

Delivering new woodlands and nature reserves

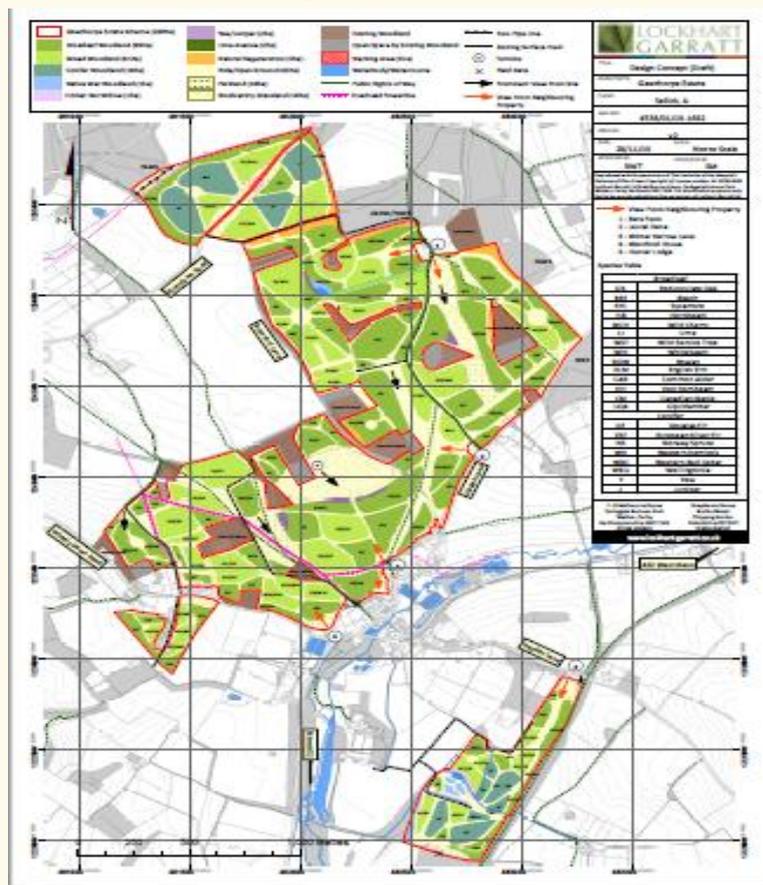


Woodland schemes



The owners of Gawthorpe Estate are considering planting up to **104 ha of woodland** on land that has been used for dairy and arable production. The scheme will deliver **3022 kg/N** credits with the potential to offset **3500 houses**. The Estate owners have engaged with key stakeholders including: Natural England, Forestry England, South Downs National Park Authority, Hampshire County Archaeologist, direct neighbours and the Parish Council seeking advice about the design of the woodland. They have also carried out extensive assessments of soils, ecology, landscape sensitivities.

Woodland Design Plan



If fully progressed, this is one of the **largest lowland woodland planting schemes** to come forward in a number of years and will lead to wider **carbon and biodiversity benefits**. The woodland and its associated **public access** will deliver wider benefits for the local community and visitors.



Delivering wetlands

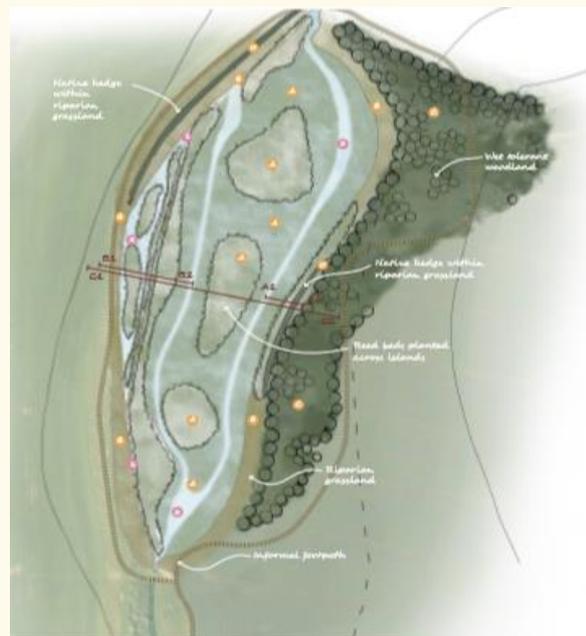
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Wetland

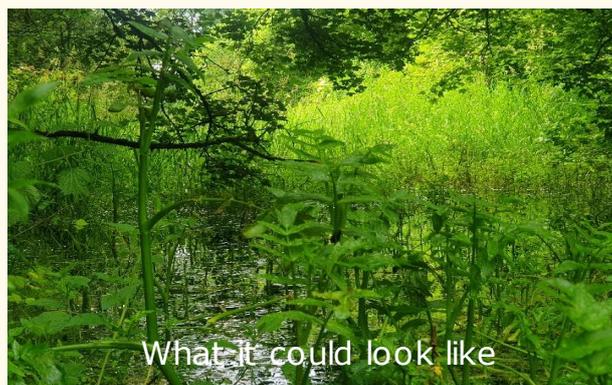
A wetland area is being created at Whitewool Farm, (Meon Springs) in the Upper Meon Valley. The Farm is a 441 hectare dairy farm located on a tributary of the River Meon. The wetland scheme fits nicely into the regenerative objectives of the farm which are adding vitality and life to the natural resources of the valley, whilst remaining profitable as a farm and producing food.

The project has been permitted and will be monitored by the South Downs National Park Authority. It will transform a linear agricultural drainage channel into a thriving, biodiverse area, with wetland, riparian buffer and wet woodland, aiming to remove in excess of **2,000 kg of nitrogen per year** from entering The Solent.

The credits could allow up to **2,500 houses** to be nitrogen neutral. Carbon and biodiversity benefits will also be delivered as well as public access. More details can be found at www.meonsprings.com/wetland



The existing stream channel



What it could look like

Sustainable urban Drainage Systems

Sustainable urban Drainage Systems can also be modified to remove nitrogen from surface water. The Wildfowl and Wetland Trust designed a scheme for small development in Fareham.

The approach modelled run off, base flow and flood retention requirements and created a main wetland basin, linked to the development by swales. Some of these swales are cut off in low rainfall months and some sections also lined to help achieve baseflow. Permeable paving on driveways also delivered additional water quality benefits. The wetland basin is clay lined to address low rainfall months and there was also a stone filter for final water quality improvements prior to infiltration.



Long term monitoring and management was secured to control tree and scrub invasion, maintain water control structures - inflow and outflow, water level control, prevent unauthorised connections and changes to system, address any sedimentation and prevent invasive non-native species.