

# Coastal Resilience Solutions for Shoreline Municipalities

*Great Lakes and St. Lawrence Cities Initiative 2018 Annual Conference  
Charting a Course to Resilience*

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Shorelines are part of our identity and a source of local revenue



# Intense Storms are Threatening These Assets





## How Do We Make Beaches and Coastal Parks More Resilient?

- Engineered Structures
- Green Infrastructure
- Naturalization/Restoration
- Preservation
- Planning
- Education



# Engineered Structures





# Green Infrastructure

**Encouraged Dunes/Bioswales**



**Constructed Wetlands**



# Naturalization/Restoration

**Natural Shoreline Features (Soft Edge)**



**Native Vegetation**





# Preserving Natural Shoreline Features





# Incorporating Sustainable Practices into Future Planning

THE PUBLIC IS INVITED TO AN OPEN HOUSE TO ASSIST IN THE DEVELOPMENT OF

## RACINE'S NORTH BEACH PLAN

### WHEN

Monday, March 21<sup>st</sup>  
6:00pm to 8:30pm

### WHERE

Memorial Hall, Racine  
Sapphire East Hall  
72 Seventh Street, Racine, WI



### AGENDA

- Environmental Stewardship
- Public Programming
- Access and Parking
- Amenities

### FOR MORE INFORMATION

Contact Stephan Kurdas at 262-636-9571



PUBLIC HEALTH DEPARTMENT  
Serving the City of Racine and the  
Villages of Wind Point & Elmwood Park

PUBLIC HEALTH DEPARTMENT • PARKS, RECREATION AND CULTURAL SERVICES • CITY DEVELOPMENT • PUBLIC WORKS



# Education/Social Learning

## Onsite Public Education



### SAMUEL MYERS PARK WETLANDS

A wetland is defined as "an area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions (Wisconsin Statutes)."

Wetlands play an integral role in the ecology of the watershed. The combination of shallow water, high levels of nutrients and primary productivity is ideal for the development of organisms that form the base of the food web and feed many species of fish, amphibians, shellfish and insects. Many dozens of species of birds and mammals rely on wetlands for food, water and shelter, especially during migration and breeding.

**Primary Wetland Functions:**

- Filter water
- Store stormwater
- Recharge water supplies
- Critical habitat
- Recreational opportunities
- Provide places of beauty
- Research and education opportunities






Visit [www.rootpikewin.org](http://www.rootpikewin.org) for more information on wetland restorations in the Pike River watershed.

## Reaching Out to Future Generations





# Return on Investment

## Direct & Indirect Economic Benefits



## Avoided Damages



\$5 million direct economic impact to Racine based on attendance, hosted events, and hotel stays – North Beach



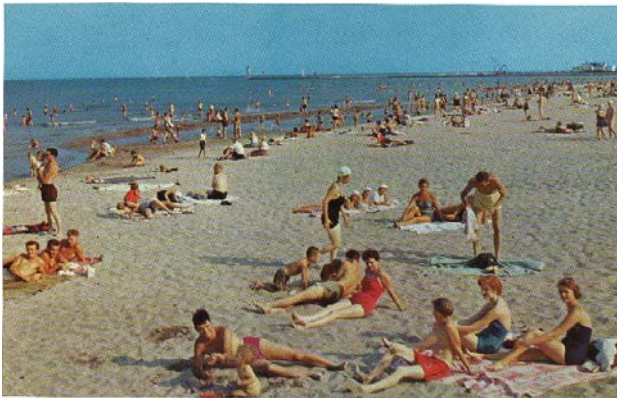
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*Thank you!*

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