



Wetlands: Climate change & the Chester Wetland Centre

DR CHRISTIAN DUNN







**“To work in them you
normally need wellies
but you don’t need a
boat”**





Giant inefficient compost heaps









Tollund Man
Denmark
1950
2,500 years old



Lindow Man
Cheshire
1984
2,000 years old

Cashell Man
Ireland
2011
4,000 years old



Carbon Farming



The Carbon Farmer

1,124 views

13 1 SHARE SAVE ...



National Trust
Published on 3 Dec 2018

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Wetlands

What have they ever done for us?

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Wildlife

Unique and diverse habitats for flora and fauna



Culture

Inspiration for many ancient and modern art forms and spirituality



Resources

Everything from food, to building materials and medicines



Clean water

Natural and constructed wetlands treat and filter wastewater



Flood prevention

Help mitigate flooding events by storing and slowing water flows



Civilisation

Birth place of many early civilisations



Defence

Used strategically in battles and wars



Wellbeing

Provide recreational spaces and activities



Climate control

Prevent dangerous amounts of carbon from entering the atmosphere



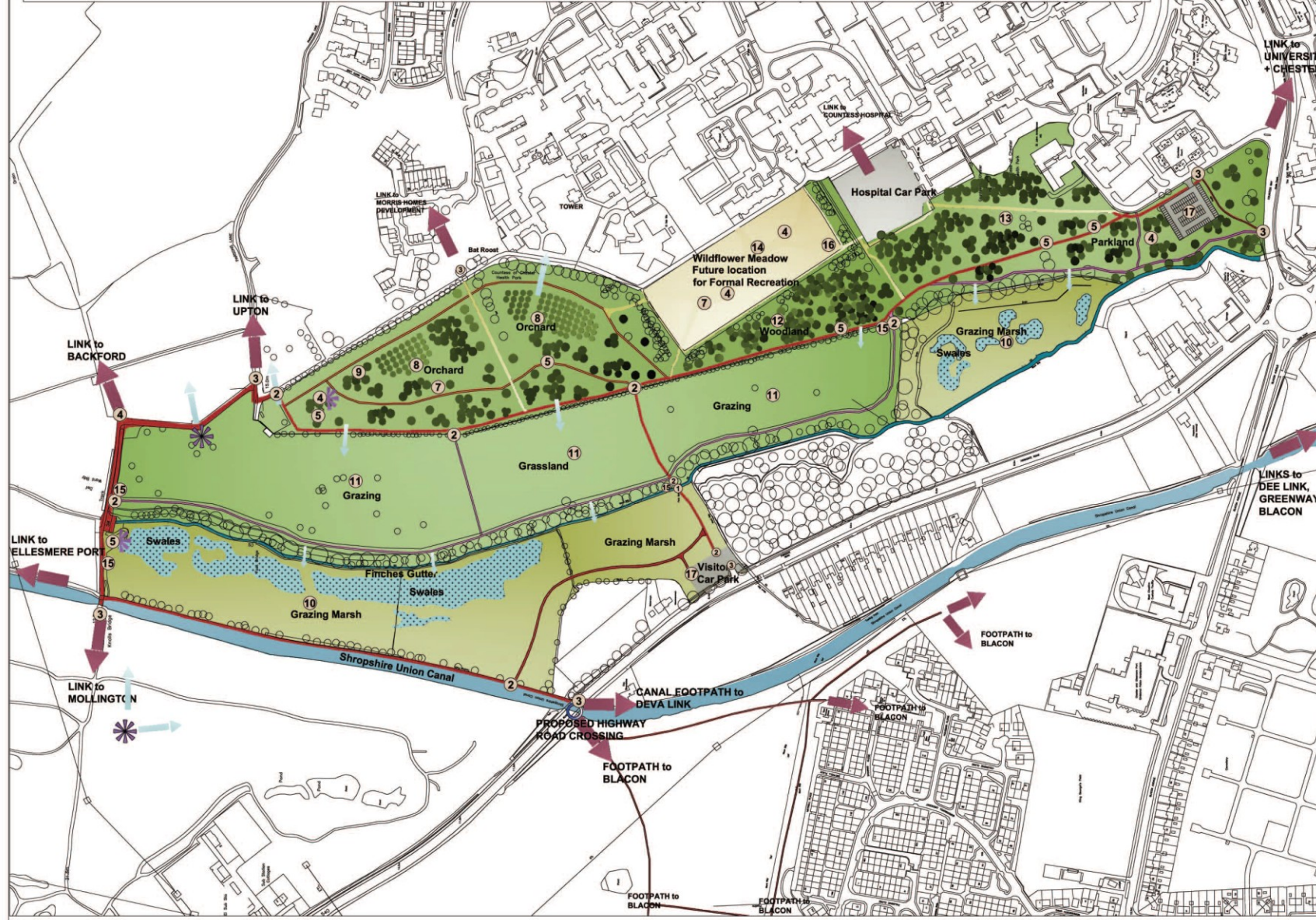
HM Government

A Green Future: Our 25 Year Plan to Improve the Environment

We will work with nature to protect communities from flooding, slowing rivers and creating and sustaining more wetlands to reduce flood risk and offer valuable habitats.

