

## Tidal Wetland Restoration and Native Plant Establishment

John Heinz National Wildlife Refuge at Tinicum  
8601 Lindbergh Boulevard  
Philadelphia, PA 19153

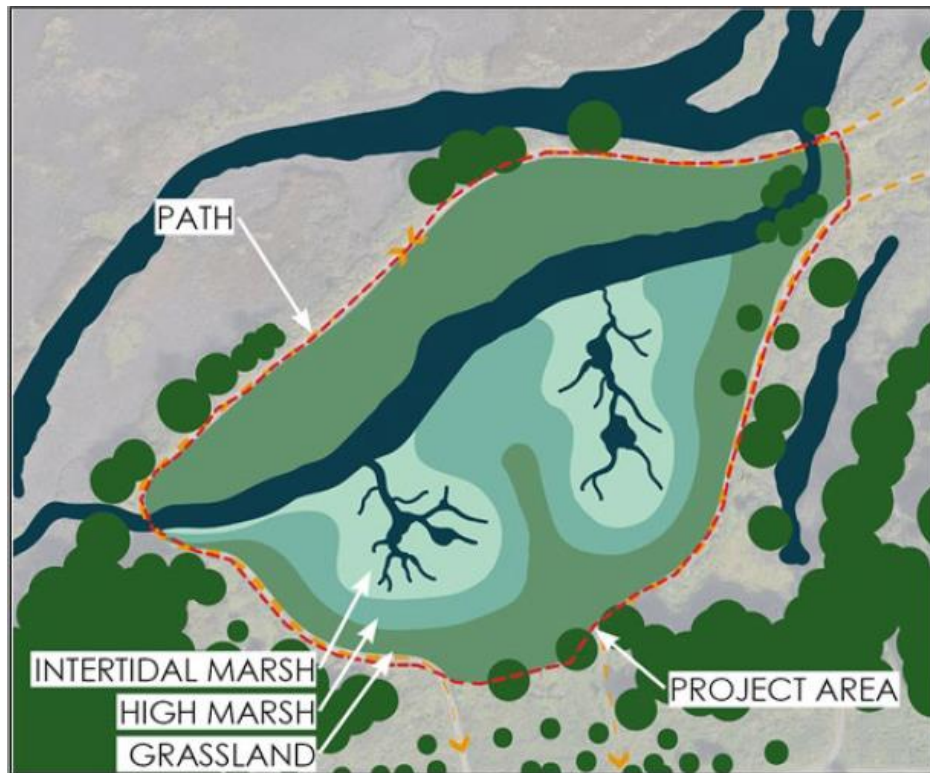
The objective is the creation of a high value tidal wetland at the John Heinz National Wildlife Refuge, Philadelphia, Pennsylvania using NRDAR settlement funds from the Sunoco Oil Spill that occurred on the refuge. Currently, the site for restoration is uplands and ponds with steep edges. The habitat is poor and dominated by invasive plants. It also contains wet silty fill that must be removed to improve tidal flow on the Refuge.



In October 2021, work began on the site with the removal of the invasive vegetation and preparation for construction work.

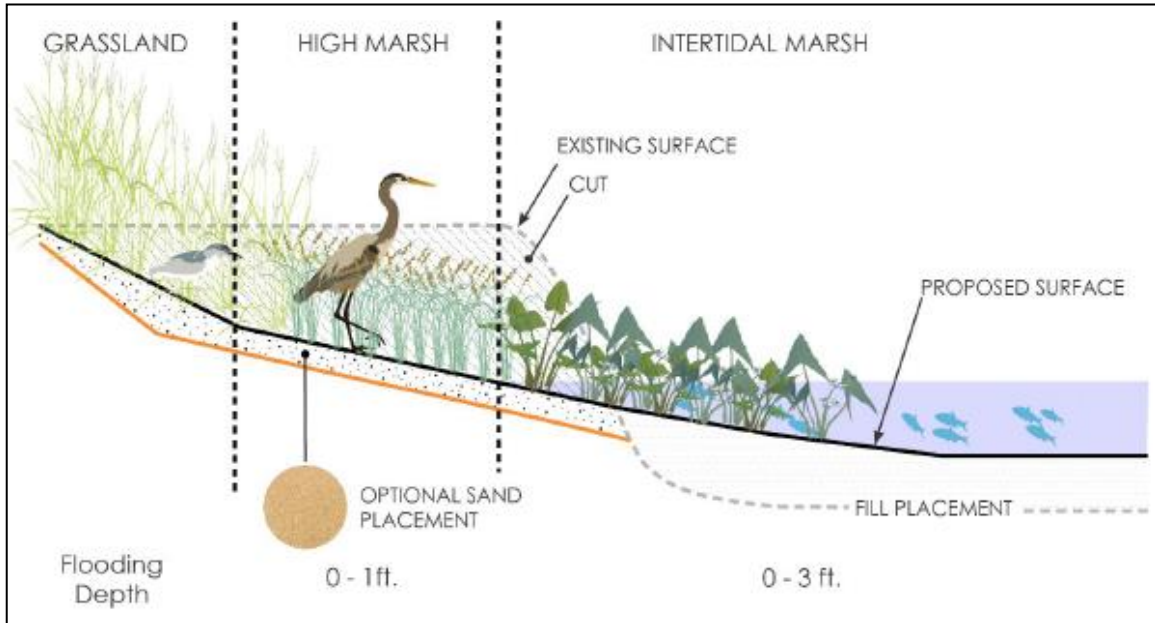


The conceptual design shows the planned wetland that will be achieved by grading the steep edges into gradual slopes and removing the silt to improve flow. Construction of this design is planned for Spring 2022.



Princeton Hydro Conceptual Design

Once the construction is complete, native plants beneficial to wildlife will be established in the grassland-wet meadow, high marsh, and intertidal marsh zones. The perimeter of the grassland-wet meadow will be planted with a variety of native shrubs and pollinator plants.



Princeton Hydro Design in Cross Section

The resulting wetland complex at the John Heinz National Wildlife Refuge, Philadelphia, Pennsylvania will provide excellent habitat for everything from fish and turtles to songbirds and butterflies.