EHWC
EAST OF HUDSON WATERSHED CORPORATION

2 ROUTE 164
PATTERSON NY, 12563
(845) 319-6349

Establishing Stormwater Ponds

Ponding water brings great benefits!

PROJECT OVERVIEW

The East Branch of the Croton River, which runs along the Southern end of the town of Brewster, receives a lot of stormwater which runs through the town. Prior to the installation of the pond system, stormwater cascaded across the town of Brewster, collecting sediment, trash and pollutants along the way. This water would flow directly into the East Branch of the Croton River and into the Diverting Reservoir. By redirecting and concentrating this flow onto NYSDEP land, it was possible to develop a massive stormwater pond system which helps remove 67.8 kg of Phosphorus each year, while also establishing new pond and wetland habitat for local wildlife.

DRAINAGE AREA	PHOSPHORUS REDUCTION	ALGAE REMOVAL
176.1 acres	149.5 lbs/year	74,750 lbs/year

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THE PROBLEM

It always comes down to the same key issue. Urban development. As towns, villages, cities and downtown centers continue to build and expand, more stormwater is being blocked from entering the ground via natural means. Instead, it concentrates and causes erosive damage, transports pollutants and trash into waterways, or causes extreme flooding.

This open site along Marvin Road received a large amount of the stormwater from the town but was simply a passing point before the water entered the river, untreated.

It was vital to implement stormwater treatment at this location to intercept a huge amount of Phosphorus, which would hopefully reduce the amount of algae in the Diverting Reservoir. Doing such will also help alleviate potential erosion issues!

THE SOLUTION

By carefully designing a pond system on the vacant NYSDEP land, we were able to gather and concentrate the large amount of flows that were already crossing this area. The huge 176.1 acre drainage area already supplies plenty of water, we just needed to make a place for it to stop. Now, water rushing down from the main town of Brewster hits the pond first, where large debris, sediments and pollutants settle out of the water. The water then flows gently into the East Branch of the Croton River, treated and carrying a significantly reduced amount of Phosphorus!

Stormwater Pond Benefits:

- Creates needed pond and wetland habitat
- High removal rate of Phosphorus
- Easy to clean collection point for wastes
- Aesthetically pleasing and community enriching!
- Help control and slow down flooding
- Reduce erosion in nearby waterways
- Helps engage community on the problems surrounding stormwater management