

The most efficient and cost effective process to establish vegetation to a high standard.



# GeoGrow

GG-Hydro-UK22



# GeoGrow HYDROSEED

#BuildingGreener





# Hydroseeding

## Erosion control techniques

### APPLICATIONS:

**ROOTLOK GEOTEXTILE BAG SYSTEM**  
**PUBLIC OPEN SPACES**  
**RETAINING WALLS**  
**SLOPE STABILISATION**  
**EROSION CONTROL SYSTEMS**  
**RAILWAY EMBANKMENTS**  
**GOLF COURSES**  
**CANALS**  
**COASTAL WORKS**  
**LANDFILL & REFUSE SITES**  
**SOIL REINFORCEMENT**  
**ROADSIDE EMBANKMENTS**  
**RIVER BANKS**  
**DITCHES**  
**CHANNELS**  
**STREAM BANKS**  
**LAKES & PONDS**  
**RESERVOIRS**



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**Hydroseeding is a technique which involves the preparation of a liquid medium that combines seed and a carrier such as a wood fibre product with water. Unlike normal seeding, the liquid is mixed in a hydroseeding machine, with mechanical agitation and recirculation and applied in liquid form to the surface.**

**The mixture, sometimes referred to as slurry helps to provide a micro climate for the seed and achieves quicker germination, accelerated growth and increased establishment success compared to other vegetating methods. Hydromulching slurry uses a high concentration of specialist inert organic fibres, tackifiers, biostimulants and fertilisers in order to boost germination and establishment. Seed mixtures can include most species, amenity, wetland, low maintenance, shade & drought tolerant, wildflowers & shrub seeds. Hydroseeding achieves the most uniform distribution of each seed type, size and species within the mixture, as the seed is successfully suspended and mixed in the machinery.**

**The technique ensures the seed is locked into close contact with the Rootlok bag system, soil or substrate, and will not be washed away by heavy rainfall or affected by climatic changes.**





# High Performance Erosion Control

## Our Hydroseeding service.

GeoGrow offer a fully bespoke hydroseeding service. A process of spraying a mix of seed, mulch, fertilisers and binders on to a substrate surface. The substrate can vary from topsoil down to rough rocky faces. The technique is chosen when conventional seeding isn't appropriate either due to the nature of the soil or site conditions being too steep or too wet. We have successfully hydroseeded thousands of hectares of roadsides, waste management sites, industrial and commercial developments, coastal projects and golf courses to name a few.

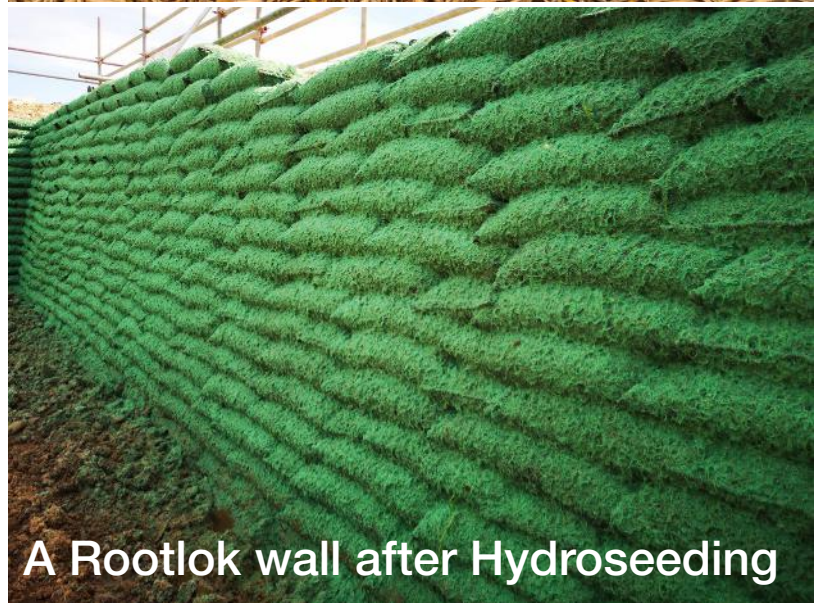
Furthermore we have also used our Hydro services for historical and environmentally sensitive sites, windfarms and flood alleviation schemes.

We use a range of 100% natural products, produced specifically for Hydroseeding.

Our products are produced in the UK and provide ultimate protection and excellent moisture retention and erosion control.



