



**We're Oren
Environmental**

**Industry leaders in reed
bed maintenance and
large-scale desludging**

OREN
ENVIRONMENTAL

a part of

**SEVERN
TRENT**



We are a specialist department of Severn Trent Services

We take care of the maintenance and management of reed bed systems and associated water and wastewater systems nationally.

Our expertise and understanding of the importance of maintaining a reed bed system and lagoons correctly means that we are the national leaders, looking after the largest portfolio of reed beds and lagoons in the UK.

355,000m²
of reed beds
maintained



Save up to 80% in refurbishment costs



Reduce your carbon footprint

Our Story

The word '**Oren**' means 'Orange' in Welsh. Orange is the colour of mine water when it's oxygenated before it's treated, cleaned, and released safely into waterways.

When we remove iron oxide it dries to what's commonly known as ochre – a bright orange powder.

That's why we think our name perfectly represents our roots and the work we do today.



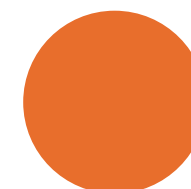
Oren:

Manage **82 mine water treatment schemes** across the UK – on behalf of the Coal Authority, appointed by the Government.

Contribute to the **122 billion* litres of water** that is treated each year. This helps to protect the environment – including around **350km* of rivers** – from the polluted water that comes from disused coal and metal mines.

Manage the largest portfolio of single-owned reed beds in Europe, covering an area of over **300,000 square metres**.

Extend the
life of your
reed bed



Our Aims



Cut Costs



Reduce Pollution Incident Risk



Enhance Biodiversity



Reduce Carbon Footprint



Core Services

Core Services:

- Reed cutting
- Reed management and maintenance
- Reed planting
- Reed transplanting
- Lagoon desludge
- Sustainable waste disposal
- Waste management (desludge/reed bed)
- SuDs maintenance - balancing ponds
- Small civils & enabling works
- Treatment works refurbishment
- Operation & maintenance services (O&M)

Supported:

- Dewatering services
- Ecology surveys
- Chemical dosing systems
- Bespoke mobile chemical units
- CCTV survey
- Chemical supply
- Aggregate cleaning
- Aggregate supply
- Filter bed cleansing
- Enabling works



Reed Beds and Lagoons/Settlement Ponds



	Quantity	m ²
Lagoons/Settlement ponds maintained	157	192,720
Reed beds maintained	132	355,000
Works over last 3 years		
Lagoons settlement ponds desludge	89	
Reed beds cut	87	
Reed beds refurbished	58	

	North	South	Total
Reeds planted (m ²)	64,000	92,000	156,000
Ochre/reeds shifted onsite (tonnes)	173,973	40,386	214,359
Reeds ochre disposed of sustainably (tonnes)	58,533	35,256	93,789
Overpumped during desludge (tonnes)	104,625		104,625
Ochre to landfill (tonnes)	10,815	5,130	15,945
Permits or statements applied for and granted by the regulator	36	36	72

Lagoon, wetland attenuation management

Large-scale lagoon/reservoir/pond

- Cleansing and desludging
- Liner installation
- Sustainable disposal and repurposing



Balancing ponds/Wetlands/Attenuation

- Maintenance
- Management
- Upgrading

Enabling works

- Grounds clearance
- Cleaning and unblocking of pipes and inlets
- Small civils





Reed Bed

- Maintenance
- Refurbishment – partial & full
- Consultants – providing expertise and advice
- Project management
- Surveys to assess reed bed condition
- Performance evaluations and action plans
- Water sampling with certified laboratory support
- Grounds clearance as part of the works
- Cutting and removal of weeds and reeds
- 85% of waste repurposed



Save up to

80%

in refurbishment
costs

Aggregate recycling

Aggregate washing

- Mobile plant
- Excavate, wash, replace on site
- Greatly reduce haulage/landfill and disposal
- Environmentally friendly

