

Wetland Mitigation at FDR Park

Philadelphia, Pennsylvania



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33-acre mitigation project creates rare, forested, tidal wetlands at Philadelphia's doorstep, while enhancing climate resilience for historic, low-lying FDR park.

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The historic, 350-acre FDR Park is located at the confluence of the Schuylkill and Delaware Rivers, near Philadelphia International Airport. It is also very close to sea level, and thus vulnerable to the impacts of a changing climate. Working with the Philadelphia Department of Parks and Recreation, the Philadelphia International Airport (PHL), and PIDC (Philadelphia's public-private economic development corporation), Biohabitats is transforming a neglected, 33-acre portion of the park into an ecologically functioning mosaic of tidal wetlands. The project mitigates impacts to low-quality wetlands caused by an airport expansion, while advancing the park's master plan to create a resilient, state-of-the-art recreation complex.

Biohabitats conducted supplemental field studies of site resources to build upon feasibility studies conducted by PHL and to support concept development. Having met with stakeholders to gain feedback, Biohabitats prepared final designs, led local permitting efforts, and supported PHL with NEPA, State, and federal permitting requirements. The design factors in anticipated sea level rise and creates a 20+ acre mosaic of forested tidal wetland, a rarity in such an ultra-urban environment. Two-dimensional modeling optimized site grading to ensure that eventual sea level rise would not convert the wetland habitats to open water likely to draw waterfowl, a hazard to airport operations. The design stages excavated soil for later use in elevating park amenities such as athletic fields.