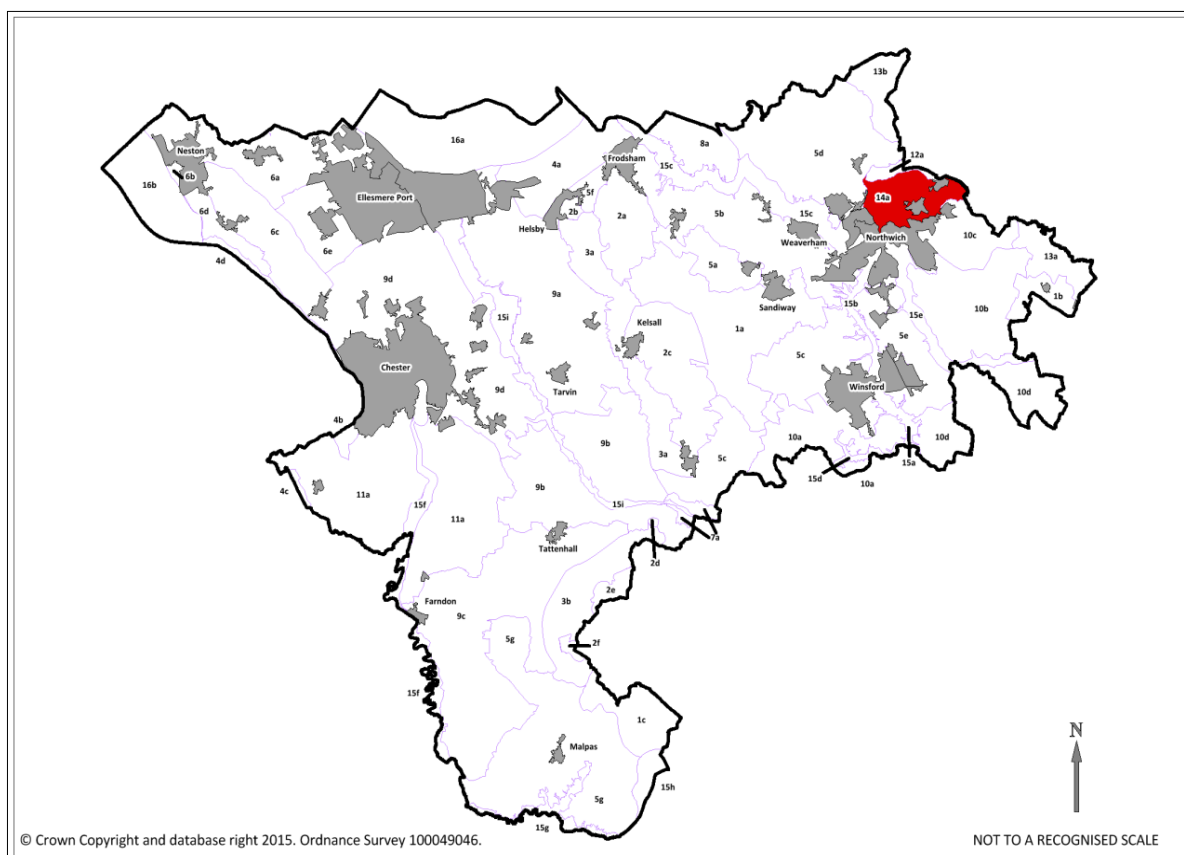


## LCT 14: SALT HERITAGE LANDSCAPE



### General Description

The presence of salt in parts of Cheshire has had a considerable and dramatic impact on the landscape of the Cheshire West and Chester borough. What began as the small-scale exploitation of naturally occurring brine springs escalated following the industrial revolution. The intensive process of extracting salt via brine pumping and mining led to the creation and eventual collapse of a number of large underground cavities, thus forming the flashes, which are effectively water-filled craters. Another feature associated with salt production is lime beds, the waste products from the production of soda ash.

The presence of salt in CWaC has resulted in three unique and valuable wildlife habitats: *saltflashes*—lakes caused by subsidence, *lime beds* produced by spoil from the chemical industry and *inland salt marsh* due to natural brine springs and spillage from the salt industry.

