

Site 4: Carpenters Woods

Site Information

This tributary is located approximately 2.3 miles above the confluence of Wissahickon Creek with the Schuylkill River, and to the northeast of the creek's mainstem.



Problems, Opportunities & Constraints

The conditions at the Carpenters Woods project site are a result of problems with water/flow variability, siltation, and habitat alteration. Opportunities for improvement of site conditions include restoring natural stream channel characteristics and function, reducing sediment and nutrient input, enhancing riparian wetland habitat, and attenuating and treating stormwater runoff. Additional opportunities may exist along Carpenters Woods where emergency repairs were made by PWD in March and April 2009 to protect outfalls. These repairs may be able to be retrofitted to further enhance and create the natural stream channel characteristics and function and wetland habitat.

Major Problems	Opportunities	Constraints
Water/Flow variability Siltation Habitat alteration	Restore natural stream channel characteristics and function Enhance riparian wetland habitat Attenuate and treat stormwater runoff	Community concerns regarding potential disturbance

Alternatives

Alternative	Overview
1: No action	Severe erosion, siltation and habitat alteration will continue under without project conditions. High and variable discharges along with poor water quality (nutrients, oil, grease, and pathogens) will produce additional amounts of sediment and degrade aquatic habitat.
2: Stream restoration at higher invert & wetland construction	Alternative #2 includes raising the baseflow water level and channel invert through the project length by installing cobble weirs, as well as wetland construction, to increase water filtration, alleviate bank erosion, inhibit invasive species, and improve aquatic habitats.
3: Stabilization of eroding banks & wetland construction	Alternative #3 focuses on stabilizing eroding banks and installing natural channel techniques to improve aquatic habitat. It would improve the riparian habitat through wetland construction, invasive species treatment, and revegetation work.
4: Stream restoration at higher invert, wetland construction & riparian enhancement construction	Alternative #4 focuses on the upper reach where the channel is most degraded by raising the channel bed as described in Alternative #2. Wetland construction and invasives treatment would improve riparian conditions throughout the reach.

