



**ECOLOGY** The Danish Meteorological Institute anticipates that Copenhagen's future climate will include more infrequent - but more intense - rainfall. This combination of predicted effects requires infrastructural solutions that are capable of retaining water for longer and, crucially, absorbing more at once. The RGB Spectrum not only retains 100,550 cubic meters of water, but the retention and filtration of water on-site ensures that water is reused and leaves the site cleaner than when it arrived.

The high salinity pools of the RGB Spectrum are contained within concrete basins to prevent very briny water from discharging into the bay. The gradient of fresh to briny water across pools supports a wide range of microorganisms that thrive at different salinities. These include *synechococcus*, *halobacteria*, and *dunaliella*. The pigments inherent in these organisms - chlorophyll, rhodopsin,

and phycobiliproteins, among others - lend them their shimmering hues, from pale green to bright chartreuse, deep magenta to cyan blue.

These rich and varied microbiota support a diverse ecosystem of shorebirds, waterfowl, insects, and other wildlife that feed on the algae and organisms living in the salt ponds. Additionally, these microorganisms filter water, thereby regulating water quality and producing a distilled, briny solution that enhances the osmotic process.

**FUTURE** The urbanization of water - at once spatial and social - is a critical part of Copenhagen's civic narrative, and, increasingly, the future narrative of all inhabited coasts. RGB Spectrum reconsiders the meeting of the city and the sea and posits a new language of productive design for the present.



**A** View of two brackish water pools and salt tolerant grasses | **B** Looking West down the pier steps towards Den Lille Havfrue (The Little Mermaid)



**C** Looking East at a large pool circumscribed by a brackish water channel | **D** View of a small briney pool with riprap and grasses