Factories and infrastructure have been cleared away, and areas of derelict land regenerated under England's national programme of Community Forests. The Mersey Forest Partnership has been the catalyst since the early 1990s for the transformation of approximately 350 hectares of former industrial land on the northern edge of Northwich into nine inter-connected landscapes that make up the Northwich Woodlands.

### Visual Character

A complex 19<sup>th</sup> and 20<sup>th</sup> century, post-industrial, gently undulating urban fringe landscape, punctuated by extensive salt flash lakes and river valleys of the River Weaver and River Dane, themselves fed by brooks in deeply incised valleys. Remnant and derelict salt industry infrastructure is evident, particularly the brine cisterns and lime beds with some industrial buildings remaining.

Some more pronounced areas with elevated topography are evident by the river valleys and where reclaimed lime beds have been modelled into the landscape creating public spaces, such as Carey Park and Anderton Nature Park, part of the extensive Northwich Woodlands. Wetland habitat successions have served to soften former industrial flash waterscapes caused through subsidence and where unique calcareous habitats have developed in the wake of industrial decline. Maturing woodland is prominent across the river valley sides and brook valleys. Areas of newly planted woodlands are evident across the area, creating a mosaic of land use with mixed pastoral and arable farming across the northern fringes of the area. Past and current industrial infrastructure outside the area dominates many views, none less so than the imposing Winnington Works.

### ***Physical Influences***

The solid geology beneath the salt flashes comprises Wilkesley Halite. This is overlain by Devensian till interspersed with glacio-fluvial sand and gravel. Soils are pelo-stagnogleys and typical stagnogleys.

Rock salt deposits in Cheshire are not exposed and always terminate some distance below the ground surface. Within the borough, as elsewhere in Cheshire, salt has therefore been obtained by mining or brine pumping or in the early days from natural brine springs, rather than being worked from the surface.

There are limited natural calcareous substrata and therefore the only extensive calcareous habitats that occur are the result of the salt and chemical industries. For example, the lime bed at Ashton's Flash supports calcareous grassland and the site has been colonised by a wide range of species that are typical of calcareous habitats. Inland saline habitats are also extremely rare and are of considerable interest because of the unusual associations of plants and animals normally found near the coast.

The 'wich' (see Cultural Influences below) saltland areas are also of considerable interest for breeding and migrating birds including teal and wigeon. The shallow water and muddy margins of Neumann's Flash attracts wildfowl and waders. The open lime beds are important for invertebrates, especially butterflies. For example Ashton's Flash near Northwich is one of only four known breeding sites in Cheshire for the Dingy Skipper.

### ***Cultural Influences***

Salt has been an important Cheshire product from at least the Iron Age. The small settlements (vicus) which grew up adjacent to the Roman roads and Auxiliary Cavalry forts at Northwich and Middlewich industrialise what may have been a domestic industry prior to the Roman occupation. A further settlement specialising in salt production was subsequently established at Nantwich and these three settlements develop into the three Cheshire 'wich' towns. By the medieval period, Nantwich is by far the most significant producer of salt in the county, but by the eighteenth and nineteenth century the focus has shifted to Northwich, and to a lesser degree, Winsford and Middlewich.

