



CHESHIRE WEST AND CHESTER COUNCIL

Frodsham Solar DCO - EN010153

**Cheshire West and Chester Council's response to the
Examining Authority's second written questions and requests for information (ExQ2) issued on 13 March 2026**

Submitted at Deadline 5 – 26 March 2026

This document represents a table of responses by Cheshire West and Chester Council (**CWCC**) to the Examining Authority's second written questions and requests for information (**ExQ2**), in respect of Frodsham Solar Ltd's (**the Applicant**) application for development consent for Frodsham Solar Farm DCO (**the Project**). CWCC's comments for Deadline 5 (26 March 2026) are entered in the right-hand column and relate to the matters addressed to CWCC.



Application by Frodsham Solar Ltd for Frodsham Solar (EN010153)

The Examining Authority's second written questions and requests for information (ExQ2): Issued on 13 March 2026

Responses are due by deadline 5: 26 March 2026

Download a copy of this Microsoft Word version of the ExA's written questions, enter your answers and save the document using an appropriate file name. You can then submit the completed document by choosing 'Make a comment' and selecting 'Upload files'.



Abbreviations used:

AEol	adverse effects on integrity
BESS	battery energy storage system
BNG	biodiversity net gain
BoR	Book of Reference
BSMP	Battery Safety Management Plan
CA	compulsory acquisition
CA Guidance	Planning Act 2008: guidance related to procedures for the compulsory acquisition of land
CFRS	Cheshire Fire & Rescue Service
CNP	Critical National Priority
CWCC	Cheshire West and Chester Council
CWT	Cheshire Wildlife Trust
DCO	Development Consent Order
dDCO	draft Development Consent Order
EA	Environment Agency
EIA	environmental impact assessment
EIA Regs	The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
EM	Explanatory Memorandum
ES	Environmental Statement
ExA	Examining Authority

ExQ (1, 2)	The Examining Authority's first or second written questions
FLL	functionally linked land
FRA	flood risk assessment
gCO _{2e} /kWh	grams of carbon dioxide equivalent per kilowatt-hour
ha	hectare
Habitats Regs	The Conservation of Habitats and Species Regulations 2017
HE	Historic England
HRA	habitats regulations assessment
ISH	issue specific hearing
km	kilometre
LWS	local wildlife site
MW	megawatts
MWh	megawatt hours
NBBMA	Non-Breeding Bird Mitigation Area
NBBMS	Non-Breeding Bird Mitigation Strategy
PV	photovoltaic
NE	Natural England
NH	National Highways
NPA 2017	Neighbourhood Planning Act 2017



NPS	National Policy Statement
NPS EN-1	Overarching National Policy Statement for Energy
NPS EN-3	National Policy Statement for Renewable Energy Infrastructure
NPS EN-5	National Policy Statement for Electricity Networks Infrastructure
NSIP	Nationally Significant Infrastructure Project
oCEMP	Outline Construction Environmental Management Plan
oDEMP	Outline Decommissioning Environmental Management Plan
oOEMP	Outline Operational Environmental Management Plan
oLEMP	Outline Landscape and Ecology Management Plan
oCTMP	Outline Construction Traffic Management Plan
OL	Order Limits
PA2008	the Planning Act 2008
PRoW	public right(s) of way

RSPB	Royal Society for the Protection of Birds
SADA	solar array development area
SoCG	statement of common ground
SoS	Secretary of State
SPA	special protection area
SPEN	Scottish Power Energy Networks
SSSI	site of special scientific interest
tCO ₂ e	tonnes of carbon dioxide equivalent
TP	temporary possession
UK	United Kingdom
UW	United Utilities Water Limited
UXO	unexploded ordnance
WFD	Water Framework Directive
oWSI	Outline Written Scheme of Investigation
ZoI	zone of influence

The Examination Library

References in these questions set out in square brackets (for example [[APP-010](#)]) are to documents catalogued in the Examination Library. The Examination Library can be obtained from the following link: [EL web link](#)

It will be updated as the examination progresses.



