## The Case for a Floodplain Enhancement Rating System: Has the time come for an ASFPM accreditation program? By: John MacDougall, Pamela Reber, Evan Stewart, & Paul St. Louis University of Washington - Seattle

## Abstract

A need exists for a new tool to encourage responsible use of the floodplain at the project level because as economic growth continues to negatively influence responsible floodplain management. The City of Dubuque, Iowa was able to achieve significant flood damage reduction within the Bee Branch watershed by using an innovative floodplain design approach. In 2017 the Upper Bee Branch Creek Restoration portion of the watershed project was recognized by the Iowa State Floodplain Managers Association as the project of the year. Within this case study, the Bee Branch watershed project is analyzed to make the case that the Association of State Floodplain Managers should develop a new rating system that inspires innovative floodplain design at the project level. To emphasize the need for a new rating system, the Bee Branch Watershed Project is qualitatively analyzed against four existing rating systems/federal programs that incorporate elements of floodplain design and management into their evaluation criteria. These programs are FEMA's Community Rating System (CRS); US Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system; American Society of Civil Engineers (ASCE) Envision rating system; and the Environmental Protection Agency (EPA) Best Management Practices (BMPs) for Stormwater. The recommended goal of developing a new rating system is to inspire and incentivize developers and builders to incorporate no adverse impact and flood resiliency into their designs and decision making processes, and to formally recognize those that do. The Association of State Floodplain Managers is recommended as the lead organization to develop the standard because of their commitment to no adverse impact and because of the Association's existing framework that consists of fourteen committees working towards reducing flood damage and enhancing floodplains.