



PROVEN REVEGETATION SOLUTIONS FOR COMMERCIAL SITES

Developed in the lab, validated in the field

ABOUT

Developed by pioneering Australian soil scientists over 12+ years, the EnviroStraw range of revegetation products are proven to revive soil and establish native vegetation anywhere.

Even the most depleted commercial sites can be revegetated in a self-sustaining way with increased levels of soil carbon using our products, which contain built-in nutrients for sustainable growth and work faster (with less water) than standard hydromulch.

EnviroStraw products are Australian-owned and manufactured. Our chemical-free revegetation products have been carefully developed to accommodate all land sloping variants.

COMMERCIAL APPLICATIONS

After a period of intense research, development and testing, our hero product, EnviroMatrix ECM, has emerged as a cost effective self sustaining erosion control solution that is proven to work on commercial sites where top soil has been lost or depleted due to:

- Development & infrastructure
- Steep slope work
- Mining activity.

As it requires less water than other hydraulically applied hydromulch products and is Biologically activated with a specially designed blend of microbes, a potent nutrient composition, EnviroMatrix ECM has a unique ability to revive soil in even the harshest conditions.

GROUNDING IN SCIENCE

EnviroStraw products have been developed by Australia's leading soil scientists and agronomists as a self-sustaining alternative to compost and other amendments.

AWARD WINNING

EnviroStraw received an award for innovation from the International Erosion Control Association (IECA) in 2015 – the United Nations' 'Year of Soils'.

FUTURE VISION

Backed by unprecedented results, EnviroStraw products are now widely available and fast becoming the preferred revegetation solution in Australia, and soon to the world.



OUR PRODUCTS

The EnviroStraw range consists of 4 revegetation solutions. Product selection depends on slope and site requirements, with each solution combining various key ingredients to quickly establish vegetation.



EnviroStraw HGM
(Hydraulic Growth Medium)
 A hydromulch that includes a biotic soil amendment and our agronomically designed soil conditioner. This thermally processed ‘straw blended fibre’ provides the ideal environment for controlled release and efficient nutrient uptake for establishing vegetation.



EnviroStraw HGM - BFM
(Hydraulic Growth Medium - Bonded Fibre Matrix)
 Our signature hydromulch with added binders for more efficient uptake on steeper slopes.



EnviroMatrix ECM
(Erosion Control Matrix)
 For highly problematic soils that are very low in carbon, our hero product also includes 22 specially selected strains of beneficial bacteria and fungi with other essential nutrients – designed to help rebuild disturbed soils, increase soil carbon and improve soil health. Ideal for revegetating all areas including extreme slopes.



GeoSpray
 An alternative to geofabric that eliminates erosion caused by water, rain or wind. Using a spray-on technique, GeoSpray removes the labour-intensive, time-consuming and costly issues associated with laying geofabric, and exceeds all industry specifications.

