River IJ Hydrology Centre Amsterdam, Netherlands Martha Woolfrey Carleton University

Water is both divisive and connective, an embodied living line cut through the land and a bridge between shores. The tides mark hours, river levels reflect seasons, and rising seas record the passing of centuries. Water shapes the identity of place in the same way it can erode it. The water line advances, the shoreline retreats. Where is the site now?

Water sustains life on Earth. The Anthropocene has identified freshwater as an infinite resource, yet climate change had challenged this belief. The River IJ Hydrology Centre traces the cycle of water in urban and ecosystems, forming a sustainable building at the intersection of humans and nature. It dilutes these boundaries to suggest a holistic approach to environmental regeneration and neighborhood vitality. The Centre supports urban food security through permaculture, gray water recovery and year-round hydroponics. Constructed wetlands and pollinator green roofs nurture local biodiversity while managing stormwater. Community wellbeing is promoted via a botanical filtration swimming pool and spa. The citizen scientist lab encourages education on health of the River IJ aquatic ecosystem.

How will architecture achieve buoyancy in a shifting hydrosphere?



Biodiversity Section (not to scale)

