

Bigger and Better

Giving nature a home in the Trent Valley:
Newark to South Clifton Concept Plan





Our 2050 vision

The Trent and Tame River Valleys will once again be one of the great British wetlands, providing a wetland artery for wildlife in an attractive, multi-functional and inspiring landscape loved and valued by all.

The Trent Valley, between Newark and South Clifton, will be the “crown jewel” of this wetland landscape.



Objectives

The main objectives of this document are to:

- present a visual concept for the restoration of a cluster of four mineral sites in the Trent Valley north of Newark, covering some 1,200 ha – Langford Lowfields, Besthorpe, Girtton and Cromwell;
- promote a strategic, co-ordinated and landscape-scale approach to the development and restoration of this cluster of sites;
- complement the biodiversity-led restoration approach and the site specific development briefs contained within the emerging Nottinghamshire Minerals Local Plan;
- encourage key stakeholders, such as the county council, mineral operators, government agencies and NGOs, to consider any proposals for minerals development, restoration and / or afteruse in the context of the cluster of mineral sites as a whole, not just on a site-by-site basis.

By taking this approach we could potentially deliver even more for wildlife and for people, in this section of the Trent Valley, than we would if we took a relatively piecemeal, site-by-site approach. In other words, we could provide added value so that “the whole will be greater than the sum of its parts”.

This approach is already being promoted across the whole of the Trent and Tame River Valleys, through the sister publication, “Bigger and Better – How Minerals Local Plans can help give nature a home at a landscape scale in the Trent and Tame River Valleys”.

This document provides a concept plan of how this approach could be applied across this specific cluster of mineral sites.

The benefits of taking a strategic, co-ordinated and landscape-scale approach

The mineral sites north of Newark are already providing a great home for wildlife, as demonstrated by the creation of the RSPB Langford Lowfields reserve and Nottinghamshire Wildlife Trust's Besthorpe nature reserve.

The mineral planning process in Nottinghamshire has benefited from years of conservation-sector input to ensure that priority habitats and species are a focus of mineral site restoration. The Trent Valley Biodiversity Opportunity Mapping Project has played a key role in informing the development of the Nottinghamshire Minerals Local Plan (MLP), which, through its emphasis on biodiversity-led restoration to priority habitats, should help to ensure that this good work continues in years to come.

However, in order to deliver the best possible outcomes for both people and wildlife we need to change our approach to minerals development and mineral site restoration from a relatively piecemeal, site-by-site approach, to a more strategic, co-ordinated and landscape-scale approach. Taking this approach will provide a better overview of how the different priority habitats sit together within the landscape, the habitat requirements of the priority species that we want to attract and how people will utilise – and benefit from – this wetland landscape.

By creating **more** places for wildlife that are **bigger, better** and **joined-up**, we can create a coherent ecological network along this section of the Trent Valley, which is resilient to the impacts of climate change.

Taking a strategic, co-ordinated and landscape-scale approach also provides a range of economic, social and cultural benefits including:

- **sustainable flood risk management:** identifying opportunities for reconnecting the river with its floodplain in a way that helps to reduce: (i) downstream peak flows; (ii) the risk of flooding to downstream communities; and (iii) the need for hard flood defences in urban areas downstream.
- **access and recreation:** increasing public access, both on land and from the river, as well as providing a range of recreational, volunteering and educational opportunities – including the development of rural skills – with knock on benefits for health and wellbeing.
- **local economy:** strengthening, diversifying and complementing the visitor appeal and economic activity of the local area, leading to an increase in tourism (including more overnight stays) and inward investment.



Case study Benefits for fish populations and angling

The lower reaches of the River Trent are home to an incredible species composition and number of fish. However, the river remains far from perfect and still struggles to support the full recovery of a number of species. Further improvements for all species, including migratory species such as salmon and eels, now requires a more strategic approach, which can only be achieved using a landscape-scale approach. A co-ordinated approach to mineral restoration would help to provide connectivity between the right habitats in the right locations for the right species.

Demand for fishing across England remains high and the prospect of more opportunities in the Trent catchment, sensitively designed and sensibly managed, will once again see anglers travelling across the country to take part. Landscape-scale improvements to the river will not only benefit fish but also other wildlife that follows, including the iconic otter and kingfisher. Together, these are likely to increase tourism and have significant benefits for the local economy.