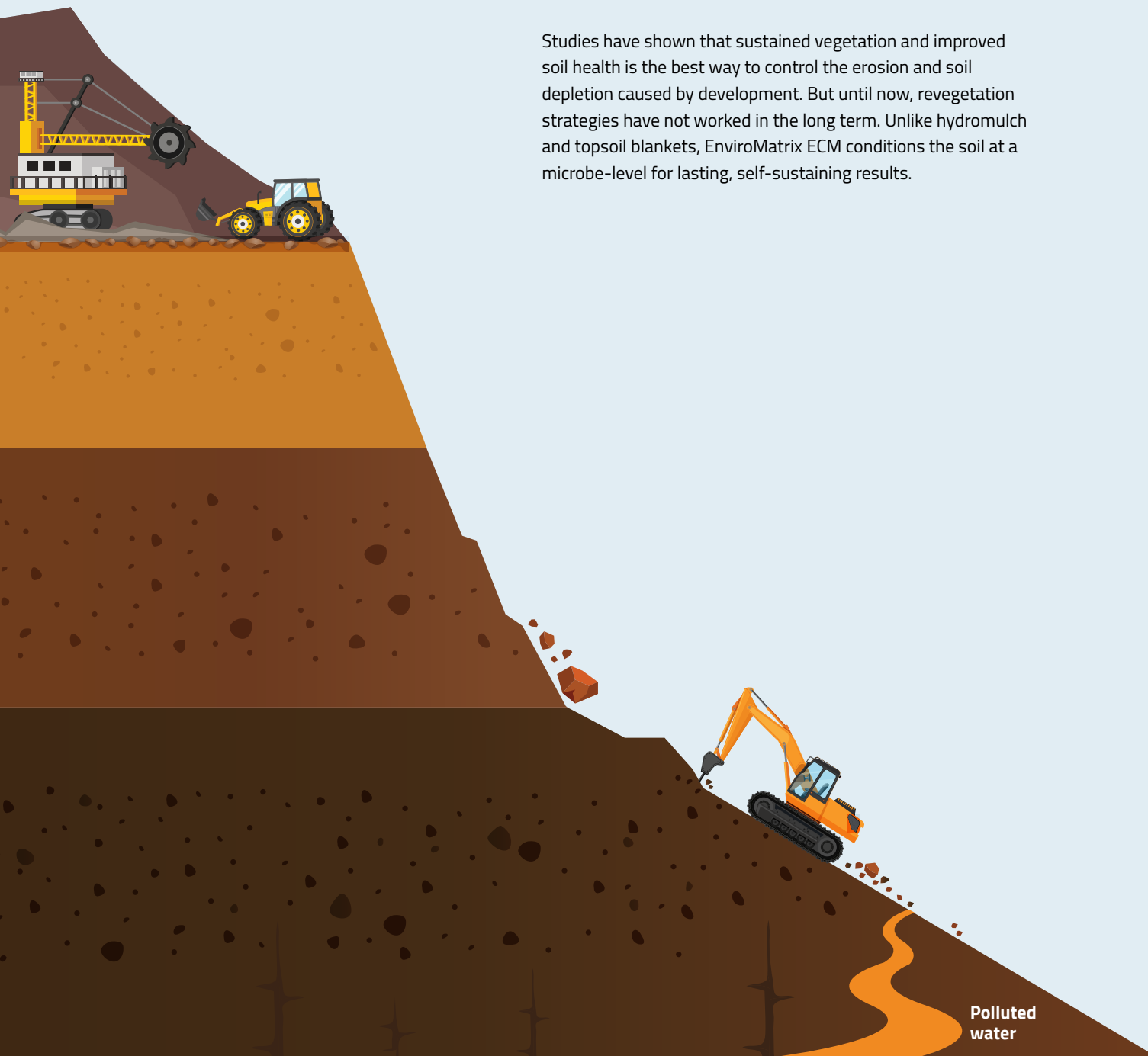
PRODUCT COMPARISON

| |  EnviroStraw™ HGM |  EnviroStraw™ HGM - BFM |  EnviroMatrix™ ECM |
|--------------------------------|--|--|---|
| Weed free pathogen free | ✓ | ✓ | ✓ |
| Slope angle | <3:1 | >3:1 - <2:1 | >2:1 - <0.5 |
| Biotic soil amendment | ✓ | ✓ | ✓ |
| Binder included | ✗ | ✓ | ✓ |
| Degradable interlocking fibers | ✗ | ✓ | ✓ |
| Volcanic mineral fertiliser | ✗ | ✗ | ✓ |
| Carbon building | ✗ | ✗ | ✓ |
| Non watering | ✗ | ✗ | ✓ |

