

Creating a Resilient and Sustainable Valley Creek Corridor

PORT WASHINGTON, WI



Extensive stream bank erosion is regrading habitat availability and water quality.

THE OPPORTUNITY

Extreme rainfall events and flooding have increased during the last few decades as a result of climate change, and these trends are expected to continue. This increase, in combination with land cover changes within the City of Port Washington's Valley Creek watershed, have led to increased erosion, stream channel downcutting, declining water quality, impacts to critical infrastructure such as water and sewer lines, human health, and the natural environment. There is an immediate need to plan for a more resilient and sustainable built and natural environment - to accommodate future conditions, improve water quality, enhance aquatic and riparian habitats, reduce future costs and risk from failure of undersized/ obsolete infrastructure, improve public access and use of the creek, and build engagement with residents with a shared appreciation for their community and surrounding watersheds.





PROJECT OUTCOMES

- Restoration of 1.9 miles (10,000 linear feet) of instream and riparian habitat.
- Decreased bank erosion, reduced sediment loading, and improved water quality in outflows to Lake Michigan.
- Restoration of natural bedform and fish and aquatic habitat structure within a Lake Michigan tributary to support resident fishes and natural reproduction for Great Lakes fishes.
- Protection and enhancement of critical migratory bird stopover and pollinator habitat.
- Increased ecosystem adaptability to climate change through restoring XX acres to resilient and sustainable urban habitat corridors with increased biodiversity to support resident and migratory pollinators, birds and fish species.

OUR GOAL

This project offers the unique opportunity to implement water quality and habitat improvement projects along the entire reach of Valley Creek, which is owned by the City. The goal of this collaborative project is to demonstrate how a watershed approach can lead to large-scale improvements that create resilient and sustainable natural and built communities. Resiliency strategies, which incorporate permaculture and regenerative agriculture concepts, will be used to design and implement a watershed-wide project that reduces flooding, restores streambanks and riparian wetlands, reduces sedimentation, increases biodiversity, improves water quality, and restores aquatic and riparian habitat in a coastal Lake Michigan community.



ESTIMATED PROJECT COSTS

- \$1.5 million for stream restoration and associated stormwater design and planning
- \$5-6 million for construction
- \$1 million for ecological restoration of riparian habitat corridors

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