Working Waterfront

Adaptive multi-layer flood protection on brownfield opportunity areas, Brooklyn

Newtown Creek, Brooklyn, used to be one of the vital industrial centres of New York City. Oil distilleries, shipyards, foundries, industrial food processors, fabric and paper mills settled along the river's edge. A lot of these factories are now abandoned and leaving behind one of the nation's most polluted canal which is suffering from raw sewage and oil spills. During Sandy the low-lying neighborhoods adjacent to Newtown Creek were very vulnerable towards the storm surge and its ecological consequences.

The master's project addresses how to re-activate the working waterfront at Newtown Creek and simultaneously create an accessible, adaptive and resilient riverfront which is capable of restoring the ecology of the river and resilient against natural hazards and sea level rise. Within the project the Dutch multi-layer safety approach of prevention, spatial planning and evacuation is tested.

Analysis Newtown Creek/Brooklyn in the aftermath of Sandy

Vulnerable infrastructure of regional importance in the flood risk zone

Multi-layer flood protection strategy on urban scale

Water accessibility at street ends

Waterfront park with integrated flood protection

Newport Creek, Brooklyn, used to be one of the vital industrial centres of New York City. Oil distilleries, shipyards, foundries, industrial food processors, fabric and paper mills settled along the river's edge. A lot of these factories are now abandoned and leaving behind one of the nation's most polluted canal which is suffering from raw sewage and oil spills. During Sandy the low-lying neighborhoods adjacent to Newport Creek were very vulnerable towards the storm surge and its ecological consequences.

The master's project addresses how to re-activate the working waterfront at Newport Creek and simultaneously create an accessible, adaptive and resilient riverfront which is capable of restoring the ecology of the river and resilient against natural hazards and sea level rise. Within the project the Dutch multi-layer safety approach of prevention, spatial planning and evacuation is tested.

Analysis Newport Creek/ Brooklyn in the aftermath of Sandy

Vulnerable infrastructure of regional importance in the flood risk zone

Multi-layer flood protection strategy on urban scale

Water accessibility at street ends

Waterfront park with integrated flood protection