

Mersey Gateway Project

Widnes/Runcorn, Halton District, UK

Merseylink (MCCJV), Mersey Gateway Crossings Board, Mersey Gateway Environmental Trust

BIG Biodiversity Challenge Award category: Large Scale Permanent

Project overview

The Mersey Gateway Project is a £650,000,000 civil engineering scheme to build a six-lane cable-stayed bridge over the River Mersey and a 9.2km road network connecting the new bridge to the main motorway network in North West England. The project will provide a link between the towns of Runcorn and Widnes and relieve the congested, ageing Silver Jubilee Bridge. The project road passes through the urban areas of Halton district and the bridge section spans the rural areas of Widnes Warth and Runcorn saltmarshes. The project at its peak has employed nearly 1000 site and office staff. The enhancement project concerns the saltmarsh area and its improvement through a cattle grazing scheme over a three year period concluding this year (on construction completion). The initial proposed cost in 2015 was estimated at £13,000 per annum with involvement primarily from subcontractors.

What were the biodiversity conditions on site, prior to the enhancement?

Downstream of the project the saltmarsh and estuary are a designated site, however within the project area the

saltmarsh was depauperate; species diversity was poor and overwhelmed with Common Couch and had lost flowering species, however it supports a diverse community of breeding/over-wintering birds.

Were there any specific reasons that led to this project?

The project haul road crosses the saltmarshes but during construction, widening of the haul road was necessary by an additional 4m. MCCJV accessed the impact of widening and found it to be 'Not Environmentally Worse Than' the Environmental Statement (ES) as this still represented 1ha reduction based on the ES. The decision was taken to widen the road and mitigate the works by introducing a saltmarsh cattle grazing programme. Statutory bodies didn't require mitigation, the project felt this a worthy cause as grazed saltmarsh sequesters/stores high levels of carbon and the cattle provide local residents with a feeling of ownership.



Photo Description: Project Aerial

What were the biodiversity measures taken?

The saltmarshes have a history of grazing but had ceased; following habitat conducted surveys by MCCJV ecologists, it was determined the saltmarshes would benefit from light grazing. MCCJV arranged with a local grazier to support a small herd of (Belted Galloways and Longhorn) 3 cows and 3 calves (and a surprise arrival of another calf) on the Widnes Warth saltmarsh with the aim of opening up the sward, allowing sunlight to penetrate the substrate and improve species diversity.

The saltmarsh sediment is recognised as an important carbon store and in grazed areas has been shown to sequester and store higher levels of carbon than peat. Healthy saltmarshes attract invertebrates and insects which attract birds and bats, furthermore, flowering saltmarsh species are important for pollinators.

The project has engaged the local community with residents going to check on 'my cattle' and photographs on the project Twitter and Facebook pages generating positive feedback. To protect the cattle, project volunteers, staff and local people joined a litter pick across the saltmarsh and collected ½ tonne of washed up waste, mostly plastics.

The initial proposal cost was reduced significantly to approximately £5000 per annum due to the reuse of water pipe, fittings and troughs, recycling fence posts and project staff and volunteers checking on the cattle's health and donating their time freely. Innovation came in the guise of trackers on the herd so all project staff and public could see where the cattle had grazed. In the long term, a bespoke charity Mersey Gateway Environmental Trust will continue the grazing programme via monies from the Mersey Gateway Project and expand the area to include Runcorn saltmarsh incorporating 18ha of grazing. This grazing and enhancement to the saltmarsh will improve the natural connectivity with the downstream designated site.

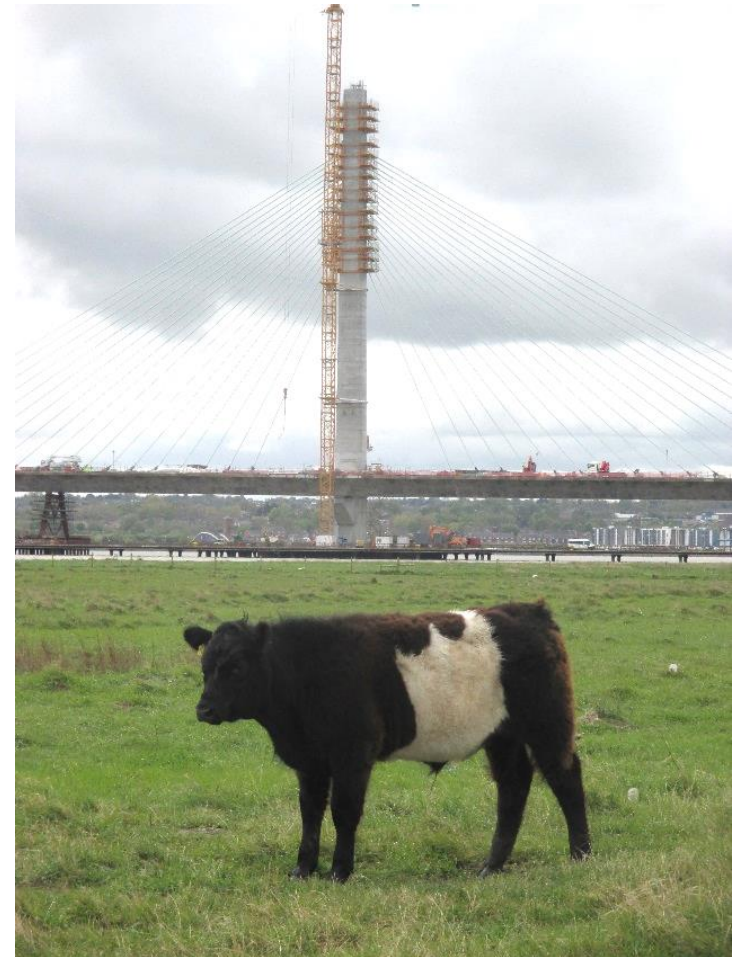


Photo Description: Surprise Arrival – Saltmarsh Calf



How would you best describe the project?

Mitigation

Further information

Prior to placing the cattle, MCCJV installed stockproof fencing around the grazing area; this was cleared of waste debris and water troughs were installed. A 600m long water supply from the construction site was connected to troughs. The cattle were transported through the site, then walked along a canal towpath to their grazing area by volunteering project staff. Checks are undertaken on the cattle and the water supply a couple of times a week by site staff and volunteers.

The main objective was to improve saltmarsh heterogeneity and whilst new habitat was not created, an improvement has been noted (via surveys) in grazed areas with the reintroduction of *Salicornia*, nesting lapwing and red shank and a higher diversity of invertebrates; a great contribution to Halton's BAP. In the long term, the Trust will continue the grazing and thereby enhancement in the saltmarsh, further connectivity of the saltmarshes will result.

Cattle grazing stopped on the saltmarsh some years ago due to insufficient water supply; to ensure longevity of the project this needs to be considered before embarking. Additionally, if the cattle are to be grazed over winter months trace heating or sufficient insulation of the water supply should be considered. Additionally, with the water supply, for best practice the troughs should also be fitted with owl proof floats to prevent drowning; we installed these from the outset constructed from reused construction materials.

The cattle have proved useful for starting biodiversity conversations as the herd can be viewed from many project locations.



Photo Description: Saltmarsh Herd

What was your personal motivation for carrying out the enhancement?

I knew from the start of the grazing that the Trust would continue with the programme long after construction was complete. To know that this will continue is a great legacy. It's such a lovely sight to see cows on the saltmarsh from the bridge; visitors can't help but smile.