Newark to South Clifton Concept Plan



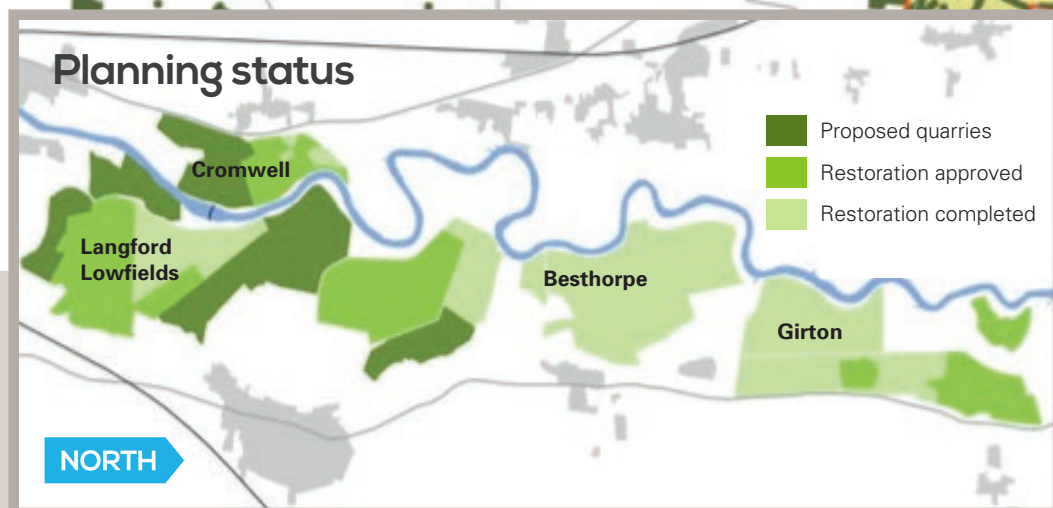
Key for main map

- Lakes and rivers
- Reedbeds
- Seasonal wet grassland
- Dry grassland (including acid and neutral grassland)
- Trees and woodlands
- Farmland on restored quarries (other farmland not shown here)
- Towns and villages

Location map



Please note: the detailed habitats shown here are purely indicative in those areas where restoration designs have not been prepared, or where mineral consent has not yet been granted. All mapped information shown here is included without prejudice to any landowner or other party.



The Newark – South Clifton cluster

This document focuses on the cluster of four mineral sites north of Newark in the Trent Valley – Langford Lowfields, Besthorpe, Girtton and Cromwell. The first three of these sites, operated by Tarmac, form a near continuous belt, stretching some 10 km along the east bank of the River Trent. Cromwell, lying on the west bank of the River Trent, consists of three separate quarries – one operated by Tarmac, to the north, and two operated by CEMEX, to the south.

The total permitted area for these four sites is 927 ha, of which approximately 530 ha has already been restored. An additional 254 ha of proposed allocations provides a total area of about 1,200 ha. Figure 1, overleaf, sets out a concept plan of how the sites could be restored, with an emphasis on biodiversity-led restoration. Further details about these sites are provided in the table below.

Mineral site data

Site	Status – Current / Allocation	Area (ha)	Operator	Start date	Likely end date	Actual / anticipated restoration (N.B. Priority wetland habitats include reedbed, wet grassland, ponds, scrapes and wet woodland)
Girtton	Current	331	Tarmac	1950s	2026	South: already restored to agriculture and water based amenity. North: will be restored to a wetland landscape of lakes and priority wetland habitats.
Besthorpe	Current	335	Tarmac	1940s	2017	North: already restored, primarily to agriculture with some wetland. The remaining restoration scheme is to open water and priority wetland habitats.
Besthorpe East	Allocation	36	Tarmac	2018	2026	Wetland landscape of lakes and priority wetland habitats, particularly wet grassland and reedbed. “The Fleet” watercourse, on the eastern boundary, provides a significant biodiversity opportunity.
Besthorpe South	Allocation	66	Tarmac	2027	2036	Wetland landscape of lakes and wetland priority habitats, particularly wet grassland and reedbed.
Langford Lowfields	Current	211	Tarmac	1990	2017	North: already restored to create a nature reserve, with significant reedbed habitat. The rest of the site will be restored as part of the same scheme, with wet woodland on the eastern border.
LL South	Allocation	27	Tarmac	2018	2022	Wetland landscape of lakes and priority wetland habitats.
LL West	Allocation	41	Tarmac	2023	2025	River flood wetlands, incorporating priority wetland habitats.
LL North	Allocation	31	Tarmac	2025	2030	Wetland landscape of lakes and priority wetland habitats.
Cromwell North	Current	20	Tarmac	1985	1994	Wetland landscape of lakes and priority wetland habitats.
Cromwell	Current	30	CEMEX	2015	2026	Wetland landscape of lakes and priority wetland habitats.
Cromwell South	Allocation	53	CEMEX	2027	2041	Wetland landscape of lakes and priority wetland habitats.
		1,181				



