

LONG POND DAM SMITHFIELD FLATS, NY



Problem



Solution



Result

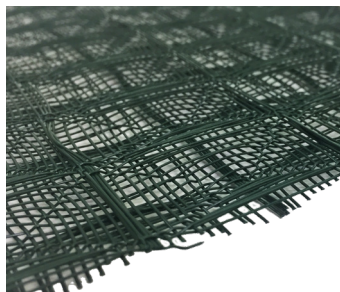
Application: Levee/Dam Stabilization
Product: TMax HPTRM

Site Issues: Spillway protection • Public multi-use area • Rocky soils • Flood control • Lake shoreline

Problem: Long Pond is a shallow lake known for its fishing, especially ice fishing during the colder seasons. It is part of the larger recreational Long Pond State Forest. To aid in the proper control of floodwaters, an emergency spillway was designed to help carry storm waters safely from Long Pond. But due to the area being a public recreational area, the designers wanted a vegetated solutions that would easily allow access to the water.

Solution: With the help of the erosion experts at E.J. Prescott, the North American Green TMax high performance turf reinforcement mat (HPTRM) was selected based on its ability to offer high-strength, long-term protection of the emergency spillway. To begin installation, the area was graded to create the wide spillways and the High-Performance Turf Reinforcement Mat (HPTRM), TMax, was installed over a prepared soilbed. Once in place, the HPTRM was secured using 8" drill tie anchors. The original design called for the use of 12" twist pins, but due to very rocky soils, the drill tie anchors were used when the twist pins failed to properly penetrate the rocky soils. Once fastened into place, 4 inches of top soil was placed above the HPTRM, and the area was hydroseeded. Together, the HPTRM and anchors form a system that offers strength and support to the surface and subsurface soils, forms a resistance against erosion from storm surge waters, and reinforcement of the vegetation stems and roots as the vegetation establishes within the HPTRM. The added topsoil was required to allow the grass vegetation the ability to more easily thrive in the poor, rocky soils.

Result: One year after the project completion, the spillway is fully vegetated, and is protecting the area from floodwaters, while still maintaining the natural beauty of the pond and surrounding forest.



PRODUCT HIGHLIGHTS

- TMax HPTRM combines high strength with ultimate vegetation performance for critical project designs.
- The soft, green armored system allowed the site to remain vegetated in place of hard armor such as rock.
- The extended longevity of the product allows for erosion protection, while the vegetation established.