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ExQ2	Question to:	Question:	CWCC Response
1. General and cross-topic questions			
2.1.1	Applicant All interested parties (IPs)	Solar Roadmap 2025 The applicant and all interested parties are invited to make any comments or representations about the Solar Roadmap 2025 and its applicability and implications for the proposed development. This is across all topics but, most notably, the areas of need, alternatives and waste management are likely to require some explanation and commentary.	As indicated on the Government website: The Roadmap details over 70 actions across a variety of areas including: - streamlining the grid connection process for solar - making the solar supply chain resilient, diverse and sustainable - demonstrating the government's commitment to eradicate the abhorrent practices of modern slavery and forced labour - proposals for mandatory community benefit funds for local areas provided by developers, to ensure communities enjoy the benefits of hosting new infrastructure The Clean Power Action Plan calls for the rapid acceleration of solar development (from 18GW to around 50GW by 2030) and the Solar Roadmap is a collaboration with industry to provide an action plan for delivery. The key seems to be a rapid increase, and to the end this ties in with comments below about not needing to keep a consent 'alive' through beginning a scheme, the focus should be on delivery. The Roadmap provides examples of multifunctional land use (and references a study in relation to increased bird usage (hectare for hectare). The Roadmap highlights the potential/need to unleash rooftop solar (an alternative in the broad sense to focus on ground mounted solar projects). The issue/importance of electricity networks and grid connection is well documented elsewhere, and it is one of the advantages (and reasons for the site selection) that Frodsham Solar has a grid connection agreement. Supply chain issues are dealt with reference to the Solar Stewardship Initiatives for one. Next generation panels are important, and the Applicant has referenced such efficiencies as a potential factor in undertaking major replacement activities. One challenge is liable to be balancing the commercial attractiveness of upgrading panels and minimising waste (associated with the removal of the older panels). The move to a Circular Economy and Recycling is highlighted. Chapter 6 of the Roadmap highlights the opportunities/challenges in tapping into the potential for skills and high-quality jobs. This is relevant in relation to ensuring that the provisions under Requirement 19 'skills and supply' chain are to the forefront of the process. The Applicant's comments at Deadline 4 [REP4-052] are acknowledged in relation to the Council's concerns over the timing of provision of the skills, supply chain and employment plan, but reliance on this being a high priority as the development progresses to implementation is dependent on Frodsham Solar's commitment to make it a priority. A commitment to engagement with some of the key actions in Chapter 6 would be a step in the right direction (e.g. actions on training infrastructure/engaging with local colleges/targeting hard to reach groups in terms of developing core competencies). The Working Together chapter of the Roadmap indicates the importance of community liaison (which the Applicant has commented too) and by including an additional community liaison group requirement in the DCO this would be likely to increase community confidence in the approach. The Council's representations on the community benefit fund have already been made, and the Roadmap reinforces the importance of the CBF and that it is adaptive to keep pace with industry norms. As part of the monitoring of success, it is important that progress towards the delivery is transparent and that there is a mechanism (either in the DCO requirements or oEMP for notification of the

ExQ2	Question to:	Question:	CWCC Response
			gross electrical output capacity / export capacity of each phase to the local planning authority.
2.1.2	Applicant	Grid connection statement At present, the grid connection statement [APP-145] predicts part energising of the project in 2029, with full construction completed 2030. The actual grid connection date is 2029 as per paragraph 2.1.4. The ExA notes that the examination completes on 30 April 2026, the recommendation report is due with the SoS by 30 July 2026 and, assuming the SoS issues a decision in 3 months, a decision made by 30 October 2026. Assuming pre-construction works commence immediately on the day of the decision, the skylark mitigation area would take time to establish (6 months – April 2027), the Non-Breeding Bird Mitigation Area (NBBMA) is said to require 6-9 months (January 2028) to establish, then construction would be 30 months (June 2030). This timetable assumes a smooth running and immediate attention to all works and activities but does not appear to account for avoiding the overwintering seasons (November to March) each year. This seems ambitious. Is the grid connection date secure? Further to that, on the basis of the above, the NBBMA would be delivered between April 2027 and January 2028. Are you confident that the Runcorn Spur Pipeline, if approved, would be built in advance of these dates?	
2.1.3	Applicant Frodsham Wind Farm Ltd	Any remaining issues Frodsham Wind Farm Limited submitted a relevant representation [RR-047] to the examination, but there are no further submissions expressly recorded in the examination. The ExA notes [RR-047] placed a holding objection to the proposed development. Is there still an objection, or is there now common ground?	