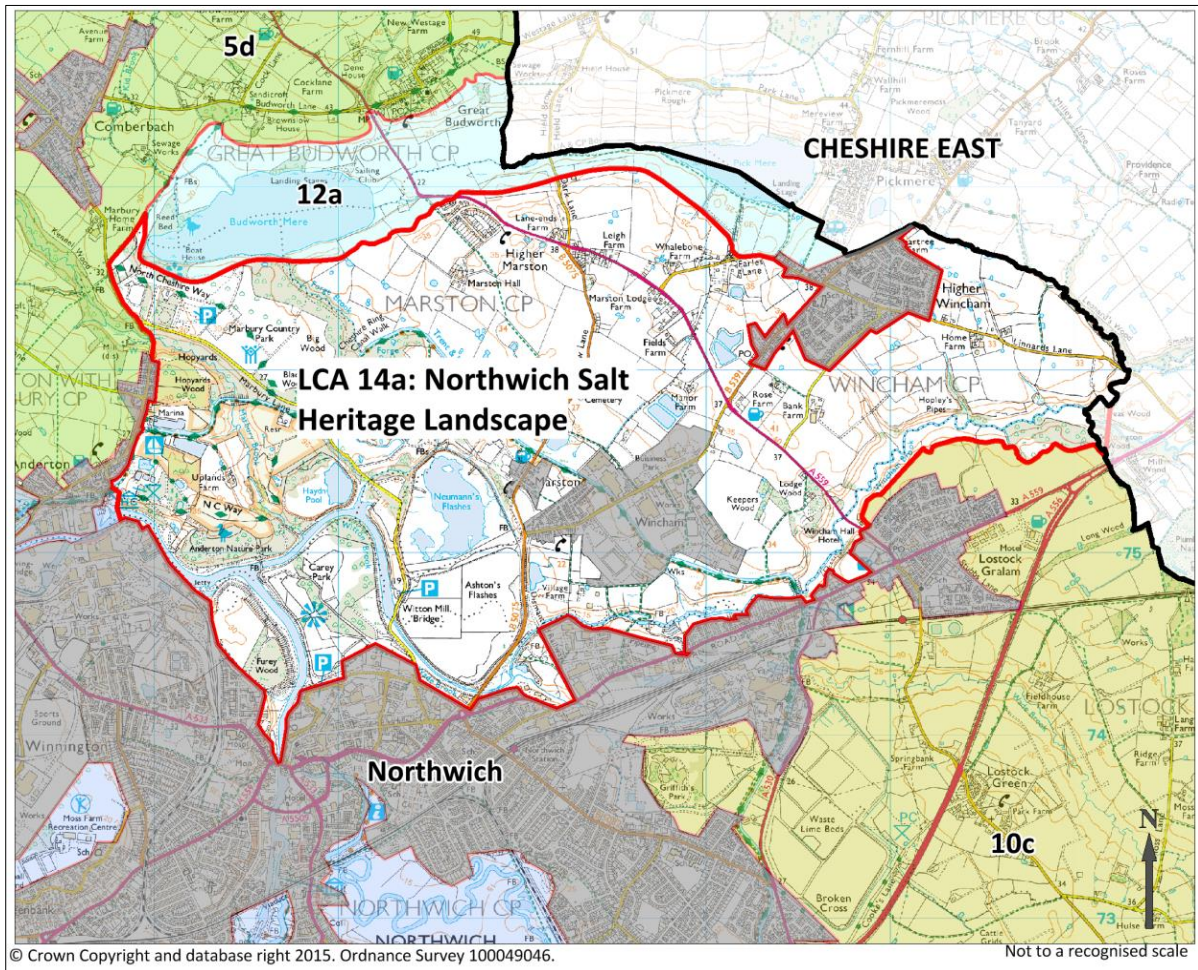
By the industrial revolution it was possible to raise large quantities of brine to the surface utilising steam pumps. From the mid-19th century competition for salt production saw brine pumping enter a frenzied phase pumping 'mine' or 'bastard' brine from the old salt workings. The fresh water that rushed in to replace the pumped brine dissolved the mine support pillars causing massive and spectacular subsidence, hence creating the flashes at the surface.

Calcareous wastes (calcium carbonate and calcium sulphate) from soda ash production have historically been pumped as sludge into lagoons to settle. The artificial boundary walls of these

lagoons are also calcareous. It is these lime lagoons, both wet and dried out, that have produced unique inland calcareous habitats.

There is **one Landscape Character Area** within LCT 14:  
**14a: *Northwich***

## LCA 14a: Northwich



### Location and Boundaries

The **Northwich Salt Heritage Landscape** is an area of formerly extensive salt works on the northern outskirts of Northwich. It incorporates the confluence of Wade Brook and Marbury Brook with the River Weaver and a large area of subsidence flashes. To the north lies the *Mere Basin* and to the south is the urban area of Northwich.