Biological Cleaning

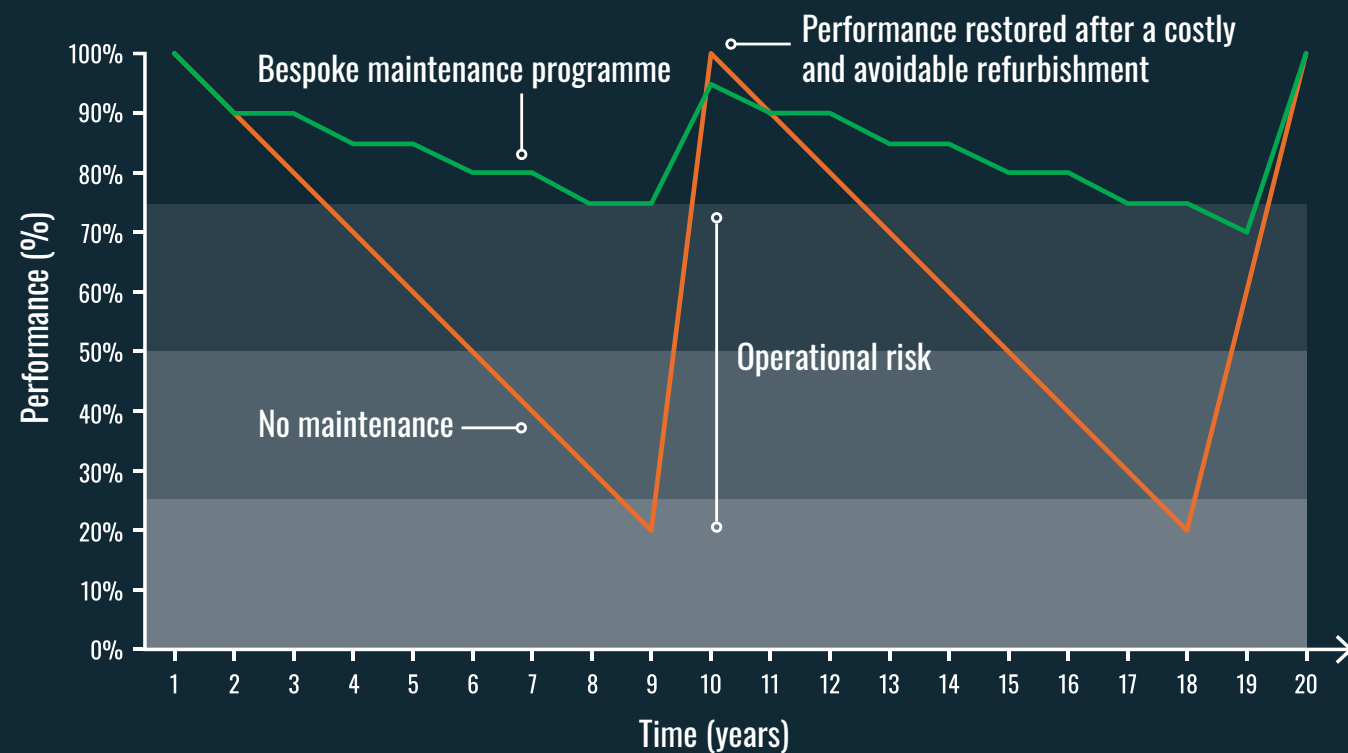
- Manual treatment, bacteria dosing and jet flushing
- Creates right environment for naturally occurring bacteria in the bed
- No downtime – even in freezing conditions
- Increases flow and distribution, eliminates ponding
- Significant ammonia reduction



Contact Ross Brown, Sales Manager,
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or call **07816 195487**