2. Principle of Development and Need			CWCC Response
Need case			
2.2.1	Applicant	Capacity and upper limits No energy cap is proposed for the project, allowing the solar farm to produce increased energy yields in the future following maintenance upgrades and panel replacements. This does however raise a few questions: 1) When the cabling for the development is initially laid, what capacity would the cables be able to manage (for example, would the cables be fitted with a greater carrying capacity than what would be generated at the onset of the proposal, thus reducing the need to dig them up when the panels are replaced)? 2) Regardless of what generation capacity is available now or in the future, would the project be restricted or constrained by the National Grid connection offer? Would you need to renegotiate the terms of that connection agreement before undertaking major replacement works? 3) Would any future increases in energy yield be in any way constrained by capacity at the SPEN Frodsham Substation? 4) Would the private wire agreements (if any) subvert the need for any renegotiation of the grid connection agreement? 5) It is noted that in table 2-13 [APP-035] the battery energy storage system (BESS) is rated to have an operational lifespan of 10-20 years. Is it also the intention, as part of the major replacement works, to upgrade the BESS so as to increase its capacity (from 100MW and 400MWh) or would those parameters not change? Taking the lower end of that lifespan, could that mean the BESS would be replaced 4 times over the course of the project?	
Effects on climate change			
2.2.2	Applicant	Commentary on case law Could the applicant provide comment in light of the recent cases of <i>R (on the application of Finch on behalf of the Weald Action Group) v Surrey County Council</i> [2024] UKSC 20 and <i>Friends of the Earth Ltd and South Lakeland Action on Climate Change v SSLUHC</i> [2024] EWHC 2349 (Admin), and whether these cases have any implications for the assessments of greenhouse gas emissions?	
Site selection and alternatives			
2.2.3	Applicant	Battery Energy Storage System (BESS) It is acknowledged that the final decision on whether to develop the BESS under Work No.2A or work No.2B would be made at detailed design stage should development consent be forthcoming. At present, however, is the applicant any closer to fixing the location?	

2.2.4	Applicant	Determination of what constitutes an alternative The ExA acknowledges the applicant's answer to ExQ1 question 8.2.5 regarding defining a 5km search area [REP2-003]. However, there are several further questions arising from this: 1) Section 1.2 [APP-053] describes the applicant's methodology to assessing alternatives. The 'methodology' does not describe a process of alternative site assessment, but rather straight away promotes the application site as the best option from a commercial perspective only. The way section 1.2 is written reads could be taken as conclusions rather than the method taken to appraise and sift potential sites. Do you have any comments on this? 2) In paragraph 1.2.8 [APP-053], the applicant states: "<i>Having secured the opportunity at the Site, the Applicant needed to ensure there was the necessary infrastructure and capacity within the transmission and distribution network to accommodate the electricity generated.</i>" In light of this statement and the later sections of the ES Chapter on Alternatives promoting the application site, is it reasonable to conclude that there was, in fact, no real consideration of alternatives because there was already commitment, financial or otherwise, in the application site itself? Were options B and C ever realistic propositions if the application site had already been secured? 3) In paragraph 2.4.9 [APP-053], the applicant declares that Option A within the search area is superior except for matters of ecology and flood risk. With regard to ecology, given the international importance of the Special Protection Area and the neighbouring Site of Special Scientific Interest (SSSI) and there was an existing area purposefully set aside for environmental mitigation related to the Frodsham Wind Farm, the ExA is unclear how the applicant a) gave weight to such considerations in the optioneering process and b) reconciled that direct interference with land in the SSSI and functionally linked land was preferred. Provide more detail on this with a clear rationale. 4) Can the applicant provide the calculations that relate to transmission losses? The ExA is not wholly convinced that the transmission losses are so significant past the 5km point to make a project beyond this unviable, unattractive or inefficient. 5) There are overhead power lines and pylons in existence stretching to the east and to the west. Was a direct connection into the overhead network ever considered? If not, why not?	
2.2.5	Applicant	Site of Special Scientific Interest Having determined that option A was to be the preferred option, the ExA notes that table 2.2 [APP-053] states: "<i>The southern fringe of the Mersey Estuary Site of Special Scientific Interest (SSSI) is located within the northern extent of Option Area A.</i>" The	

