

# **Funding environmental management and research over the long term**

## **the Mersey Gateway case study**

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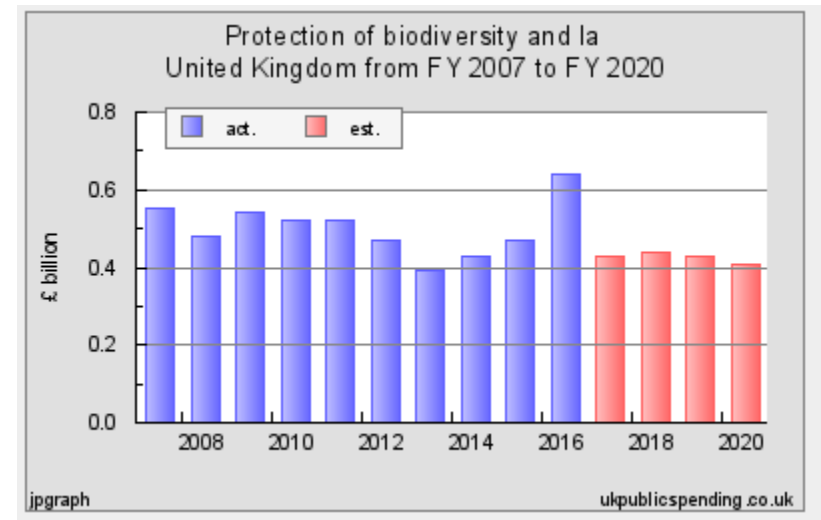
# Antecedents