Multiple Seed Choice



A Rootlok wall after Hydroseeding



Attenuation Pond

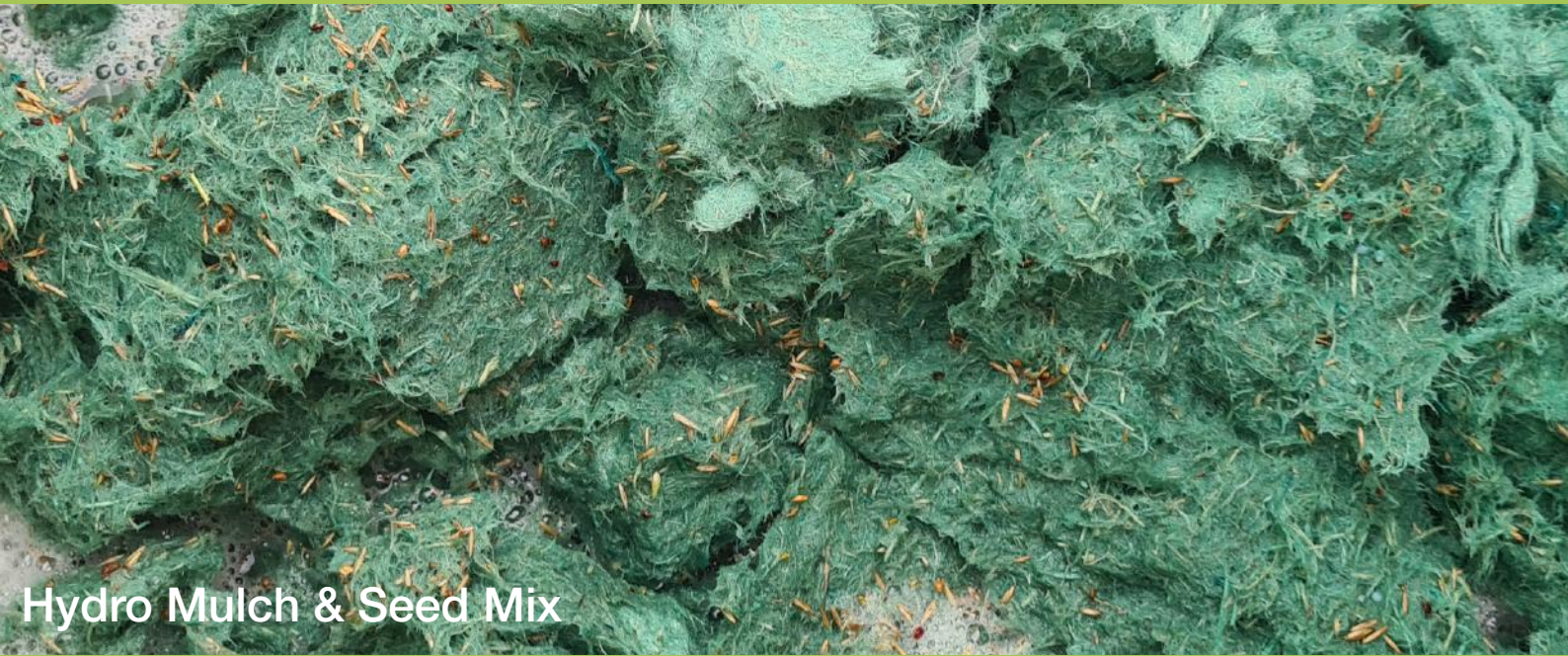
# Features & Benefits

## Save Time & Money

- Faster Germination
- Even seed distribution of size and type
- Seed protection in difficult conditions
- Superior seed to soil contact
- Soil stabilisation with high performance products
- Can be tailored to create unrivaled erosion control solutions, and incorporate erosion control blankets & HPTRMs
- Establishes more uniformly than turf
- Requires no additional aftercare over other methods
- 100% organic and biodegradable
- Economically viable compared to conventional seeding
- Makes seeding on steep banks or inaccessible areas possible.
- Reduces hazards for difficult sites and uneven terrain.



# Photo Gallery



Hydro Mulch & Seed Mix



Installation





# A look back at 2021





# Case Study

## Thornberry Hill - Lawley 6 - Telford



Before



After

Geogrow was asked to provide a Rootlok wall solution with a small footprint for a Taylor Wimpey site at Lawley 6, Telford which is part of the development of 3000 new homes in Lawley Town.

Limited on space a Rootlok tie-back wall was designed and approved for use for an external customer facing retaining wall with an existing pathway on top and a residential road below.

The wall had varying heights up to 2 meters and was approx 100 meters long with a footprint of 1.2m, built at an angle of 85 degrees to accommodate the verge space required for services and the kerb line. The wall was built by Geogrow's in-house installation team within a 2-week period.