MASTERPLAN (Draft)- Countess Country Park

18



- KEY**
- Existing Trees
 - New Tree Planting
 - Hedge
 - Existing Hedge Layered
 - Canal / River and Swales
 - Marginal Wetland Habitat
 - Footpath - Main Circular Walk
 - Footpath - Secondary
 - Footpath - Mown Grass or Bound Gravel
 - Footbridge
 - Kissing Gate
 - Main Entrance Gateways
 - Picnic Area
 - Seating
 - View Points
 - Vantage points Key Views
 - Wildflower Planting
 - Orchard
 - Play Area
 - Grazing Marsh
 - Grassland - Grazed
 - Woodland
 - Parkland
 - Formal Recreation
 - Timber Access Gates
 - Green Waste Collection
 - Car Park

Rev A JS 31st Jan 2010
Additional Car Park

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COUNTSS OF CHESTER
COUNTRY PARK

MASTERPLAN

Drawing No: C.004/01 Rev
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Date: October 2010



SPECIALIST ENVIRONMENTAL SERVICES
Backford Hall
Chester, CH1 6PZ
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MASTERPLAN (Draft)- Countess Country Park

KEY
Existing Trees
New Tree Planting

19



XRef drawings and Raster images attached to this drawing: >





Wet meadow

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Wet meadow

- ▶ Brief periods of flooding and longer periods of saturation
- ▶ Occasional standing water
- ▶ High plant diversity
- ▶ Attract large numbers of birds, small mammals and insects
- ▶ Meadow – regular vegetation removal
- ▶ Becoming rarer in the UK