- Reduced funding
- Limitations of existing systems

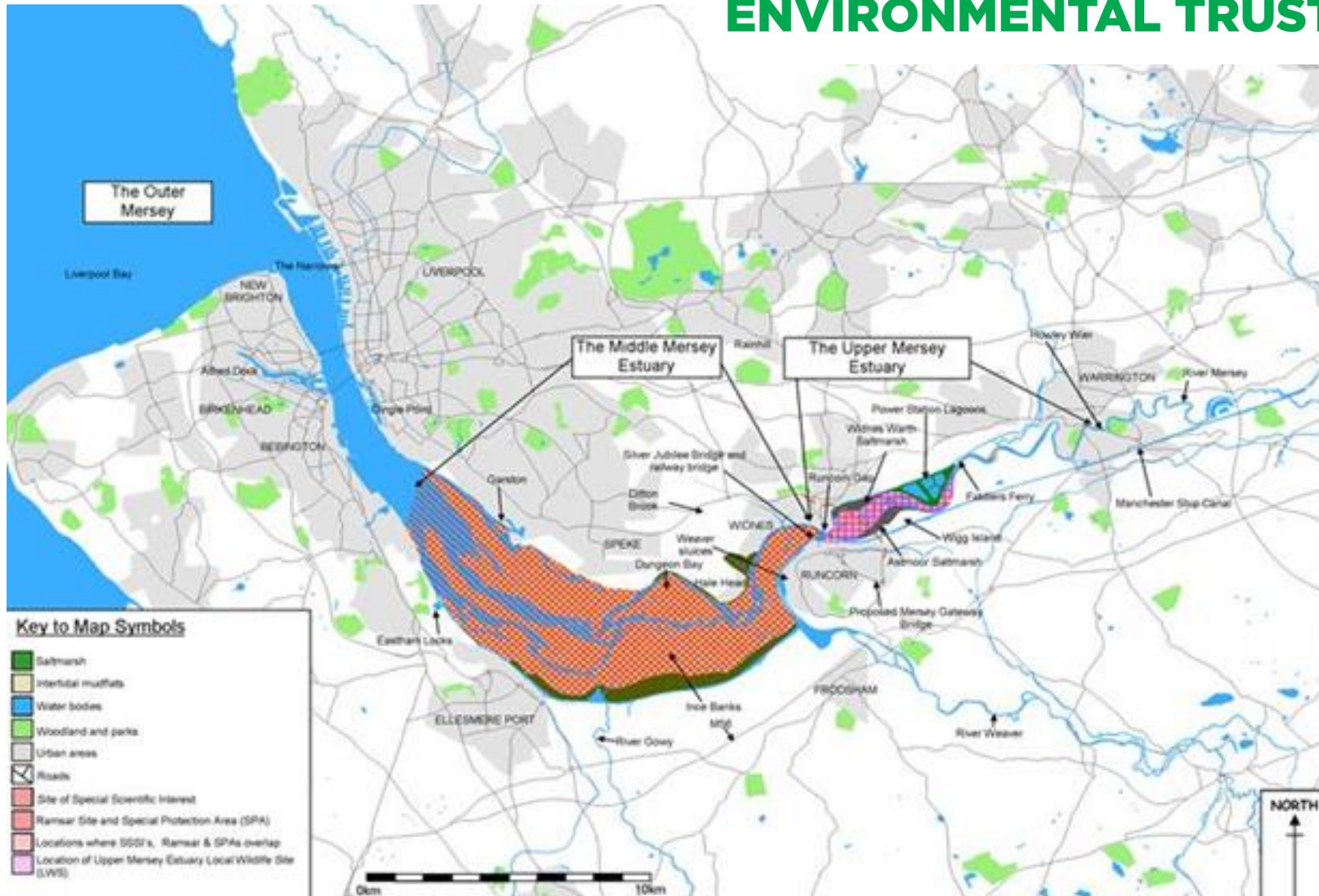
# Reduced funding

Sector	Date	Spend
NGO	2013-14	£215 million
UK Public Sector	2014–15	£452 million

Between 2009–10 and 2014–15, public sector spending decreased by 26 per cent, while NGO spending remained relatively stable.