WHY WE NEED IT

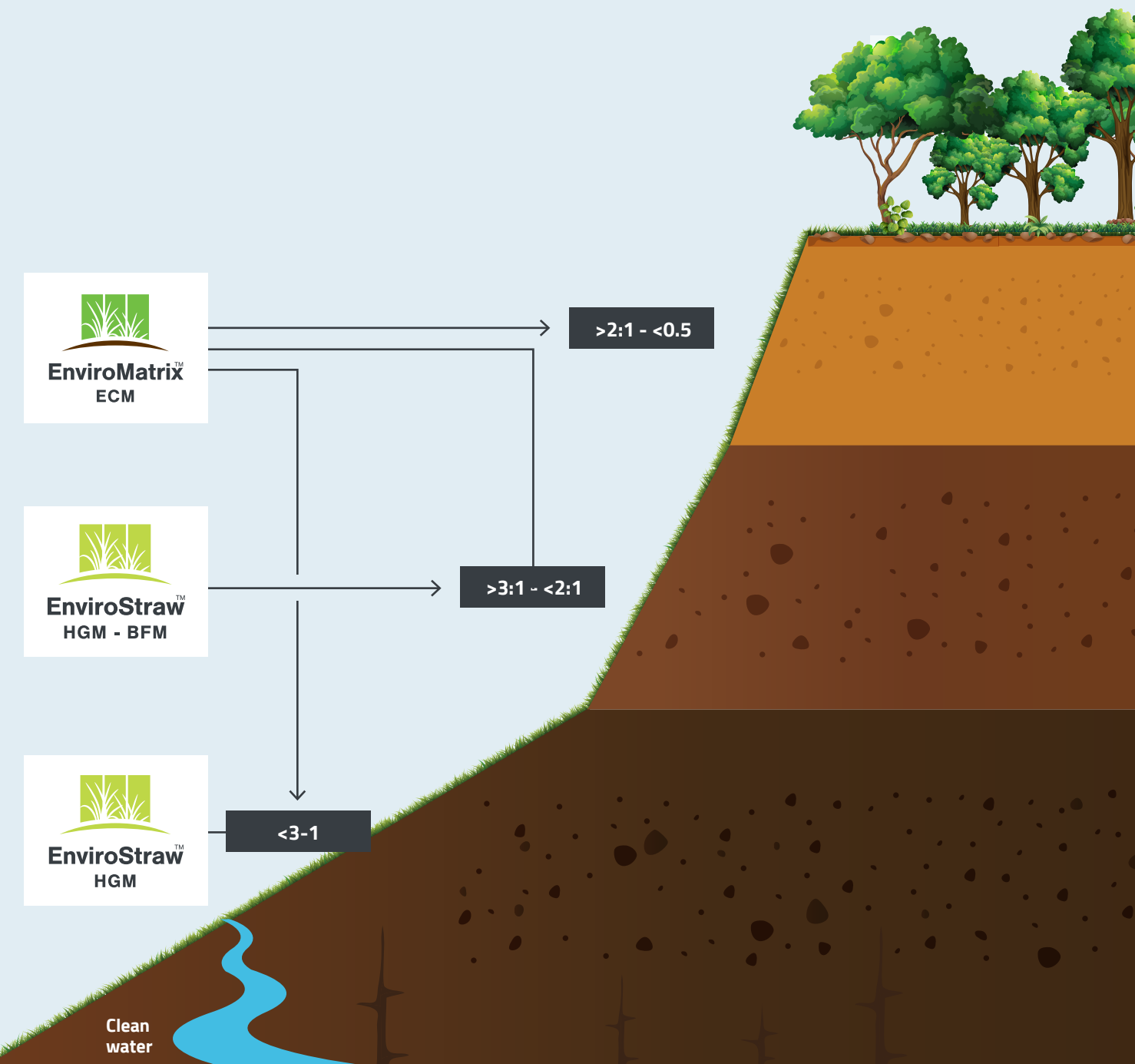
The sight of cranes, bulldozers and workers in high-vis gear is a sure sign of economic growth. The down side is that progress wreaks havoc on the land. How to repair the damage?

Studies have shown that sustained vegetation and improved soil health is the best way to control the erosion and soil depletion caused by development. But until now, revegetation strategies have not worked in the long term. Unlike hydromulch and topsoil blankets, EnviroMatrix ECM conditions the soil at a microbe-level for lasting, self-sustaining results.



WHERE IT WORKS

Wherever a vegetated solution is required to prevent erosion, stabilise bare ground and/or revive depleted soils.