Making “the whole greater than the sum of the parts”

The way in which each mineral site is restored depends, to a large extent, on site-specific issues, such as the depth of minerals and overburden. However, detailed information on these issues is normally obtained in the run-up to submitting planning applications for individual sites.

So, whilst there may be aspirations for how individual mineral sites might be restored – and how this restoration might contribute to the ecological network of the cluster as a whole – the detailed restoration and after-use proposals are only worked up at the time that a site is being put forward for planning permission.

The scope for extensive creation of priority habitat is also limited by a lack of inert fill. At present, none of the mineral sites within this cluster import inert fill as part of their restoration schemes and there are no proposals to start doing so. As such, large areas of open water will remain a feature of any restoration scheme.



Having said that, there should still be considerable scope for taking **a strategic, co-ordinated and landscape-scale approach** to the development and restoration of this cluster of mineral sites. The key to achieving this will be to identify the specific opportunities where this approach can provide added value, such that the whole is greater than the sum of its parts.

Whilst this document provides a starting point for delivering this approach, providing “added value” will need to be an ongoing consideration for stakeholders throughout the development and restoration of these sites.

This added value could be provided in a number of ways. For example, points for consideration could include:

- ensuring that habitat creation on each individual site complements habitat creation across the cluster, rather than trying to cram too many habitats onto each individual site;
- ensuring that all of the key priority habitats are provided for, throughout the chronological development and restoration of this cluster of mineral sites;
- allocating any overburden and – if available and appropriate – infill material, to locations within the cluster where it would deliver the best outcomes for wildlife;
- “over-digging” in some locations (i.e. digging below the level of the sand and gravel resource), in order to provide infill material for habitat creation elsewhere in the cluster;
- identifying locations where it may be appropriate to leave some of the sand and gravel in-situ, in order to maximise the area of priority habitat and minimise open water;
- identifying key, landscape-scale opportunities to re-connect the river with its floodplain, in a way that also helps to reduce the risk of flooding downstream;
- agreeing the long-term management of the cluster of mineral sites at an early stage, such that economies-of-scale help to reduce the management costs per hectare;
- planning for, and marketing, the recreational, educational and economic use of the restored cluster as a whole, in order to strengthen the visitor appeal and enhance the local economy.



Working in partnership

This document has evolved from two workshops organised and facilitated by the RSPB and Nature After Minerals (NAM) in July 2014 and February 2015. These workshops brought together a number of key stakeholders, specifically Tarmac, CEMEX, Nottinghamshire County Council, Nottinghamshire Wildlife Trust, Trent Rivers Trust, Natural England and the Environment Agency.

These organisations have committed to working in partnership to ensure that this cluster of mineral sites delivers even more for wildlife and for people. This document provides an additional tool for stakeholders to use to complement the existing good work that is already taking place. It is envisaged that this partnership working will continue for the lifetime of these mineral sites and beyond.

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Images: Aerial view of Langford Lowfields from the NW (used by kind permission of Tarmac); pike by Crisod (dreamstime.com); Langford Lowfields by Ben Hall (rspb-images.com); Illustrations by Michael Warren. The Royal Society for the Protection of Birds (RSPB) is a registered charity: England and Wales no. 207076, Scotland no. SC037654. LLF-2155-15-16

