

July 1, 2013

To Whom It May Concern,

This letter shall serve as affirmation that the Iowa Flood Center at the University of Iowa meets the criteria necessary for the Innovation Credit for the AASHE STARS Assessment.

Floods are among the most common and most damaging of natural disasters. The Iowa Flood Center, the first center of its kind, was initiated during the floods that ravaged east-central Iowa in 2008. Today, the center conducts important research and outreach in order to better understand how protect lives and property as our global climate changes.

The Iowa Flood Center serves as the host for NASA's Iowa Flood Studies or IFloodS – a NASA Global Precipitation Measurement (GPM) Mission to provide better understanding of the strengths and limitations of satellite products, in the context of hydrologic applications. The center also manages the Iowa Flood Information System (IFIS), a one-stop web-platform to access community-based flood conditions, forecasts, visualizations, inundation maps and flood-related data, information, and applications.

In partnership with the Iowa Department of Natural Resources, the Iowa Flood Center is also preparing new floodplain maps for the 85 Iowa counties that were declared Presidential Disaster Areas following the 2008 floods. The Iowa Flood Center's role includes creating the maps for each county that include all streams in Iowa draining one square mile or more. IFC researchers are utilizing statewide light detection and ranging (LiDAR) data recently collected by the DNR to accurately describe Iowa's river and stream networks, develop computer-based flood simulations, and delineate floodplains. All county maps will follow specific guidelines that adhere to standards established by the Federal Emergency Management Agency.

Because floods can often have long-term public health impacts, The Environmental Health Research Sciences Center, part of the University of Iowa's College of Public Health, partnered with the Iowa Flood Center to help select relevant public health information for the Iowa Flood Information System.

Iowa's severe flooding in 2008 demonstrated the need for more extensive monitoring of the state's rivers and streams in real time. To address this, the Iowa Flood Center developed and maintains a statewide network of stream stage sensors designed to measure stream height and transmit data automatically and frequently to the Iowa Flood Information System, where sensor locations and data can be viewed in real-time.

The Iowa Flood Center and IIHR—Hydroscience and Engineering were awarded funds from the U.S. Department of Housing and Urban Development to prepare watershed mitigation projects directed toward flood damage reduction in select Iowa watersheds. The specific goals of the project are to:

- Maximize soil water holding capacity from precipitation;
- Minimize severe soil erosion and sand deposition during floods;
- Manage water runoff in uplands under saturated soil moisture conditions; and
- Reduce and mitigate structural and nonstructural flood damage.

The projects will seek to restore and enhance Iowa's extensive drainage infrastructure to create more reliable flood protection.

Finally, the Iowa Flood Center provides annual activity reports to the Iowa Legislature and Governor's Office. These reports highlight the role of the Iowa Flood Center in providing resources to Iowa communities that enhance the preparedness and resiliency of Iowa towards future flood events. The reports include accomplishments of the past year, goals for the future, and updates on current Iowa Flood Center projects and programs.

More information about this innovative Center and its current projects can be found at <http://iowafloodcenter.org/>.

Sincerely,

A handwritten signature in black ink, appearing to read "Merry Rankin", with a stylized flourish extending to the right.

Merry Rankin
Director of Sustainability