

Loch Garry Spillway

Using VMax P550 on Loch Garry Embankment.



VMax³ P550 is composed of a permanent, ultra-high-strength, three-dimensional matting structure incorporated with a permanent 100% polypropylene fibre matrix. This is the highest performing TRM (Turf Reinforcement Mat) in the world, providing long term erosion protection and vegetation establishment assistance while permanently reinforcing vegetation. P550 is designed for use on steep slopes, high-flow channels, spillways, and shorelines.

Last summer we worked with SSE Renewable Generation and UB Civils on Loch Garry dam safety works. Over 400m of embankment and auxiliary spillways required a reliable and cost effective product which would withstand overtopping and extreme events.

Spillways are often designed to withstand long duration flows (10 hours or more) so conventional flat mats are inappropriate.

Flat mats provide no 3-D structure and vegetation is stripped out of the matting during extreme events where the spillway overtops. A 90% loss of vegetation within 1 hour has been recorded using flat mats, this is catastrophic as this loss of vegetation cover exposes the underlying mat, causing the spillway to erode.



At Loch Garry we used our VMax P550 which is an easy to install, reinforced 3D geotextile grid that vegetates quickly whilst that important 3D structure protects the underlying soil and delicate root and stem systems.

The site works were at a location 1500 feet above sea level and were undertaken during a summer heatwave. The project was completed on time, within budget with zero accidents.

Our VMax P550 has been proven time and again to be the right erosion control method for tough environments.