### ***Key Landscape Characteristics of LCA 14a: Northwich***

- Naturally flat low-lying topography, but with man-made mounds in areas of reclamation
- Underlying geology containing rock salt
- A post-industrial landscape of subsidence flashes surrounded by a mosaic of grassland, marsh, scrub and woodland forming the heart of the Northwich Woodlands
- Brooks in mostly steep-sided valleys, including Wincham Brook, Wade Brook, Witton Brook and Marbury Brook
- Lime beds, containing the waste products from the production of soda ash, support calcareous grassland within prominent bunds
- Inland salt marsh is also present, due to natural brine springs and spillage from the salt industry
- Former salt works and industrial archaeology characterise the area e.g. standing remains of the Lion Salt Works preserved at the Lion Salt Works Museum and remnants of the Adelaide works beneath the Adelaide Flash
- Current industry influences the area - including the prominent E.ON steam pipeline and the Brunner Mond works in the adjacent Lower Weaver Valley
- To the north-east of Marston is an area of post medieval enclosure, recognisable as irregular, straight-sided fields
- Part of the Trent and Mersey Canal (a Conservation Area) passes through this area with its associated artefacts of industrial archaeology including wharves, bridges, canal loading bays, waterside pubs
- Anderton Boat Lift, a Scheduled Monument and major visitor attraction, lifts boats from the River Weaver up to the Trent and Mersey Canal
- Unique diverse range of habitats and landscapes and extensive recreational opportunities within Northwich Woodlands comprising Carey Park, Ashton's Flash, Neumann's Flash, Dairy House Meadows, Witton Mill Meadow, Marbury Country Park, Anderton Nature Park and Furey Wood. Marbury includes the formal designed landscape and estate grounds of Marbery Hall (demolished)
- Settlement is defined by the 19th century village of Marston (a Conservation Area), scattered farmsteads, and 20th century development at Higher Marston and Higher Wincham
- The village of Marston and the Trent and Mersey Canal have strong connections with the salt industry
- Beyond Northwich Woodlands, typical built materials are red Cheshire brick and Welsh slate roofs, although industrial buildings include cast iron and timber
- The skyline is not prominent – horizon views are formed by new tree planting and industrial buildings both inside and outside the character area
- There are panoramic views from artificially created high points within the Northwich Woodlands e.g. Carey Park – these are typically long views across the River Weaver to a backdrop of woodland, industry and Northwich town centre.

### ***Key Landscape Sensitivities, Qualities and Value***

#### **Natural / Physical**

- The thick beds of rock salt contained in the Northwich Halite Formation which underlies the area has had a considerable influence on the appearance of the landscape of this area;
- The area also incorporates the confluence of Wincham Brook/Wade Brook/Witton Brook and Marbury Brook with the River Weaver which adds to the complexity of the landscape with steep sided valleys over-deepened by the erosive power of the glacial meltwaters;



- Winnington & Peas Wood and neutral semi-improved grassland meadows on the Wincham valley floor are examples of habitats recognised as sites important for nature conservation;
- Underground salt extraction processes have led to the creation of a number of large underground cavities. Following ground collapse, the craters filled with water, creating flashes;
- These water bodies are surrounded by a mosaic of grassland types, marshy hollows containing species rich grassland, ditches and minor pools, earthworks and industrial archaeological features;
- Marston Meadows is an area of species rich grassland adjacent to the Trent and Mersey Canal - the canal was realigned in 1957 because of threatened subsidence, and excavated material led to the formation of this wet meadow with fen vegetation and scattered scrub;
- Salt industry lime beds, (the waste products from the production of soda ash) have created calcareous habitats, including Anderton lime bed and Witton lime bed (in Carey Park), designated a SSSI;
- Birch and willow has colonised extensively and provides habitat for warblers and other birds as part of Anderton Nature Park;
- Furey Wood (a former landfill site) has been colonised by plants that are typical of calcareous habitats, and a significant amount of trees;
- Marbury lime bed was never used for lime disposal and is now a mixture of arable land, improved grassland, semi-improved grassland, scrub, wetland and open water—an area known as Dairy House Meadows - all Local Wildlife Sites;
- Adjacent to Dairy House Meadows is Marbury Country Park which includes Lime Avenue within the formal designed landscape and estate grounds of Marbury Hall (demolished), with ancient broadleaved semi-natural woodland dominated by oak, sycamore and ash with a diverse ground flora;
- Inland salt marsh is also present, due to natural brine springs and spillage from the salt industry. These are of considerable interest because of the unusual associations of plants and animals normally found near the coast.