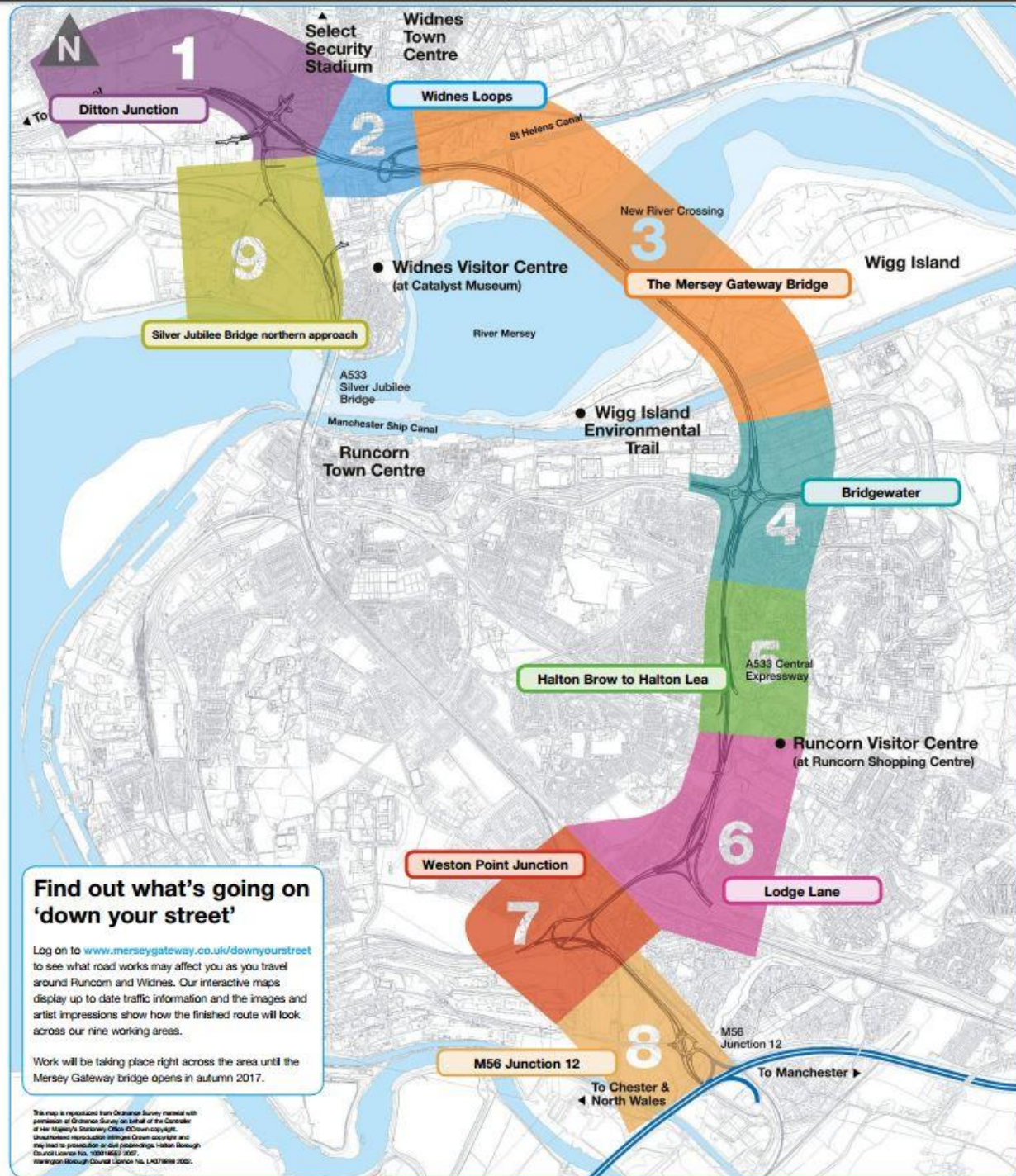
# MERSEY GATEWAY ENVIRONMENTAL TRUST





# Route of new crossing

■ land within construction area 75 ha



# Business as usual

Section 106, Town and Country Planning Act 1990 (As amended)

A mechanism which makes a development proposal , that would otherwise be unacceptable, acceptable in planning terms

Along with Highways Contributions and the Community Infrastructure Levy They are focussed on site specific mitigation of the impact of a development

# Limitations of S106 agreements

Agreements are legal agreements between Local Authorities and developers; these are linked to planning permissions and can also be known as planning obligations.

The most common obligations include:-  
Public Open Space , Affordable Housing, Education,  
Highways, Town centre Improvements

**What happens when the Local Authority is the Developer?**

# New approach

- Previous landscape ecology research
- Lawton Report (2010) & Natural Environment White Paper (2011)

 HM Government

**Making Space for Nature:**  
A review of England's Wildlife Sites and Ecological  
Network

Chaired by Professor Sir John Lawton CBE FRS

Submitted to the Secretary of State, the Department for Environment, Food and Rural  
Affairs on 16 September 2010

**The Natural Choice:**  
securing the value  
of nature





# Previous studies

- Habitat mapping
- Species distributions
- Species movements

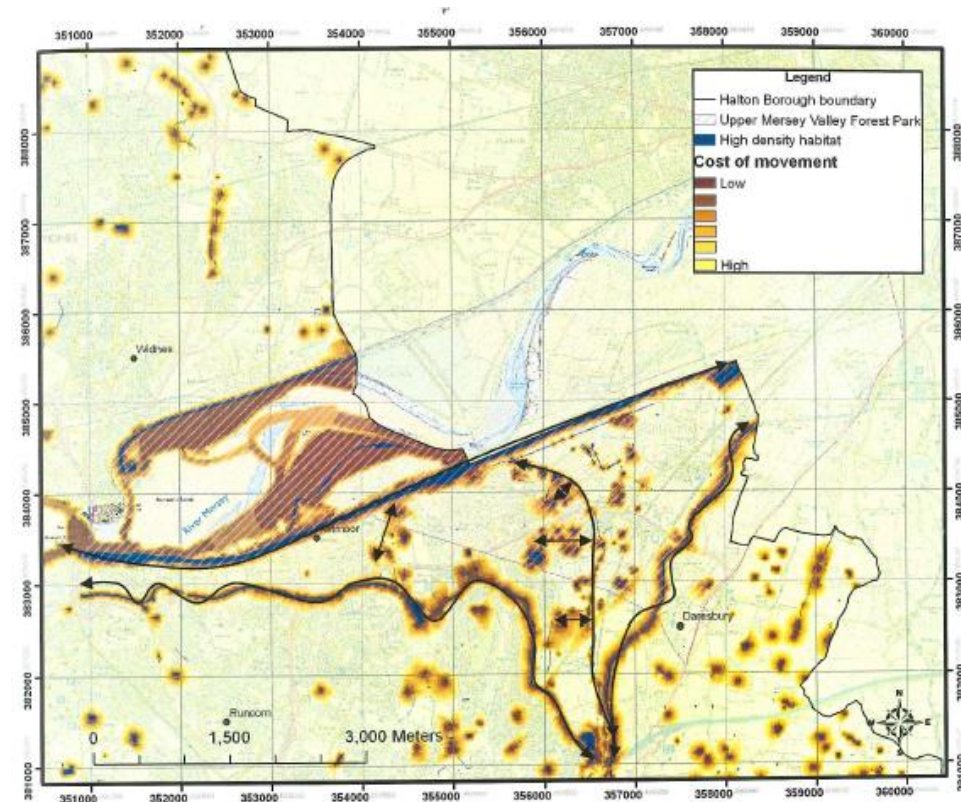


Figure 7-8 Opportunity map for water vole (*A. terrestris*) within the proposed Upper Mersey Valley Forest Park

