Statement of Matthew C. Larsen
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Before the
House Natural Resources Committee
Subcommittee on Water and Power
On
Implementation of the American Recovery and Reinvestment Act of 2009 (PL 111-05)
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Madam Chairwoman and members of the Subcommittee, I appreciate the opportunity to provide the Department of the Interior's views regarding USGS efforts to implement the American Recovery and Reinvestment Act of 2009 (PL 111-05).

USGS Role in Economic Stimulus Program

The American Recovery and Reinvestment (ARRA) Act of 2009 (P.L. 111-5) provided $140 million to the U.S. Geological Survey that will fund 308 projects across all 50 states, Guam, and Puerto Rico. We welcome this opportunity not only to create and support jobs, but also to support the scientific research that underpins the Department's decisions on behalf of the American people as the stewards of the Nation's natural resources.

The funding received through ARRA will allow the USGS to address an inventory of deferred maintenance projects at USGS facilities; abandoned groundwater wells that have not been remediated; streamgages and cableways that have been discontinued and should be removed; upgrades to monitoring capabilities for earthquakes and volcanoes; streamgage modernization; and collection of much-needed elevation data, especially in coastal areas. A number of criteria were considered in order for a project to be deemed suitable for funding through ARRA. Among these criteria were (1) expediency of implementation; (2) addresses high priority mission needs; (3) job creation potential, and (4) long-term value.

Funding received under the Recovery Act will not significantly affect USGS's FY 2010 budget request. Recovery Act appropriations will be applied to projects meeting the criteria of the Act, as outlined above. The FY 2010 budget request will address needs of the entire USGS portfolio, most of which go beyond the criteria of the Recovery Act.

I will briefly summarize some of the planned projects and then will focus most of my statement on the two water-related project areas, which are of most interest to this Subcommittee.

Specific investments include:

- **Volcano Monitoring** - $15.2 million to modernize equipment in the National Volcano Early Warning System at all USGS volcano observatories. The U.S. and its territories include some of the most volcanically active regions in the world, with 169 active volcanoes. As many as 54 of these potentially dangerous volcanoes need improved monitoring.

- **Deferred Maintenance of Facilities** - $29.4 million for projects that address health and safety issues; meet functional needs such as improved laboratory space; make facilities more energy efficient; and incorporate sustainable design criteria in project implementation. There are 67 projects in 18 States and territories that will receive funding for deferred facilities maintenance, including Alaska, California, Guam, Louisiana, Maryland, Massachusetts, Michigan, Missouri, New York, Pennsylvania, South Dakota, Washington, Wisconsin, and West Virginia.
- **Earthquake Monitoring** - $29.4 million to enhance the Advanced National Seismic System (ANSS) by doubling the number of ANSS-quality stations and upgrading seismic networks nationwide, to bring the total from approximately 800 to 1600. These improved networks will deliver faster, more reliable and more accurate information – helping to save lives by providing better situational awareness in the wake of the damaging earthquakes that can strike this Nation at any time.
- **Construction** – A total of $17.8 million for research facilities at Patuxent Wildlife Refuge Research Center in Patuxent, MD; the Columbia Environmental Research Center (CERC) in Columbia, MO; and the Upper Midwest Environmental Services Center (UMESC) in LaCrosse, WI. Work at these centers will improve the ability of scientists to conduct innovative research on contaminants and wildlife, endangered species, wind power and wildlife, adaptive management, wildlife disease and much more. The rehabilitation of these facilities will support jobs for the local community, improve functionality, and reduce long-term operating costs.
- **Imagery and Elevation Maps** - $14.6 million to improve mapping data, which will be made publicly available for multiple uses including flood mapping, emergency operations, and natural resource management.
- **Data Preservation** - $0.5 million for the USGS Bird Banding Laboratory (BBL) to digitize, and make available to the public via the Internet, the historical banding recovery and bird banding records. Bird banding data have a wide variety of uses including applications for disease research.

Water Investments

Of the total ARRA investment for the USGS water program, $14.6 million will be distributed to deferred maintenance projects and $14.6 million to upgrade the national streamgage network; these funds will be expended in all 50 States.

