



Department of Civil and Environmental Engineering UNIVERSITY OF WISCONSIN-MADISON Kiwanis Park March 2021

East River Collaborative A community driven approach to resilience planning Project updates and next steps

Kayla Wandsnider East River Resilience Coordinator The Nature Conservancy

### Stakeholder Interviews

#### 29 individuals

(municipal and county officials and staff, university, state agency and NGO)

- Change in land cover/land use: wetlands, agricultural runoff, increased development
- Flood impacts are not limited to downstream communities
- Policies allow development in floodplain
- Undersized, aging infrastructure
- Cost of infrastructure
- Data needed: downstream development impacts, tributaries
- Desire for community coordination

## Community Flood Resilience Assessments

East River Watershed Flood Hazards									
Riverine floodplain flooding	Stream- bank erosion	lce jams	Ponding	Drainage ditch backups	Flash flooding	Coastal flooding	Storm Sewer	Rising ground water	

High Moderate	Low- Moderate	Low	NA
---------------	------------------	-----	----

## Allouez Flood Hazards

Riverine/flood- plain flooding	Streambank erosion	Coastal flooding	Ponding	lce jams	Drainage ditch backups	Flash flooding



# Community Impacts

#### **Impact on Socio-Economics**

		_		
Buildings and their contents	Disruptions to individuals' livelihood and prosperity	Displacement, resettlement, and relocation	Loss of trust in local governments officials and staff	Business interruption

Impact on	Public Health	Impact on Community Assets			
Direct injury or loss of Interrupted access to life healthcare		Contamination of waterways	Parks and recreational trails		

#### Impact on Critical Infrastructure, Facilities, & Services

Power utilities	Wastewater treatment systems	Roadways and evacuation routes	Emergency flood response	Stormwater facilities and infrastructure	Transport systems (bus, rail, port, bicycle)	Schools and day care centers	Community centers and shelters	Medical facilities and services	Waste and recycling collection services

High	Moderate	Low-Moderate	Low	NA
------	----------	--------------	-----	----

## Allouez's Priorities

- Priority actions to address
  - Streambank stabilization and impacts to waterways
  - Raising of lift stations
  - Community flood preparedness
  - Flooding of the East River Trail

#### Other priorities

- Ponding in neighborhoods as a nuisance
- Incorporate green infrastructure into future planning efforts
- Map socially vulnerable populations

# Flood Modeling & Mapping

- Baseline flood model of East River (includes lake levels)
- Flood scenarios of precipitation and lake level changes (Low, medium, and high risk)
  - Online data hub



# East River Collaborative

- 1. Cross-boundary collaboration
- 2. Building community capacity
- 3. Data-informed decision-making
- Inclusion of vulnerable and underrepresented residents
- 5. Encourage implementation of naturebased solutions

## Next Steps

- Cross-boundary communication and coordination
- Mapping and community level planning
- Partnership with US Army Corps of Engineers
- East River Water Trail
- Native plantings











WISCONSIN COASTAL



Thank you! Questions?

Kayla Wandsnider, East River Resilience Coordinator

kayla.wandsnider@tnc.org

414.339.4641

Website:

https://east-river-resilience-project-tnc.hub.arcgis.com/