#### Cultural / Heritage / Historic

- Salt extraction has been influential on the landscape of the area since Roman times;
- The first rock-salt mines date from the 17th century – one was located near Marbury lime bed, while another is under Neumann’s lime bed;
- The last rock salt mine to be worked was Adelaide in Marston, which collapsed to form the Adelaide Flash in 1928. Remains of the works can be seen when water levels are low;
- Today the New Cheshire Salt Works is the only remaining works based on natural underground brine and forms a modern landmark building on the B5391 through Wincham;
- Standing remains of the Lion Salt Works at Marston are preserved at the Lion Salt Works Museum and include distinctive industrial buildings, including an engine shed and brick chimney that forms a local landmark and are designated as Scheduled Monument;
- The Trent and Mersey Canal, constructed in 1777 by James Brindley, passes through this area with its associated artefacts of industrial archaeology including wharves, bridges, canal loading bays and waterside pub (the former Wincham Hotel);
- The canal corridor is a Conservation Area and some of the structures are listed. It provides recreational opportunity for walking, navigation and other informal outdoor pastimes;
- Anderton Boat Lift, a Scheduled Monument and major visitor attraction, lifts boats from the River Weaver up to the Trent and Mersey Canal;
- To the north-east of Marston is an area of post medieval enclosure, recognisable as irregular, straight-sided fields;
- Marbury Country Park has been developed from the relic designed landscape of Marbury Hall, although the hall itself was demolished in 1968. The historic parkland is of local significance and

is now a recreational attraction providing a well-surfaced network of paths and bridleways as well as picnic facilities in a parkland setting;

- Largely derelict land left over from the salt and brine industries has been regenerated to provide a mosaic of habitats, landscapes and extensive urban fringe outdoor recreation opportunities covering approximately 350 hectares at Northwich Woodlands (part of The Mersey Forest) through access to Carey Park, Ashton's Flash, Neumann's Flash, Dairy House Meadows, Witton Mill Meadow, Marbury Country Park, Anderton Nature Park and Furey Wood, which together with the river and canal corridors present a significant green infrastructure asset close to Northwich.

#### **Built Development and Settlement Pattern**

- Settlement consists primarily of the 19<sup>th</sup> century village of Marston, later development at Higher Wincham and Higher Marston, and scattered farmsteads;
- Modern industrial and business estates at Wincham;
- The built environment and historic building patterns have been damaged through significant subsidence;
- Houses are typically red brick terraces with two storeys and Welsh slate roofs.

#### **Perceptual / Visual**

- Landscape that appears large in scale, but contains great variety and interest at the local level;
- The presence of derelict, new landforms, lime bed bunds, industrial archaeology and waterways, designed estate landscape at Marbury, produces a complex landscape although unified by its connection with the salt industry;
- There are panoramic views from artificially created high points e.g. from Carey Park – these are typically long views across the River Weaver to a backdrop of woodland, industry and Northwich town centre;
- The large amount of woodland provides changing colour with the seasons;
- Although this is a man-made landscape, it has a naturalistic character due to the presence of woodland, water and grassland. It lies to the north of Northwich where it forms a transition between town and country;
- The sense of naturalness is likely to increase with time as the woodland matures and artificial embankments blend with their surroundings;
- Despite the presence of industry within the area this landscape feels 'remote' from its context;
- Views and proximity to large scale industry (at Winnington and East Northwich) outside the character area have been retained to provide a connection to the areas industrial heritage;
- There are views from Marbury Country Park, on the north of the area, across Budworth Mere to the landmark of Great Budworth Church;
- Since this area is relatively low lying it does not have a strong skyline. The horizon, viewed from within the area, is formed by trees and industrial buildings. The undulating nature of the landscape means the low lying areas are hidden while hill tops are open and visually more sensitive;
- The lime bed bunds are prominent features locally;
- The area now contains a large amount of woodland planting and is mostly well screened from adjacent landscapes. This reduces its visual sensitivity. Furthermore the presence of woodland means there is some potential for mitigating visual impact of low lying features without the mitigation measures in themselves having an adverse effect on the character of the landscape;
- Residential settlement at Marston indicates the presence of sensitive residential receptors while the extensive recreational opportunities indicate presence of a large number of recreational receptors.