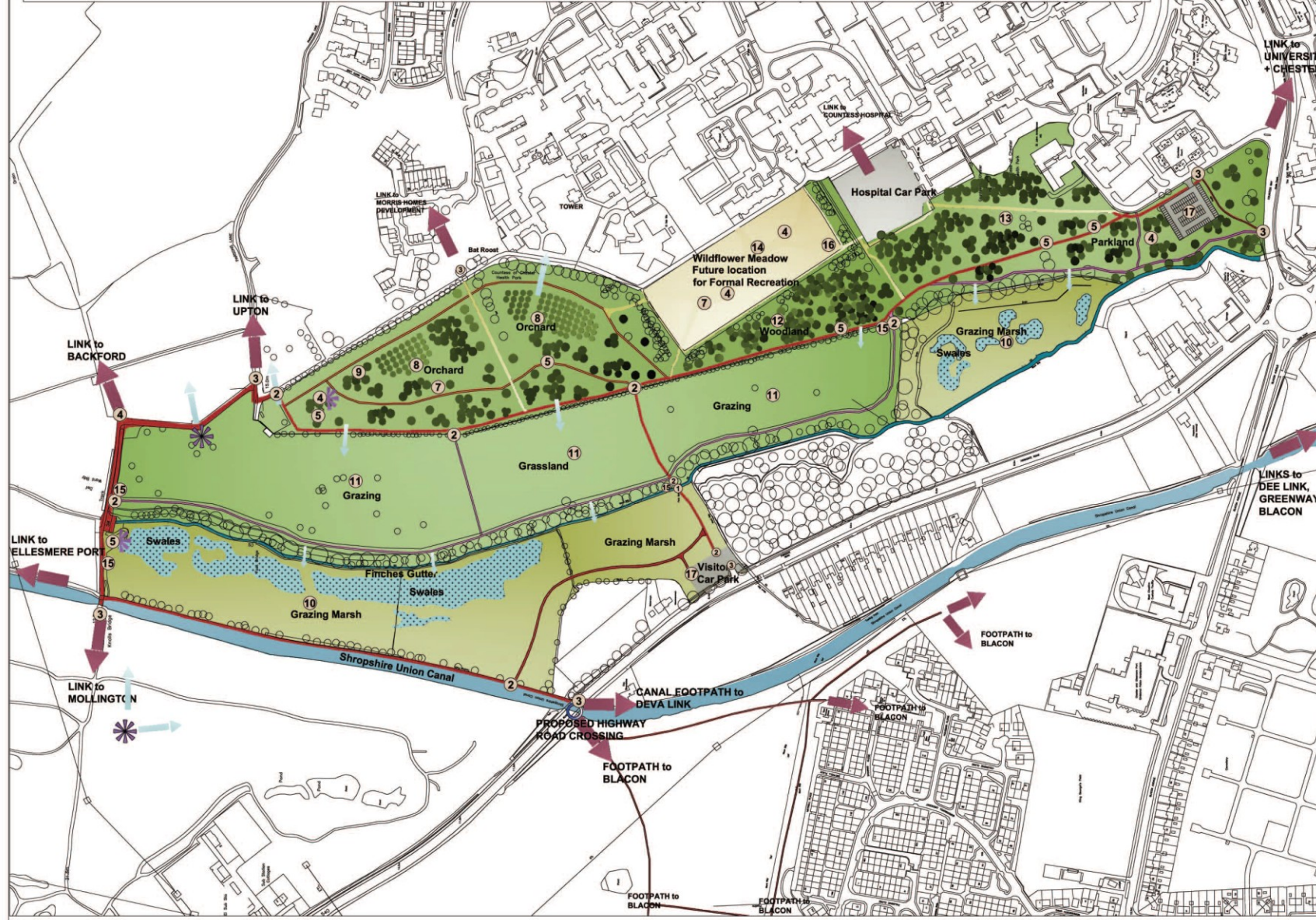
The Hay Wain. John Constable. 1821

How?

1. Amount of water (and when)
2. Quality of water
3. Vegetation management

MASTERPLAN (Draft)- Countess Country Park

25



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Where we're at...



- ▶ Advisory panel
 - ▶ EA, CWaC, Friends group, Land Trust, local MP and councillors, Bangor University, Chester Zoo, Cheshire Wildlife Trust, Chester University, TCV Merseyside, Friends of the Earth Chester & District
- ▶ Project group
- ▶ Land acquisition
- ▶ Surveys
- ▶ Fundraising

The steps

1

Building initial
treatment wetland &
irrigation channels

2

Flood water holding
area. Vegetation
management.

3

Board walks and
educational
resources

4

Hide/educational
centre

The wins

- ▶ Create a rare, beautiful and valued habitat
- ▶ Increase biodiversity
- ▶ Aid flood mitigation
- ▶ Treat water pollutants
- ▶ Educate
- ▶ Research site
- ▶ Wellbeing



The potential?

London Wetland Centre



Chester Wetland Centre