		ExA also notes the same table, in respect of Option B, states: “a large solar farm development could be accommodated within this Option Area without affecting these SSSIs.” Set out clearly why the ‘southern fringe’ was not excluded from the project site and why a large solar farm could not be accommodated at the project site without affecting the SSSI, just as in option B.	
2.2.6	Applicant	Land at the Frodsham Wind Farm Knowing that the Frodsham Wind Farm had land designated as a mitigation area and that land had been modified and improved to support wildlife as a means of mitigation for the wind farm (particular emphasis on Cell 2), why was this area not avoided when undertaking the site selection process? Justify why the site selection and order limit refinement process did not seek to exclude this land and set out what other alternatives were considered to using the said land.	
2.2.7	Applicant	Initial scope of substations Whilst ES Chapter 3 [APP-036] and its accompanying appendix [APP-053] discuss the suitability of the SPEN Frodsham Substation and options A, B and C, no information is volunteered about whether other substations were considered. Explain why or what research was actually done with regards to alternative substations other than the SPEN Frodsham Substation.	
2.2.8	Applicant	Contamination and alternatives In comparing options A, B and C, there does not appear to have been any consideration of historic land uses or historic contamination. Representations to the examination, particularly at issue specific hearing 2 (ISH2), suggest a high level of known contaminants in and around the project site. In determining and considering alternatives, was any weight given to this environmental constraint on the option A land that presumably does not exist on either options B or C?	
2.2.9	Applicant Cheshire West and Chester Council (CWCC) Cheshire Wildlife Trust (CWT) Natural England (NE) Royal Society for the Protection of Birds (RSPB) Mr Dermot Smith	Alternatives and Habitats Regulations Assessment (HRA) Several IPs have suggested incorporating Cell 2 into the NBBMA so as to avoid an Adverse Effect on Integrity occurring. Could this be an alternative solution that could mitigate harm arising to the Mersey Estuary Special Protection Area (SPA)? With regard to the consideration of alternative solutions in relation to the Habitats Regulations, explain the importance and relevance of this alternative to the SoS’ decision-making process for this project.	As represented in paragraph 7.70 of CWCC’s Relevant Representation [RR-037] existing mitigation area Cell 2 and the eastern and northern areas of Cell 1 also support qualifying bird species. These are also the Cells located closest to the designated site (as opposed to Cell 5 which is one of the existing mitigation areas further inland). Therefore, although CWCC’s preference would be to include further areas of Cell 1 into the NBBMA, as well as Cell 2, the inclusion of Cell 2 into the NBBMA, due to recorded bird usage and location, would provide a major contribution in mitigating the harm to the Mersey Estuary Special Protection Area (SPA). Bird usage of Cell 2 is shown in the Frodsham Solar Environmental Statement Volume 2 (APP-082) Figure 6g Non-Breeding Bird Survey Results Mar 2023, Figure 8c Non-Breeding Bird Survey Results Nov 2023, Figure 8d Non-Breeding Bird Survey Results Dec 2023, Figure 8e Non-Breeding Bird Survey Results Jan 2024, Figure 8f Non-Breeding Bird Survey Results Feb 2024, Figure 8g Non-Breeding Bird Survey Results Mar 2024.

			In addition, retention of a mitigation Cell that will have no re-engineering works proposed, will provide in part, a failsafe continuous foraging resource for those birds that will likely be disturbed on Cell 3 in the passage seasons, due to the proposed 6-9 months Cell 3/NBBMA remodelling works proposed and will ensure a grassland foraging resource (one of the original functions of Cell 2) is always available throughout the NBBMA works.
Decommissioning			
2.2.10	Applicant	Re-powering In the document about Future Baseline Decommissioning [REP4-054] there is discussion about whether or not the Frodsham Wind Farm would be decommissioned or re-powered. The applicant's position during the examination is a belief that the wind farm would be re-powered because of the national drive for renewable energy and that the need would continue in the future. Applying that same rationale regarding the need for renewables going forward and the likelihood of projects being re-powered, on what basis should the ExA consider the proposed development to be 'temporary'? Whilst there is a decommissioning date written into the dDCO, if the applicant is confident the Frodsham Wind Farm would be re-powered under current national policy, what is to stop the proposed development being re-powered? In such circumstances, would not the label of 'temporary' be misplaced in all ES assessments?	

