









Data Checklist

Economics of Green Infrastructure

This matrix provides a list of data used to conduct two pilot projects in the Great Lakes assessing the costs and benefits of using green infrastructure to reduce flooding impacts. These data are the best available from national, state, and municipal data sources and models. They are suitable for watershed-scale studies. Work with your local GIS analyst to discuss the data available for your assessment.

Learn more about each assessment step in the "Guide for Assessing Green Infrastructure Costs and Benefits for Flood Reduction."
www.coast.noaa.gov/pubs/gi-cost-benefit.pdf

ASSESSMENT STEPS

 STEP 1: Define the Flooding Problem	 STEP 2: Assess Flooding Scenarios without Green Infrastructure	 STEP 3: Identify How a Flood Reduction Target Can Be Met with Green Infrastructure	 STEP 4: Assess Flooding Scenarios with Green Infrastructure	 STEP 5: Estimate Benefits and Costs	 STEP 6: Identify and Communicate the Desired Green Infrastructure Strategy
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Land Data

Land Use, Current	✓	✓	✓	✓	✱
Land Use, Future		✓	✓	✓	✱
Land Cover, Current	✱	✓	✓	✓	✱
Land Cover, Historical	✱		✱		✱
Digital Elevation Models (DEMs)	✱	✓	✱	✓	

Weather and Climate Data

Precipitation, Current	✱	✓		✓	✱
Climate, Current	✱	✓	✱	✓	✱
Precipitation, Future		✓		✓	✱
Climate, Future		✓	✱	✓	✱

Hydrology Data

Historic Flood Locations	✓		✱		✱
Watershed Delineations	✓	✓	✱	✓	
Streams	✓	✓	✱	✓	✱
Stream Points		✓	✱	✓	
FEMA Regulatory Maps	✱	✓	✱	✓	✱
FEMA Digital Flood Insurance Maps (DFIRM)	✱	✓	✱	✓	✱
FEMA Flood Insurance Studies (FIS)	✱	✓	✱	✓	
USGS Regression Equations		✓	✱	✓	
Basin Storage %		✓	✱	✓	
Basin Development Factor		✓		✓	
Main Channel Slope		✓	✱	✓	
Rural Peak Discharge		✓		✓	
Inundation Grids		✓	✱	✓	✱
Flow Direction Grids	✱	✓	✱	✓	✱
Flow Accumulation Grids	✱	✓	✱	✓	✱

Social and Economic Data

Social Vulnerability Index	✱	✱	✱		✱
Bureau of Labor Statistics Employment	✱	✱			✱

Infrastructure Data

Land Parcel / Assessor Database		✓	✱	✓	✱
Stormwater Utilities	✱	✱	✱	✱	✱
Building Structure	✱	✱	✱	✱	✱
Green Infrastructure Sites, Current	✱	✱	✓	✱	✓
Green Infrastructure Sites, Future		✱		✱	✱
Impervious Surface %	✱	✓	✱	✓	✱

✓ Required: Data that get you through the process

✱ Optional: Data that help to improve the process