

# South Meadow Lake Restoration Design-Build

Philadelphia, Pennsylvania



As part of an on-going effort to ecologically restore degraded landscapes within Philadelphia's Fairmount Park system, the Natural Lands Restoration and Environmental Education Program (NLREEP) targeted South Meadow Lake. Over the past 50 years, the freshwater lake had been reshaped, and

filled and armored to facilitate its conversion to a swimming pool. The lake bottom had been lined with concrete to provide a hard bottom surface. What was once a fully functioning, six-acre lacustrine ecosystem had been systematically converted to a neighborhood swimming pool.

*This ecological restoration design-build project was implemented for a fraction of the anticipated budget and completed in half the time it was projected to take. As part of this project, Biohabitats used the recycled concrete from the swimming pool to raise three recreational baseball fields with an improved drainage layer with no additional fee. This was possible because the cost of trucking the material to a landfill was more than the cost of rehabilitating the three poorly draining ballfields.*

Recognizing the ecological and historical significance of South Meadow Lake, NLREEP selected Biohabitats in a design-build capacity to restore South Meadow Lake to a fully functioning lacustrine ecosystem. Biohabitats' restoration approach began with an assessment of the historical condition of the lake prior to modifications and an examination of current ecological, hydrological and morphological conditions. From there, the Biohabitats team developed concept drawings and a final design and construction package suitable for permitting.

The restoration involved removing the concrete bottom, re-contouring the lake bottom and shoreline, and restoring the lake littoral zone by amending soils and revegetating with native freshwater marsh species. A pedestrian trail and interpretive signs were designed and installed, providing the neighborhood with new opportunities for recreation and education.

## SERVICES

Inventory & Assessments  
Permitting Construction  
Procurement  
Construction Management  
Design-Build

conservation planning  
ecological restoration  
regenerative design



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