3. Ground conditions			CWCC Response
2.3.1	Applicant Frodsham Wind Farm Limited CWCC	Extent of contamination The examination has received strong concerns from Councillor Mrs Sumner regarding contaminated land in, at and around the proposed development Order limits. To assist the ExA understanding the baseline, and perhaps to give reassurance to the interested party regarding the likelihood of encountering high concentrations of contamination, could any contaminated land reports, surveys and investigations for the Frodsham Wind Farm investigations and any other relevant investigations be submitted to the examination? An accompanying commentary from the submitting party would be welcomed to clarify what, if any, the findings show. The relevant investigations to include are those listed in table 3.1 of Appendix 10-1 of the ES [APP-096]: 1) Groundsure Report Datasheet GSIP-2023-13776-14419 (SADA) GSIP-2023-13776-14430 (Private Wire Connection and Main Site Access); June 2023 (provided in Appendix B) 2) Frodsham Wind Farm Preliminary Site Investigation, March 2014 3) Frodsham Wind Farm Phase 2 Site Investigation, April 2015 4) Frodsham Wind Farm. Condition 38: Hydrocarbon Contamination within Cell 3, April 2015 *The ExA notes that MSCDDG Cell 3 Summary of Chemical Testing (March 2025) has already been provided in Appendix G [APP-097] and that the Wildfowlers Land – Summary of Soil Chemical Results Recorded in June 2024 Ground Investigation (July 2024) has already been provided in Appendix H [APP-097].	There has been some difficulty retrieving the Frodsham Windfarm documents. If the Applicant is unable to provide the documents, further investigations will be carried out.
2.3.2	Applicant	Chemicals referred to by interested parties in the examination The ExA notes the applicant's response to action point 43 was provided in Appendix D [REP4-055] for arsenic, vinyl chloride and carbon tetrachloride. The ExA would like the applicant to expand this appendix to include the following chemicals which have been raised by interested parties as a concern, within the examination: • chloroform • hydrogen chloride • polychlorinated biphenyls	

4. Biodiversity and ecology			CWCC Response
Biodiversity Net Gain (BNG)			
2.4.1	Applicant	BNG unit baseline Explain why the baseline habitat units within the BNG assessment in section 3.1.2 of the: Biodiversity Net Gain Report [REP4-038] have changed for deadline 4, see screen shot below. Fully explain the basis of the recalculation. <i>Summary of BNG Unit Baseline</i> 3.1.2 Baseline habitats ~~with~~<u>within</u> the Site generate a total of ~~1692.01~~<u>1457.21</u> habitat units (~~379.48~~<u>330.85</u> units from the NBBMA and ~~1314.28~~<u>1126.368</u> units from the remainder of the Site). Baseline hedgerow units generate a total of ~~54.25~~<u>47.18</u> hedgerow units (~~0.82~~<u>71</u> units from the NBBMA and ~~53.44~~<u>46.47</u> units from the remainder of the Site). Watercourse units generate a baseline of ~~109.71~~<u>113.60</u> watercourse units (~~8.54~~<u>13.64</u> units from the NBBMA and ~~101.19~~<u>99.95</u> units from the remainder of the Site).	
2.4.2	Applicant	Post works BNG summary Explain why the BNG units within the BNG assessment in sections 5.1.3 to 5.1.6 and section 6.1 of the Biodiversity Net Gain Report [REP4-038] have changed for deadline 4, see screen shot below. Fully explain the basis of the recalculation, including the changes within tables 6.1, 6.2 and 6.3.	

