



# Put Green Infrastructure between Your Community and the Next Coastal Storm.

## There are many benefits.

### Tidal and Forested Wetlands

- Slow waves
- Filter and clean floodwaters
- Provide food and jobs

### Green Streets

- Capture and clean stormwater
- Beautify streets and encourage economic development
- Provide pedestrian-friendly walkways

### Oyster and Coral Reefs

- Slow storm surge
- Provide food
- Clean water

### Sand Dunes

- Buffer waves as a first line of defense
- Build economy through tourism

### Open Space and Parks

- Store floodwaters and recharge aquifers
- Increase property values

### Urban Trees

- Reduce runoff and absorb floodwaters
- Shade and cool homes and businesses
- Provide clean air and water

### Living Shorelines

- Slow waves and reduce erosion
- Protect property



# Here's What You Can Do to Protect Your Community.

Green infrastructure can have multiple functions and cost less than using only gray infrastructure.



## Conserve Existing Natural Areas

Natural areas such as wetlands, dunes, and vegetated shorelines absorb storm surge waves, reducing damage to nearby homes and roads.

**How do we know it works?** A study after Hurricane Sandy showed that areas containing wetlands had less damage than those without. Wetlands prevented an estimated \$600 million in property losses.



## Increase Your Community's Ability to Absorb Stormwater

- Protect and plant trees.
- Implement other practices such as green streets to keep stormwater from running into sewers, lessening the strain on existing systems.
- Use capital improvement projects as an opportunity to fund stormwater projects.

**How do we know it works?** The City of Portland, Oregon, used a combination of green roofs, green streets, trees, and rain gardens to reduce the peak flow of stormwater runoff by 93 percent, cooling costs by 27 percent, and heating costs by 15 percent.



Photo: Tracy Skrabal, North Carolina Coastal Federation

## Create Natural Shorelines

Create living shorelines using oysters, marsh grass, and other natural materials to absorb wave energy and reduce erosion.

**How do we know it works?** North Carolina properties that used natural shoreline protection measures withstood wind and storm surge during Hurricane Irene better than properties using seawalls or bulkheads.

To learn more, visit [coast.noaa.gov/digitalcoast/topics/green-infrastructure](http://coast.noaa.gov/digitalcoast/topics/green-infrastructure).

