



PLANNING GREEN STORMWATER INFRASTRUCTURE IN A CHANGING WORLD

PRESENTATION DESCRIPTIONS

Integrating Climate Change Impacts on GSI Design for Improved Resiliency

Donald D. Carpenter, PhD, PE, LEED AP

This talk will discuss how rainfall and lake level patterns have been and will continue to vary and the influence that variability will have on successful green stormwater infrastructure design. Subsequently, incorporating GSI to improve community resiliency will also be discussed.

Stormwater Rules and Implementation

Ryan C. McEnhill, PE - Vice President of Eng., Inc.

An overview of the proper implementation of the critical storm water design elements being required under the new development rules will be explained. Case studies of various private development designs submitted over the last three years under the new rules will be discussed.

Developing Operation and Maintenance Plans for Private Stormwater BMPs

Kelly Goward, Environmental Program Manager, MACC

The post-construction stormwater requirements of the MS4 permit require long-term operation and maintenance (O&M) of stormwater controls on private property. An O&M plan can help ensure that proper procedures and schedules are outlined and followed. The MACC, as part of a SAW grant, developed a guide to assist in the development of O&M plans for private stormwater controls. The guide is intended to be used by developers, contractors, consultants, and landowners, but can also be used by anyone who needs an O&M plan for their stormwater controls. The presentation will include an overview of the guide and how to use it to create an O&M plan for stormwater controls.

Green Stormwater Infrastructure Suitability Mapping

Mara Gericke, Assistant Planner, MACC

The Macatawa Area Coordinating Council received a grant from the Community Foundation of the Holland Zeeland Area in December 2016 to support the development of a green stormwater vision for the Macatawa Watershed. A key component of the vision was to determine suitability and priority for implementing green stormwater infrastructure in the watershed to ensure the greatest economic and environmental benefit. With the input of local stakeholders, MACC staff developed a suitability map based on various geospatial data including slope, soil hydrologic group, and drainage class. The suitability mapping was completed using multiple raster functions in ArcGIS. This presentation will focus primarily on the mapping procedures and results.

PRESENTATION DESCRIPTIONS

A Guide to Self-Assessing Community Sustainability

Zach Vega, Community Planner, LIAA

In this session, attendees will be introduced to LIAA's new Community Sustainability Self-Assessment Tool, which the organization now uses as a resource for a variety of planning projects. Participants will learn about the coastal sustainability best practices found in the tool and how this new resource can be employed by local leaders across the state to facilitate discussions around community resilience.

Resiliency Planning – A Panel Discussion

Paul Sachs, Director of Ottawa County Planning and Performance Improvement

Jenna Elswick, Senior Planner, City of Holland

Stacey Fedewa, AICP - Community Development Director, Grand Haven Charter Township

Jennifer Howland, Community Development Manager, City of Grand Haven

As the impacts of climate change are being more widely recognized and experienced first-hand, more and more communities are addressing their vulnerability to climate change by creating resiliency plans. Resiliency planning provides the framework for communities to better respond, and adapt to, the economic, social, and physical stresses they face when confronted with disruptive events. In Ottawa County, several communities have adopted resiliency plans which are integrated into their conventional master plans, which in turn, position them well to recover quickly from a sudden disaster, whether economic, weather, neighborhood or climate-related. The great body of water, called Lake Michigan, that serves as the western-most boundary of Ottawa County, also necessitate that more shoreline communities prepare themselves for the variability in water-levels and coastal dynamics of the Big Lake. This panel discussion will extract insights from planning experts of three local communities that have developed, and are implementing, resiliency strategies into their decision-making.