Base map is © Crown Copyright/database right (2008). An Ordnance Survey/EDINA supplied service. Modelling using Phase 1 habitat data courtesy of Halton Borough Council (2008). Arrows indicate potential connections of low ecological cost

# Waders and wildfowl



# Terrestrial ecology



- Common spotted orchid, Bee orchid, Gatekeeper on fleabane
- Sedge warbler, Lapwing, Marsh orchids
- Willow warbler, brown long-eared bat



# Conservation grazing



# The Innovative Solution

- Establish an environmental trust funded from the development, including tolls.
- The Trust, established as a charity, will be responsible for managing the mitigation areas on the estuary once the Mersey Gateway construction work has been completed.

## The Trust

- The Trust will be funded for a 30-year period and the activities to be carried out will include:
- monitoring of bird species, habitat, freshwater courses and water quality.
- a scheme and programme for the mitigation of the effects of the Project.
- implement a scheme for the improvement of bird breeding habitat and aquatic ecology.



# MERSEY GATEWAY ENVIRONMENTAL TRUST



 The 1600 hectare area covered by the Mersey Gateway Environmental Trust

**1,654 ha of land and water –  
compared to 75 ha**

# Living Laboratory – Monitoring





# Living Laboratory – Ecosystem services

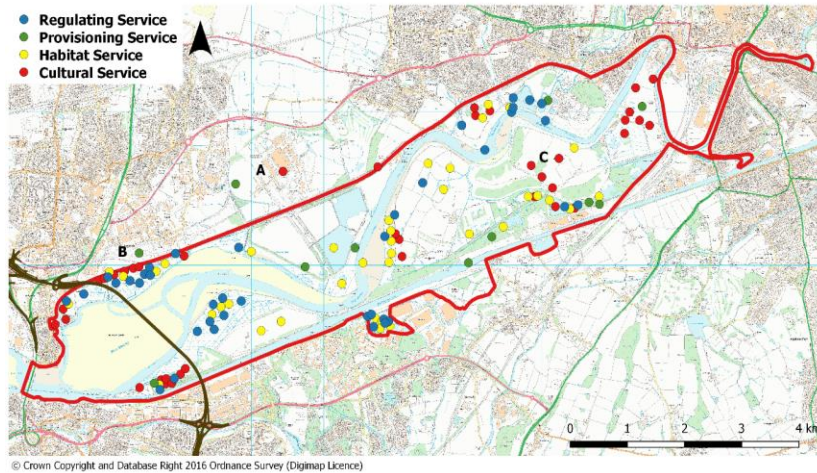
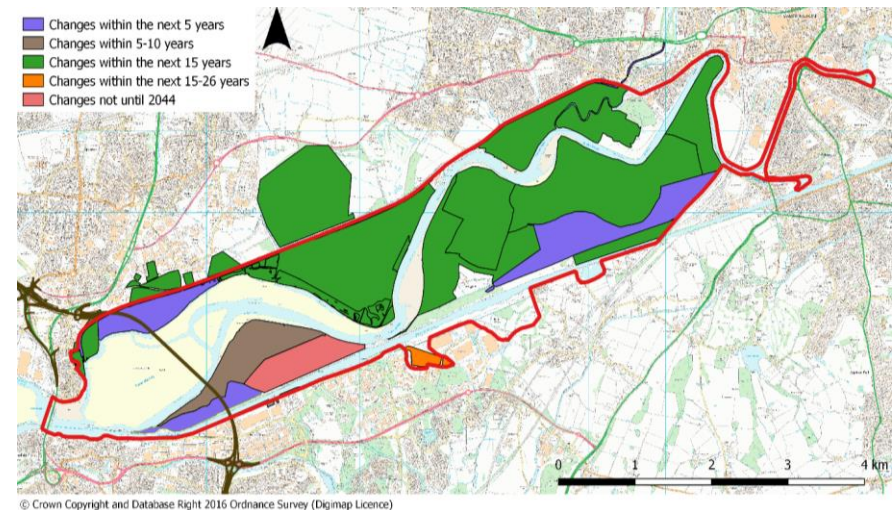
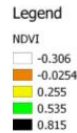
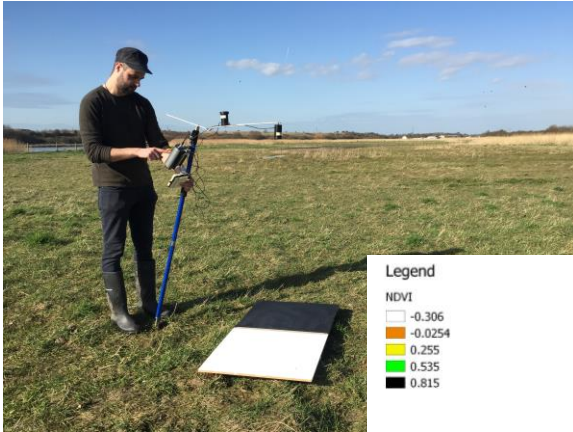