		Post-works BNG Summary <u>5.1.2</u> In the undertaking of the BNG assessment it has been assumed that 5% of habitat within the solar fenceline would be lost to built development, such as panel framework. This is in line with established industry practice¹⁵ and has been taken into account within the Metric. <u>5.1.25.1.3</u> The development footprint results in the loss of ~~131.24~~<u>169.87</u> ha of habitats, equating to ~~477.23~~<u>551.07</u> habitat units (~~79.53~~<u>247.42</u> units from the NBBMA and ~~401.51~~<u>303.64</u> units from the remainder of the Site). The development footprint results in a loss of 0.18 km of hedgerows, equating to ~~1.49~~<u>30</u> hedgerow units (~~0.05~~<u>04</u> units from the NBBMA and ~~1.45~~<u>26</u> units from the remainder of the Site). The development footprint results in a loss of 0.16 km of watercourse, equating to ~~0.78~~<u>68</u> watercourse units (~~all~~ <u>0.78</u><u>68</u> units from the remainder of the Site). <u>5.1.35.1.4</u> Created habitats generate a total of ~~669.93~~<u>888.77</u> habitat units (~~92.56~~<u>364.65</u> units from the NBBMA and ~~577.37~~<u>530.28</u> from the remainder of the Site). Enhanced habitats generate a total of ~~4.73~~<u>71.61</u> habitat units (~~4.73~~<u>all</u> <u>71.61</u> units from the remainder of the Site). <u>5.1.45.1.5</u> Created hedgerows generate a total of ~~49.74~~<u>43.25</u> hedgerow units (~~49.74~~<u>all</u> <u>43.25</u> units from the remainder of the Site). <u>5.1.55.1.6</u> Created watercourses generate a total of ~~1.10~~<u>0.95</u> watercourse units (~~1.10~~<u>all</u> <u>0.95</u> units from the remainder of the Site). Enhanced watercourses generate a total of ~~83.34~~<u>72.47</u> watercourse units (~~9.45~~<u>8.22</u> units from the NBBMA and ~~73.89~~<u>units</u><u>64.25</u> units from the remainder of the Site). Although D57 will be removed during habitat creation works within the NBBMA, the ditch will be reinstated within two years of initial removal, and is anticipated to achieve baseline condition, furthermore, following its reinstatement and due to the proposed habitat management measures to be implemented, the condition of this ditch is expected to be enhanced (from poor to moderate). As such, and in accordance with The Statutory Biodiversity Metric User Guide (DEFRA, 2024), this ditch has been assigned as being enhanced within the Metric, with a one-year delay in starting the habitat enhancement. A series of ditches will also be enhanced through the reduction in riparian zone encroachment. These ditches are shown on Figure 6 and identified on the corresponding shapefiles (provided separately). and	

		6.1 Overview 6.1.1 The Proposed Development will generate a net change of ~~+194.86~~ ~~(11.52)~~ ~~373.19~~ ~~(25.61 %)~~ habitat units, ~~+48.25~~ ~~41.95~~ (88.92 %) hedgerow units and ~~+14.65~~ ~~(13.35)~~ ~~12.74~~ ~~(11.21%)~~ watercourse units. <u>A summary of the biodiversity net gain interventions across each distinctiveness and habitat type is provided as Table 6.1</u>	
2.4.3	Natural England (NE) CWCC CWT	Classification of reedbeds within the applicant's BNG assessment The applicant has provided further information on the classification of reedbeds within Annex 3 of its deadline 4 Biodiversity Net Gain Report [REP4-038]. This states that: <i>'Following receipt of Relevant Representations by CWACC a review has been undertaken of particular reedbed habitats against both JNCC and UKHab definitions. Following the review, an area formerly classified as reeded located within Frodsham Windfarm East has now been reclassified as g3.16 instead due to not meeting soil moisture criteria. Further, several areas which may meet the UKHab definition of reedbed, are not considered priority habitat but rather smaller stands of reed.'</i> 1) Do you agree with the applicant's classification of reedbed in general? 2) Do you agree with the applicant's classification of reedbed at the Frodsham Windfarm East area described in table 1 [REP4-038] and above as not meeting the definition of reedbed? 3) Do you agree with the approach the applicant has demonstrated to the overall consideration of reedbed within the applicant's deadline 4 Biodiversity Net Gain Report [REP4-038]?	1) It is agreed that areas of reedbed aside from that mentioned in part 2 are classified correctly. 2) There is disagreement on this point and the Council considers that the Frodsham Windfarm East reedbed should be classified as reedbed. Note that the information provided at Annex 4 of the Biodiversity Net Gain Report [REP4-038] is the same information provided previously in Appendix C. Further Information On The Classification Of Reedbeds in [PD2-027] Response to Local Planning Authority and Statutory Environmental Body Relevant Representations. As per CWCC's response to the ExA's first written questions Deadline 2 [REP2-005] at Q4.5.7 (i), this question is answered as follows: The secondary codes "504-Waterlogged" and "505 Inundated", are stated as corresponding with the section of the f2f Reedbed definition that states "water table is above ground or at ground level for most of the year". This is not correct; these secondary codes are used to further define the level 2 primary code of "Wetland", of which the Level 3 code is Reedbed and are not referred to at the Level 3 stage in terms of definition. They can be used to define discreet areas within the level 3 code when mapping habitats, to provide further information regarding that habitat, but do not contribute to its definition. In addition, the definition of one of the exclusions of the Wetland category, has been incorrectly added to the definition of secondary code "504 Waterlogged" "wet defined as water table within 40cm of the surface and soil contains free water for most of the year". Note that secondary code 504- Waterlogged, states that only small patches remain wet during mid summer, that either the water table is at the surface for 50-70% of the year, or the soil is completely saturated, so does account for dry areas reedbeds. The most robust factor of the classification of reedbed habitats, is the presence of more than 5m width of reedbed. This is the primary factor that should define the classification of the reedbed, in the absence of any other agreed evidence,

