

BMP Project Fact Sheet

In-Stream Stormwater Management

Princeton Hydro was contracted to complete a design-build restoration of an intermittent stream that was highly eroded due to urban development and the installation of stormwater piping of the headwaters of the watershed. The project included a stormwater outfall retrofit to capture sediment laden runoff and the stabilization of over 250 feet of ephemeral stream. The project satisfied several needs, including the stabilization of the stream corridor, and the satisfaction of stream mitigation requirements by a developer in an adjacent community.

Due to urbanization, the stream channel was incised by four feet and the banks, which were up to nine feet in height had become unstable, creating an additional sediment source during rain events. This project was immediately upstream of a major water supply reservoir and created an attractive nuisance.

The stormwater retrofit used a large concrete vault to capture primary coarse solids from the local road network and stormwater system. The flow leaving the vault entered a pre-formed scour hole, then three grade control structures lined with rounded river stone.

The stream restoration included the creation of a narrow riparian terrace to slow flows and provided additional flood storage, and step pools to allow settling of particulates and infiltration.

The project utilized several bank stabilization techniques, including bioengineering soil wraps with boulder toe protection, erosion control matting, and riprap stabilization with 12" diameter stone.



Did you know...

Unstable streambanks can be a significant source of sediment.

Contact Information

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