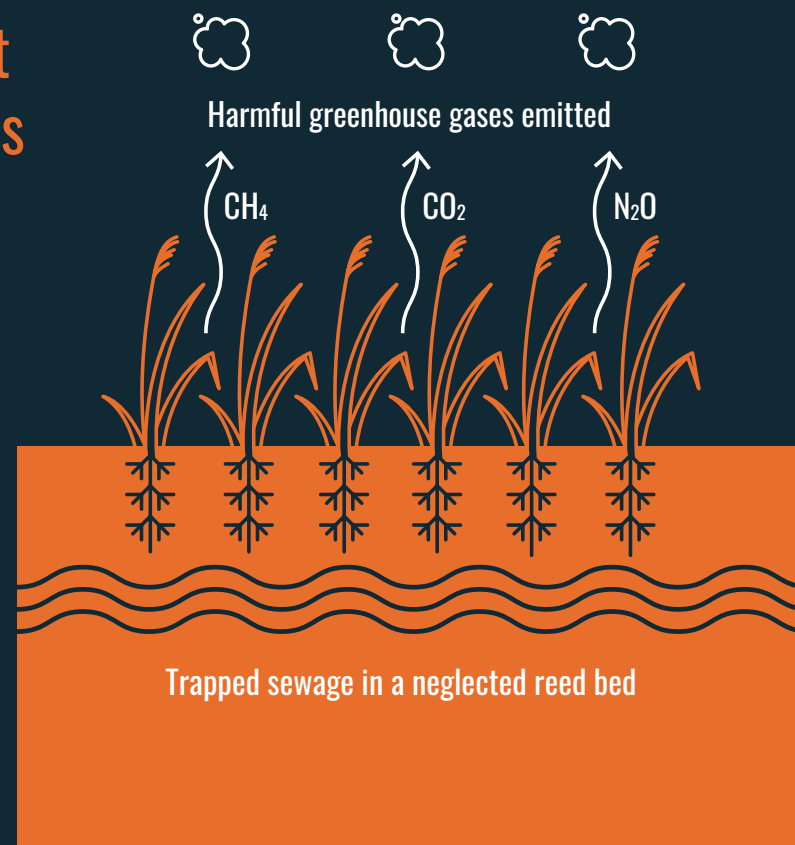
It pays to look after your reed bed

Regular, long-term proactive maintenance of your reed bed keeps it operationally stable and at peak performance for longer. Fail to take care of your reed bed and operational performance will plummet. This leads to unnecessary refurbishment costs, environmental risks, and reputational damage.



Neglected reed beds emit harmful greenhouse gases

Is your reed bed designed to help treat sewage? If the answer's yes, you mustn't neglect it. Otherwise, that final settlement sewage that's trapped inside your reed bed will continue to emit harmful greenhouse gases including methane, carbon dioxide, and nitrous oxide.



Ancillary

Disposal:

- Waste disposal
- Waste transfer/tankering
- Land bank for agricultural spreading
- Large tank clarifier cleaning

Regs/Data/RAMs:

- CDM site management
- Borehole depth measurement (Data Loggers)
- Project management
- Verified laboratory sampling
- Management information systems - EHS, sustainability, quality
- Environmental permitting

Project:

- CAD drawings

Electrics:

- Joinery
- Electrical testing
- Ducting
- Electrical drawings and design
- DNO connections
- HV cabling installation
- HV cabling supply
- Motor control centre install
- Motor control centre supply
- Mains cabling

Water:

- Flow measurement
- Flow meter installation
- Flow meter supply
- Borehole depth measurement (supply of Data Loggers)
- Dewatering sludge pressure
- Flood elevation - land drainage
- Submersible pump installation
- Submersible pump supply
- Telemetry installation
- Water jetting
- Weir design and installation
- Pump trials - including temp set up of compound, pump sets, generator power, pipework and VSD controls
- Drainage
- RAM pump install and supply

Building:

- Fabrication - steel work, pipes, bends, checker plate etc
- Facilities management - painting/window and door repair
- Jet vac
- Manhole installation
- Steel work installation
- Kiosk supply and installation
- Drainage
- Minor civils
- Fencing/slabbing

Gas:

- Gas vent installation

Why Oren Environmental?

While reed beds are low maintenance, we're on a mission to promote the significant operational, commercial, and environmental value that can be harvested from properly cared for reed beds.



Extensive experience

Our experience comes from refurbishing and maintaining one of the largest portfolios of reed beds and settlement lagoons in the UK. In fact, we've a long history in this specialist field.



Proven track record

We can demonstrate how our long-term, proactive reed bed maintenance programmes can save you substantial refurbishment costs and double the lifespan of your asset.



Recover not replace

We believe that many neglected reed beds are recoverable. Our innovative techniques are proven to help your existing reed bed system to flourish and thrive.



Passion for the planet

We're driven by a desire to protect and enhance the natural environment. Our methods reduce your carbon footprint and improve your waste recycling rates.

Still not convinced? Ask to see our work!

Contact Ross Brown, Sales Manager, at
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