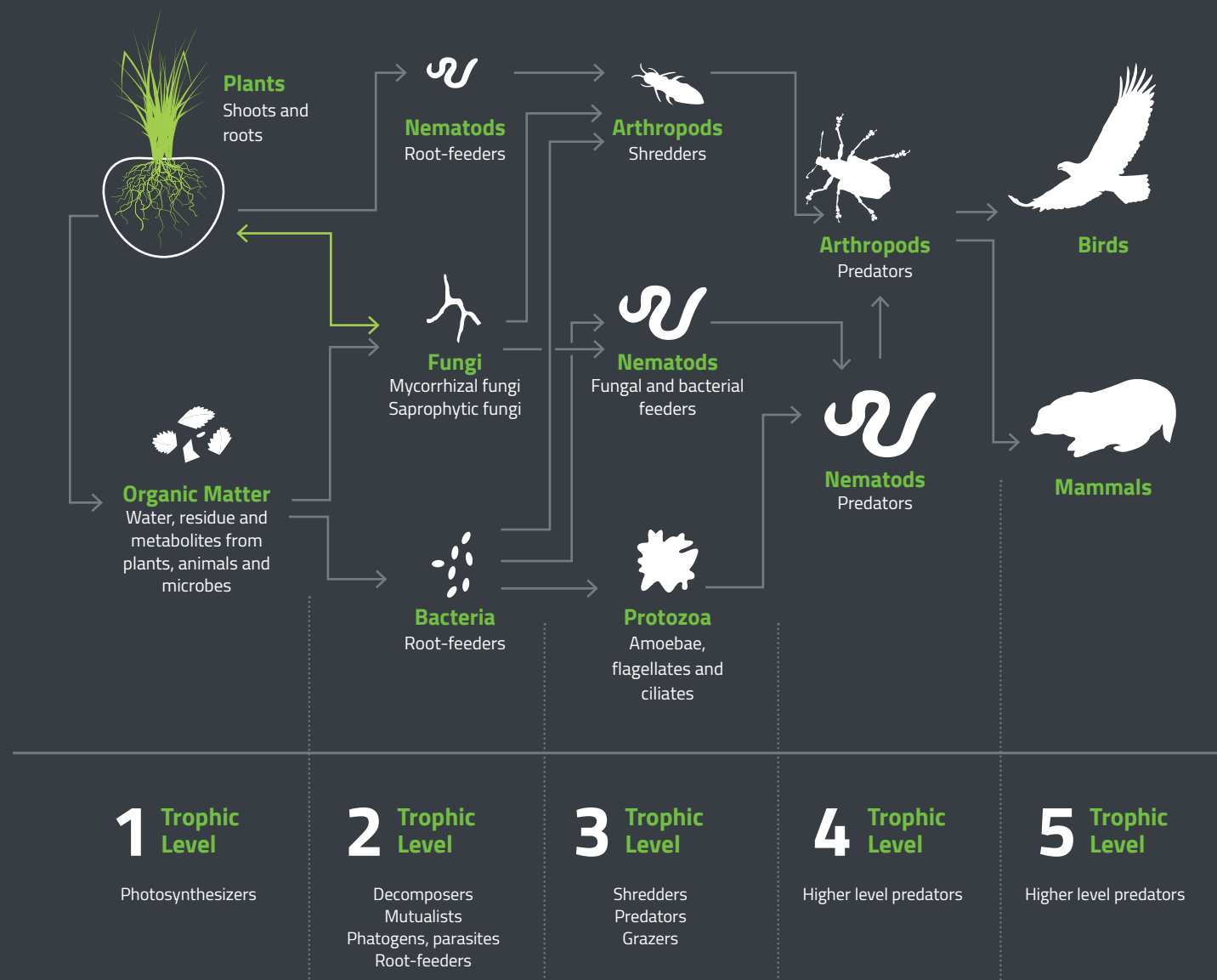


HOW IT WORKS

EnviroMatrix ECM is a unique combination of organic fibres and humus-building components that quickly restores carbon levels and revegetates large expanses of land ravaged by development and mining, and control erosion.

As shown in the graphic below, EnviroMatrix ECM conditions the soil via a delicate blend of essential fungi, bacteria and natural minerals. This helps rebuild topsoil and soil health by mimicking the natural Soil Food Web.

SOIL FOOD WEB



Soil scientists and microbiologists have discovered that a community of bacteria, fungi and other microbes exists in symbiosis with the root hairs of plants. EnviroMatrix ECM initiates the development of healthy soil through a combination of the essential elements that make up robust topsoil.

8 ESSENTIAL BENEFITS



Encourages a strong root system

All EnviroStraw products are designed for sustainable long-term revegetation.



Weed, pest and pathogen free

Our solutions are free from nasties and designed to work in harmony with the eco-system.



Won't pollute waterways

There is no toxic run-off to worry about when you use EnviroStraw.



Australian owned and manufactured

Not only are our products developed by leading Australian scientists, they are also made here.



Works faster and needs less water than standard hydromulch

What is truly remarkable about EnviroStraw products is how fast they work. Results can be seen in just a few weeks.



Contains built-in nutrients for sustainable growth

EnviroStraw works with nature to revive soil and revegetate large expanses of depleted land.



Proven to work in the harshest conditions

Even severely depleted soil on steep slopes responds extremely well to our hero product, EnviroMatrix ECM.



Chemical free

Our team recognised that there was no need to resort to harsh chemicals because, just like the human body, nature has an incredible ability to heal itself given the right nutrients.



Advanced soil science that
brings even the most ravaged
land back to life.

