee and Ranking Member Heinrich, thank you very much for your time and the opportunity to be in front of this Committee—I am very honored and humbled to be here—and very proud of the agency that I have been nominated to lead—the U.S. Geological Survey. My deepest thanks to Secretary Burgum and President Trump for the confidence they have reposed in me.

For me, the path to today has been an incredible personal and professional journey—starting out as a steelworker in my native Pittsburgh before deciding to go to college—becoming an entry level geologist—with three stints in grad school—working at the Geological Survey and later in the energy industry all over the country and the world. My academic work included major research studies in Iceland and later in Wyoming's Bighorn Basin as part of my training at Penn State and Texas A&M University—two of our country's premier geology programs.

Years later I was privileged to help stand up a new mineral sustainability division within DOE Fossil Energy, established for the purpose of characterizing domestic ore deposits for their critical mineral and rare earth element content. For the past three years I have served as the Chief Geologist at GreenMet. Finally, my co-author Ann Bridges and I have produced two recent thought-provoking books on the issue of America's critical mineral import dependence and its path to mineral independence.

Mr. Chairman, the U.S. Geological Survey, or "the Survey" as we USGS veterans affectionately call it—is one of the oldest and most storied of our federal agencies. The success of the four great geological surveys of the American West during the 1870s provided the impetus for President Rutherford Hayes to sign—on March 3, 1879—the Congressional bill appropriating money for the formation of the U.S. Geological Survey within the Department of the Interior. President Hayes' signature approved the *Organic Act* of the USGS—a unique combination of mission responsibilities elegantly described in only 19 words—which are: ***"classification of the public lands, and examination of the geological structure, mineral resources, and products of the national domain."***

These Organic Act functions were critical in 1879 because the federal government held title to more than 1.2 billion acres of land, nearly all of it west of the Mississippi River, of which only 200 million acres or approximately 17 percent had been surveyed. After decades of adding more states and more federal lands, approximately four fifths or 80 percent of our country still does not have geologic map coverage at a scale that is needed for detailed exploration of minerals and other resources. Therefore, we can appreciate more fully the absolute importance of the USGS Organic Act today, and the need to focus our attention on the hard work of geologic mapping, discovery of energy and mineral resources, and inventorying other products of our national domain.

During its 150-year history, the USGS has collected millions of observations through geologic mapping, aerial photography, satellite imagery, geophysical measurements, and other data collection platforms. From these datasets the USGS has made thousands of maps for topography, geology, surface water, groundwater, mineral resource areas, mining districts and their ore deposits, natural hazards, ecosystems, land use categories, and for many other purposes and customers.

Mr. Chairman, the USGS mission appears to be even more important today than it was in 1879, particularly given the recent explosion of demand for energy resources, critical minerals, rare earth elements, and technology metals—not to mention America's very risky critical mineral import overreliance—much of it from adversarial nations. Little wonder that America's national security and economic stability will remain highly dependent on the original mission of the Geological Survey.

As Secretary Burgum likes to say: "Map Baby Map!" and he is absolutely correct because all-important geologic mapping must always precede the long road of exploration, discovery, and startup production of energy and minerals. Therefore, the Survey needs to dramatically reinforce its institutional strength of mapping across geology and the other core missions too.

Mr. Chairman and Ranking Member, leading one of our Nation's preeminent scientific agencies has never been—and will never be an easy task. But my love and support for it, and the strong support of my USGS colleagues, fellow scientists, and others will be extremely helpful—should I be confirmed. Furthermore, I pledge to this committee, to Secretary Burgum, and especially to President Trump—who graciously nominated me to this post—to uphold key USGS mission areas, and to increase the focus on classifying our lands,

mapping their geological structure, their energy and mineral wealth, and other endowments within our national domain.

In conclusion, the business of today's U.S. Geological Survey is urgent because our energy and mineral security is our national security—meaning America will need to rely on the USGS mission like never before! Mr. Chairman, with that I look forward to your committee's questions.