Waterfront Edge Design Guidelines: How to Promote Resilience, Ecology, and Access at the Water's Edge

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HOW TO PROMOTE RESILIENCE, ECOLOGY, AND ACCESS AT THE WATER’S EDGE

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We are a blue movement
Our Priorities for NYC Harbor

Strong

Working

Healthy

Open

Managed
Our programs
But there is also...
And this...
And this...
And this…

Study: Sea level rise has already cost Virginians $280 million in home values since 2005
Addressing sea level rise and storms—no single solution or scale

Local

Building

Regional

Site
WEDG is... a rating system and guidelines
for better engagement
and improved practice

CALCULATING DESIGN FLOOD ELEVATION

<table>
<thead>
<tr>
<th>BASE FLOOD ELEVATION</th>
<th>+</th>
<th>FREEBOARD</th>
<th>+</th>
<th>SEA LEVEL RISE ADJUSTMENT</th>
<th>=</th>
<th>DESIGN FLOOD ELEVATION</th>
</tr>
</thead>
</table>
| Use the FEMA 100-year floodplain base flood elevation. Or, if seeking a elevation above the 500-year floodplain, use the methods in Appendix A to identify the 500-year floodplain baseline elevation. | 12” (30.5cm); 24” (61cm) for critical structures | Determine the regionally-adjusted sea level rise expected for the design life of the project using methods in Appendix A. Use at least the moderate sea level rise scenario or higher.

Case A

Case B
Most importantly...a communication tool
Professionals
Owners, developers
Government/regulatory
Communities

Resilient, accessible, and ecologically-sound: Bronx Community Board 9 Waterfront Action Plan

Newtown Creek VISION Plan

Newtown Creek is a 3.8 mile waterway border between Brooklyn and Queens, and a federally designated Superfund site with a long history of industrial pollution and environmental neglect. Each year, billions of gallons of raw sewage flow into the creek. The creek is identified as a Significant Maritime and Industrial Area and lies in close proximity to numerous neighborhoods.

Newtown Creek is an EPA Superfund site and will have a Long Term Control Plan (LTCP).

What is a Superfund and what is an LTCP? Under the ongoing EPA Superfund program and NYC's LTCP there are resources made available to remediate both legacy toxins and ongoing sewage pollution that pose risks to human health and ecological systems of the Creek.
Components
Category 0: Site Assessment & Planning
Category 1: Responsible Siting & Coastal Risk Reduction

Case A

Case B
Category 2: Community Access & Connections
Category 3: Edge Resilience
Category 4: Natural Resources
Category 5: Innovation
WEDG Certified: examples
Domino Sugar

- Building footprints outside of the floodplain
- Gathering and play spaces
- Corridors reconnecting upland areas to the water
- Artifact Walk integrates historical context
- Renovated and elevated relieving platform supporting public access area
- Native and resilient vegetation including 169 new street trees
Sandy Hook Pilots Association

- Elevated emergency & electrical systems
- Raised the building out of the floodplain
- Storm-resilient materials (e.g. zinc-titanium exterior)
- Reconstructed resilient edge with corrosion protection
- Maximized views to the waterfront, historical displays, and educational partners
- Supplies 100+ working waterfront careers
Greenpoint Landing

- Waterfront park; public programming
- Native salt-tolerant vegetation
- Comprehensive flood protection strategy
- Enhanced visual access to the water
And just two weeks ago…McInnis Cement/Oak Point!
To date...

- Eight certifications
- Three awards
- 3,000+ downloads
Expansion
Local partnerships: WEDG Neighborhoods
Regional partnerships
National partnerships

American Planning Association
Making Great Communities Happen
Professional education and commitments of practice
Thanks!