

Project Team Members

Owner:
Town of Putnam Valley,
Putnam Valley, NY

Engineer:
Todd Atkinson, P.E.
J Robert Folchetti Associates

Contractor:
Fabco Industries

Products Used:
StormSack and StormBasin

StormBasin and StormSack catch basin inserts specified for retrofit of an MS4 system within a Phosphorus Limited Lake Watershed



Lake Oscawana, Putnam Valley, NY



Typical MS4 catch basin draining to Lake Oscawana



Hilltop Beach Area of Lake Oscawana



Stormdrain retrofit with StormBasin in Hilltop Beach Area



StormBasin retrofit in Lake Oscawana Watershed

The Challenge:

Lake Oscawana in Putnam Valley, NY was listed as impaired for phosphorus by the New York State Department of Environmental Conservation (NYS DEC) in 2004 and subsequently a Total Maximum Daily Load (TMDL) was issued. The TMDL was a result of the diligent effort of many researchers and scientific professionals who collected and analyzed lake water quality monitoring data going back to circa 1987. The TMDL was finalized and documented in the 2008 Management Plan prepared by Princeton Hydro, LLC. Stormwater from developed land was identified as a major contributor to the external phosphorus load.

The Solution:

The Management Plan identified several strategies, which were then prioritized for implementation based on cost, impact on watershed and operation and maintenance requirements. One of the strategies selected for implementation was the retrofit of MS4 catch basins that discharge stormwater runoff to Lake Oscawana. As a result, the Town of Putnam Valley and Town Engineer (J Robert Folchetti Associates) competitively bid the retrofit of approximately 100 stormdrains in June of 2011 and awarded the bid to Fabco Industries. The project was completed following a 2-week installation period in mid-October.

Specifications targeted two levels of treatment based on location of the drain and physical limitations of the existing infrastructure. The insert devices were required to treat a frequently occurring runoff event and have adequate hydraulic capacity to safely pass a peak runoff event. Level one specified a geotextile sack device capable of removing gross particulates, oils and grease and phosphorus loads associated with organic debris and gross particulates. Level two specified a cartridge type filter capable of removing fine particulates, hydrocarbons and nutrients (dissolved and particulate bound phosphorus).

About Fabco Products:

The StormSack is specifically designed for the capture of gross pollutants: sediment, trash, and oil and grease. Ideally suited for municipal storm drain retrofits, the StormSack's unique design allows maintenance to be performed using conventional vacuum suction equipment.

The StormBasin is a filtration BMP that employs custom-built filtration cartridges to remove fine particulates, nutrients, hydrocarbons, heavy metals, organics and bacteria. The insert combines a gross pollutant trap with filtration technology for effective solid and dissolved pollutant capture.

Corporate Headquarters - 66 Central Ave., Farmingdale, NY 11735

Regional Office - 120 Exchange St., Suite 300, Portland, ME 04101

www.fabco-industries.com

© 2012 FABCO Industries Inc.