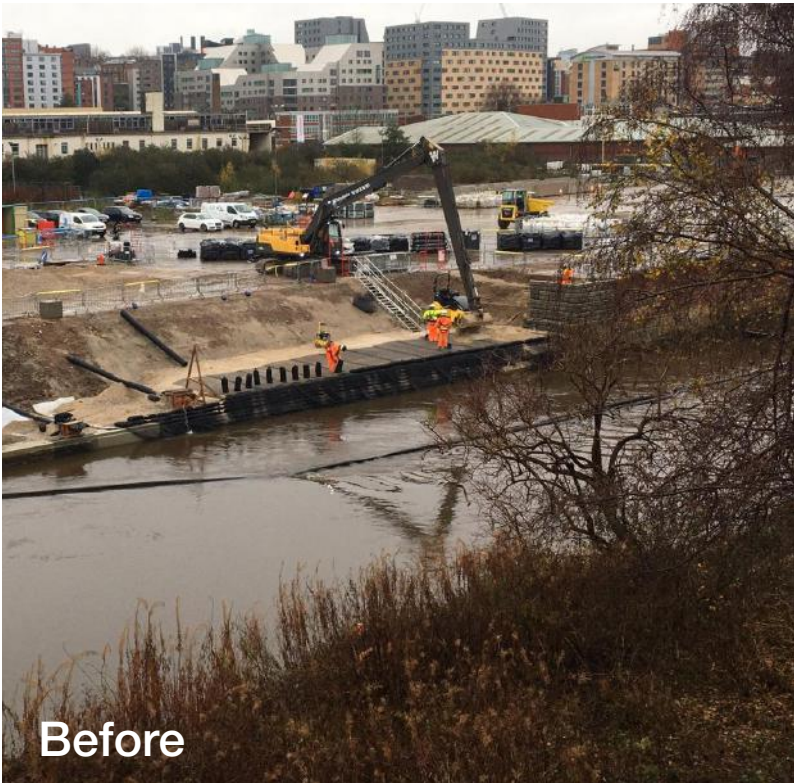
On completion the wall was hydroseeded during November with a drought & shade tolerate seedmix - Geogrow's high performance mulch gave winter protection to the seed and germination was successful in the following spring, good grass growth proceeded during the summer and the wall was 80% vegetated by the end of year one, by the end of year 2 the Rootlok wall was fully vegetated and now provides a sustainable green finish.

Hydroseeding provides an even distribution of seed for quicker germination and grass growth with a fuller establishment of vegetation and is recommended over other vegetation methods for larger wall installations & public open spaces.

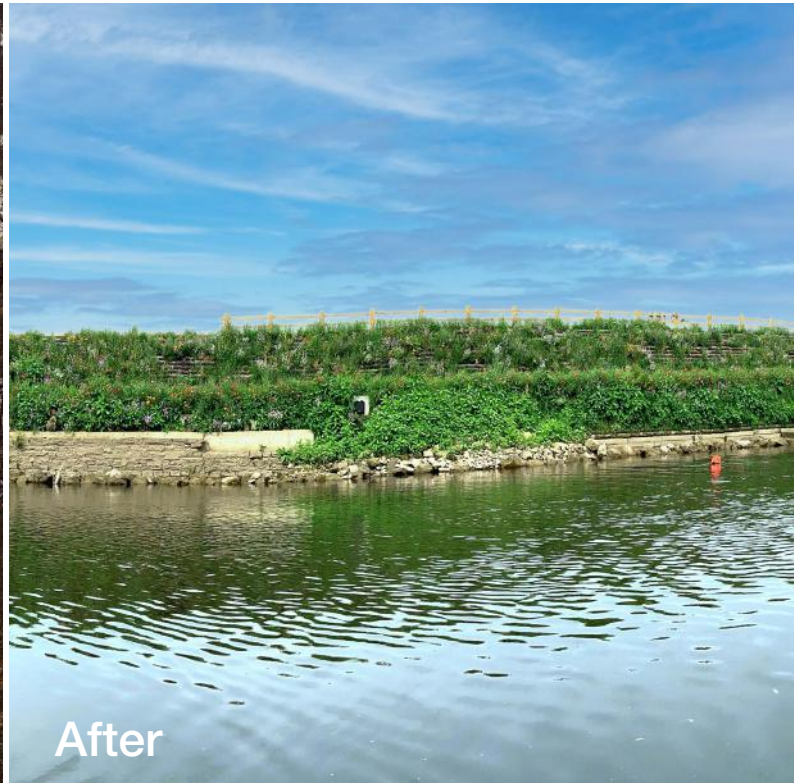


# Case Study

## Leeds Flood Alleviation Scheme Phase 2. - BN – Leeds CC – EA - MM



Before



After

Geogrow were invited to provide a formal design for the supply & installation of a Rootlok vegetated wall system to part of the riverbank along the river Aire corridor between Wellington bridge and Viaduct Road.

Geogrow's design engineers worked alongside BAM Nuttall & Mott MacDonald who were to carry out a range of works along the river Aire including areas where major flood events hit at Christmas 2015. Geogrow provided a design for an earth reinforced structure utilising geogrids with a Rootlok geotextile bag facing to provide a sustainable green finish. The wall measured approximately 44 metres long x 3M high and had a geogrid wraparound face to provide extra factors of safety.

Rootlok was chosen to provide a softer, engineered system to promote a more natural structure that provides more benefits for the environment, wildlife habitats and a vegetated finish, all stone was sourced locally to help reduce the scheme's carbon footprint.

The wall was installed within a 6-week period, on completion December 2020 the Rootlok bag facing was hydroseeded with a riverbank seed mix and planted with a range of herbaceous flowering plants, over winter the seeds were protected by our high-performance mulch mix and successful germination took place in spring 2021, grass and plants started growing and gave a colorful pleasing vegetated finish for the remainder of 2021. Eight meters back from the top of our wall BAM Nuttall built a brick & block flood wall to further protect the local businesses & residents.

BMMjv were delighted with the Rootlok system and approval from the client LEEDS City Council and the Environmental Agency will lead to other installations of the Rootlok system.





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**Sustainable | Green | Vegetated | Ecological**