### Landscape Condition

This is a landscape that has seen dramatic change since the decline of the salt industry. Many parts of the landscape have been regenerated and improved over recent years and are now in an improving condition with significant tree growth on former industrial land. However, the area still includes some elements in poor condition.

#### CWaC Local Plan policies with an influence on the character of LCA 14a: *Northwich*

- Green Belt and Countryside;
- Natural heritage sites of national, regional and/or local importance;
- Nationally designated heritage assets (on Historic England's National Heritage List for England) and locally significant heritage assets;
- Flood risk and water management.

#### *Forces for Landscape Change*

##### **Past change**

- An historic industrial landscape where industrial processes have literally shaped the landscape through creation of flashes, lime beds and tips;
- Now being actively managed by rangers and volunteers over large parts for recreation, habitat and other green infrastructure benefits as Northwich Woodlands, part of The Mersey Forest;
- Significant increase in woodland cover and softening of industrial influences;
- Loss of architectural detail through rebuilding and modification of brick terraces in Marston village;
- Some loss of industrial heritage (although standing remains of the Lion Salt Works are preserved at the Lion Salt Works Museum) whilst natural heritage has become a principal land use;
- Loss of other heritage assets such as Marbury Hall, demolished in 1968, although the designed landscape remains as an important visitor attraction within Marbury Country Park.

##### **Potential future change / key issues affecting LCA 14a: *Northwich***

- Under the 2014 Mersey Forest Plan the Northwich Woodlands Forest Park will continue to be developed to provide further recreational facilities and habitats, screening, connectivity and interconnection with Northwich;
- Natural vegetation succession changing the character of the lime beds and bund walls;
- Urban / industrial expansion of Northwich;
- Inappropriate urban-edge informal recreation e.g. motorcycles / trial bikes;
- Climate change impacts of increased flooding on the water environment, leisure uses and habitats.



## ***Overall Landscape Management Strategy for LCA 14a: Northwich***

The overall management objective for this landscape should be to continue to **restore** and **enhance** the landscape and industrial archaeology through continued management, while **conserving** the unique habitats of the area and increasing connectivity with and the setting of Northwich and Wincham.

### ***Landscape Management Guidelines***

1. Support continued management of the Northwich Woodlands for nature conservation and recreation.
2. Support 'wood allotments' which provide firewood, and traditional woodcraft skills e.g. hazel coppicing.
3. Conserve the diversity of habitats that are of importance for biodiversity as well as contributing to the diversity of the landscape. Seek opportunities to extend/re-create areas of reedswamp, inland salt-marsh, marshy species-rich grassland and other wetland habitats.
4. Support the planned expansion of woodland (policy within the 2014 Mersey Forest Plan) to compliment the regeneration of Northwich and the setting for the employment areas to the east, principally at Wincham.
5. Planting near watercourses should consist of native species.
6. Control and reduce the spread of invasive species such Japanese Knotweed, Himalayan Balsam and Giant Hogweed.
7. Conserve and actively manage the lime beds that support calcareous grassland (for example through grazing) to maintain the open calcareous habitats.
8. Preserve the industrial aesthetic of the Trent and Mersey Canal and its setting – including associated artefacts of industrial archaeology such as wharves, bridges and canal loading bays.
9. Conserve the 'remote' and tranquil character of the area which results from the presence of naturalistic habitats and planting schemes.
10. Maintain views to the landmark of Great Budworth Church, for example from Marbury Country Park (across Budworth Mere).

### ***Built Development Guidelines***

- 1.** Preserve the structure and setting of the village of Marston that has strong connections with the salt industry and a unique character.
- 2.** Seek to restore the original architectural detail of the brick terraces in Marston village.
- 3.** Use of built materials such as red Cheshire brick and welsh slate roofs in residential buildings, and cast iron, Cheshire red brick and timber in industrial buildings, will maintain a continuity in use of materials and create a stronger sense of place.
- 4.** Enhance boundaries within the area by promoting repair of traditional brick wall boundaries and creating new boundaries that may enhance the apparent condition of the landscape.