Figure 1 Map of Upper Mersey Estuary, with identified locations of ecosystem services as a product of the Delphi workshop. Points A = Fiddlers Ferry, point B = Tan House Lane, Point C = Arpley landfill.

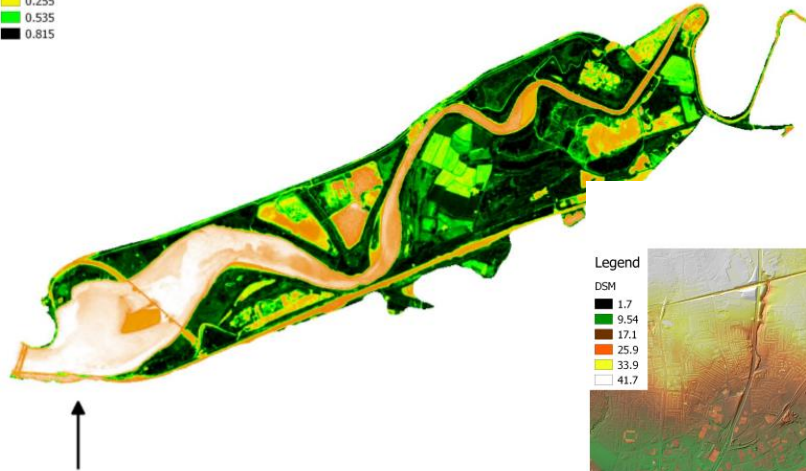


Changes of the estuary anticipated by the participants of the Delphi workshop per site compartment. Intervals of change were given as i) changes within the next 5 years; ii) changes within the next 15 years; ii) changes within the next 26 years; iv) no changes until 2044.

# Living Laboratory – Habitat improvement

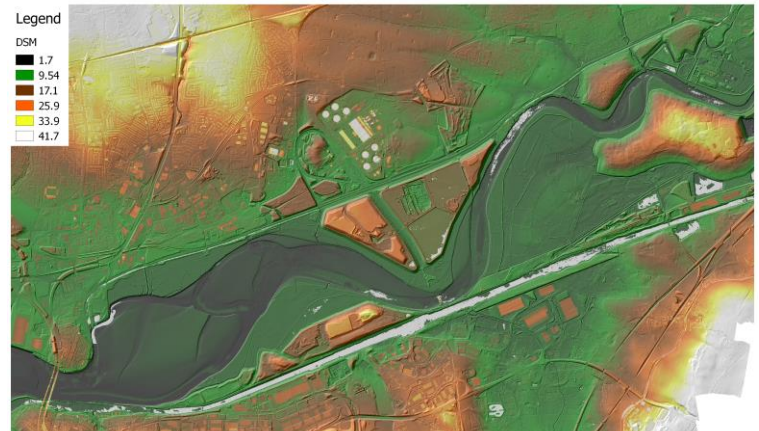
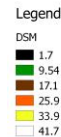


Upper Mersey Estuary NDVI  
(Vegetation Presence) June 2016



DSM UME 2010

EA 2016



# Take Home Messages

- Significant environmental gains through innovative thinking supported by an on-going research focus.