Deferred Maintenance – Streamgages, Cableways, and Wells: The USGS operates streamgages and groundwater wells with state and local funding partners; when partners no longer co-fund the streamgages and wells, sites are usually closed and removed or remediated. Discontinued streamgages, cableways, and wells may pose public health and safety issues until they are removed or remediated. The $14.6 million will be spent on equipment and services that will remove or remediate structures that are no longer in use, thereby restoring the site and making it safe for public enjoyment. Approximately 1,200 discontinued monitoring sites nationwide will be remediated. Once this work is completed, there will be no future operating costs associated with these sites. This work will reduce the USGS liability for discontinued monitoring sites by at least $15.0 million.

Upgrades to Streamgages: The USGS national streamgage network (7,500 sites) provides critical information used to estimate flood dangers, protect fragile ecosystems, construct safe

bridges and roadways, and monitor the effects of climate change on water availability. This network depends on the NOAA-operated Geostationary Operational Environmental Satellites (GOES) for transmission of real-time streamflow data. In order for the USGS to make streamflow information available and continue to use the NOAA satellite, the USGS must convert its streamgages to the new high-data rate radio (HDR) technology by the end of 2013. Approximately 4,500 streamgages across the Nation have already been upgraded to HDR technology using annual appropriations; funding through ARRA combined with annual appropriations should enable the USGS to complete the conversion well before the 2013 deadline.

With the $14.6 million in ARRA funding, the USGS will acquire equipment to upgrade streamgages in each State to HDR technology. In addition to HDR upgrades to approximately 2,000 streamgages, the USGS will use these funds to upgrade streamgages with new streamflow measuring technologies, including hydroacoustic flow measuring devices, side-looking hydroacoustic sensors, and non-contact radar units, which are safer than older units and reduce operation and maintenance costs. The new stream measurement equipment will allow the USGS to monitor streamflow more efficiently and provide higher quality data. In keeping with the Administration's focus on renewable energy, solar-powered technologies will be utilized to the greatest extent possible.

It is anticipated that private vendors and manufacturers of equipment will need to increase production to meet this increased demand. Installation of the new streamgage equipment, which will generally take less than 1 hour at each site, will be completed during regular periodic servicing visits by USGS hydrologic technicians.

Oversight and Implementation

In order to meet the President's call for transparency and accountability for money spent as part of the ARRA, and to fulfill citizens' desire to track where their taxpayer dollars are going and how they are being spent, the USGS has established a Recovery Act Oversight Board to ensure that the Bureau's projects are executed according to the requirements of the Act. This means that plans are meeting objectives, spending rates are aligned, and work is on schedule.

The USGS provides weekly and monthly reports to the Department and the Office of Management and Budget that will track our progress. This information is also available on the USGS recovery Web site (www.usgs.gov/recovery), on the Department of the Interior's Web site (www.doi.gov/recovery), and at Recovery.gov.

The USGS is implementing DOI and OMB guidelines to develop the administrative process by which funds will be released for the projects funded under the American Recovery and Reinvestment Act. The USGS has prepared an acquisition implementation plan and an acquisition review plan that were reviewed by the Department during the week of April 20. The USGS expects to have $56 million obligated, with $35 million in projected gross outlays by 9/30/2009. The USGS expects to obligate an additional $84 million by 9/30/2010, which would obligate the full $140 million that was appropriated under ARRA. Of this amount, the USGS projects gross outlays of $116 million by 9/30/2010, with the remaining $24 million in gross outlays projected by 9/30/2011.

Conclusion

The Recovery Act provides an unprecedented opportunity to address funding needs that could not be met within current appropriations. With this funding, the USGS will meet the 2013 deadline that requires the USGS to upgrade radio transmission on streamgages to be able to use a new NOAA satellite. Stations in the Advanced National Seismic System (ANSS) will be upgraded to meet approximately one-quarter of the goal set for full implementation of ANSS. The National Volcano Early Warning System will begin a robust upgrade to digital systems and implementation of newly developed instruments. Critical elevation data along U.S. coasts will be gathered and archived, and data preservation will be advanced by digitizing historic records. The USGS will address a large proportion of its inventory of facilities repair in order to provide functional and technical workspace needed to advance its program missions.

The USGS welcomes this opportunity to provide the science needed to meet the imperatives of the Nation's challenges and to support the President's goals of jumpstarting our economy, creating or saving jobs, and enabling the Nation to thrive in the 21st Century.

Thank you for the opportunity to testify, and I will be pleased to answer any questions the Subcommittee may have.