CASE STUDIES

ENVIROSTRAW CASE STUDY #1

Mine Site, Mackay QLD



Results



Description

This project was a large-scale water diversion consisting of 350,000 square metres of Hydromulch. Testing revealed challenging conditions. Soil was extremely dispersive with very low organic carbon levels, high sodicity (sodium levels) and hydrophobic properties.

Along with small quantities of lime and gypsum, the EnviroMatrix system was applied in a 2-step process at a rate of 6 tons per hectare to ensure total ground cover.

After 6 tons of EnviroMatrix applied

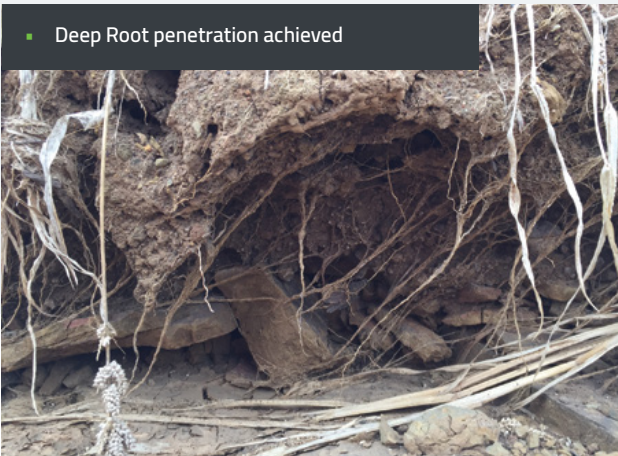


10 months after application



Impressive revegetation results were seen within three months of the project starting and the self-sustaining area flourishes to this day.

Deep Root penetration achieved



Before: Low organic carbon levels



ENVIROSTRAW CASE STUDY #2

Mine site, NSW



Results within 6 weeks



Description

Locally sourced rock material from a mine site had been used to build a railway track, which was showing signs of sever decomposition. This left the structure vulnerable to rill erosion.

Cation soil balance tests indicated that 6238kg of calcium would be needed to raise the available calcium to 68% and/or exchangeable calcium to 65%. The tests showed

that 2160kg of magnesium would be needed to raise the available magnesium and exchangeable magnesium to 15%.

The EnviroMatrix ECM program was applied at a rate of 10 tonnes to the hectare. Seed bed preparation was performed by track rolling with a wide track dozer. There was no need for high rates of calcium from lime or gypsum.



Impressive revegetation activity was seen within four weeks of application on 30 June 2017, with multiple grass species establishing by 18 July 2017.

Rill erosion on the batter at the site



Decomposing rock sample typically found on rail way batters



RESULTS

| | 22-FEB-17 | 22-AUG-17 |
|------------------------|-----------|-----------|
| ORGANIC CARBON % | 0.26 | 0.83 |
| DISPERSION INDEX | 16 | 11 |
| SOIL BULK DENSITY KG/L | 1.38 | 1.02 |
| SODIUM MG/KG | 2258.6 | 862.5 |
| POTASSIUM MG/KG | 301.07 | 324.53 |
| MAGNESSIUM MG/KG | 230.85 | 901.53 |
| CALCIUM MG/KG | 9322.02 | 6401.97 |
| PH | 9.7 | 9 |

The best & easiest hydromulch we have used

'No comparison, by far the best and easiest HydroMulch we have used. We mix more and spray more area per tank. It looks great on the ground and the coverage is incredible.'

Hytek HydroMulch

By far the best hydromulch I have used

'By far the best HydroMulch I have used. My team love using it, we can load 400 kgs of EnviroStraw per tank in my Finn T120 and cover significantly more area per tank load. My Finn handles this product with ease.'

Jock Harcourt, Grow Grass, Brisbane

The result is a well fed grass sprouting from my Hydromulch

'I have been using Envirostraw for my Hydromulch work ever since it has been made available and I am very satisfied with the results. I find the cut of the straw to be even and contains no foreign material or pieces that are too big and can cause a blockage to my equipment. Thus it is ideal for spraying from hose or from the gun. The organic fertiliser component is a plus as I am able to cut down on the amount of chemical fertiliser used and the result is a well fed grass sprouting from my Hydromulch.'

Nathan Magnus, Director of Hydro Spray Grass, Brisbane



Our Australian commercial revegetation solution is now available worldwide.

For more information, please contact our sales to determine which product and program would best suit your site.

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Developed in the lab, validated in the field