			especially ones that are defined by season or percentage of water/saturated soil over a year, which cannot often be demonstrated, due to time constraints. Inclusions for the f2e reedbed habitat type are areas that meet the stands of Common reed size threshold and that include both reed-filled ditches and reed-dominated vegetation extending on to dry land. Therefore, dry areas of reedbed are accepted into the f2e classification. The only exclusions to f2e are if parcels of common reed are less than 5m in width, and Common reedmace swamp, which note, does not include references to water levels. On the basis of the coding of reedbed habitats as discussed above, it is not into concurred that the section of reedbed labelled Frodsham Windfarm East, should not be classified as UK Habs reedbed, as the areas of reed are reported to exceed 5m in width and therefore fit the definition. <u>3) Declassification of Reedbed:</u> See above. <u>Trading Rule Errors:</u> In terms of trading rules, the Annex 1 Biodiversity Net Gain Metric OL (REP4-061) shows a Trading rule error for reedbeds habitats of 10.95 units. As per the statutory User guide and previous non-statutory metrics, if trading rules have not been satisfied then a net gain in biodiversity cannot be claimed unless trading rules are resolved. CWCC has already submitted representations on this in [REP4-068] at Deadline 4, in table [REP3-041] 8.28 Applicant's Response to Written Representations (D4.3.3.01). Page 17 to 18 of Natural England's Statutory User Guide on the Biodiversity Metric, (already submitted into the Examination) states the following in terms of the use of Rule 4: "You should not use rule 4 for most projects. It may be used in exceptional ecological circumstances, occurring when: • the site has optimal conditions (such as soil condition, hydrology, nutrient status) for restoration of a wildlife-rich or historic natural habitat, • and the project team has the expertise and resource to deliver the habitat with negligible risk of failure. It can only be used where one or more of the following applies: 1. Highly complex landscape scale habitat changes such as creation of heathland, heathland grassland mosaic or other mosaic habitats

			2. River re-meandering, or 3. Large-scale restoration of natural processes Deviation from biodiversity metric trading rules can occur when there is a clear ecological justification for the habitat intervention which is not being reflected by the biodiversity metric tool.” In terms of optimal conditions, the Applicant does not address this element as described by the user guide, in terms of soil condition, hydrology and nutrient status, but instead refers to a Natural England blog post, which references connectivity to other wildlife sites, which this site currently is. This development will reduce that connectivity between the Local Wildlife site and the Mersey Estuary, in reducing the area of land for protected species and qualifying species for the Mersey Estuary SPA. Therefore, this requirement is not met. In terms of expertise, the Applicant references that the NBBMA will be managed by a suitably experienced nature conservation organisation. This is not yet secured and so this requirement is not met. The Applicant then goes on to comment on landscape-scale changes, which is assumed to address points 1 to 3 of the user guide above. The Applicant states that “the mitigation site in the Natural England blog post is described as ‘exceptionally large, at 275 hectares’. The Frodsham Solar Order Limits total approximately 337.5ha, with extensive landscaping provided across the Solar Array Development Area (246ha) and NBBMA (66.7ha). As such, the landscaped area for the Proposed Development considerably exceeds that of the Case Study Site and the Frodsham Solar Site must be considered to be of a landscape scale.” It is the Council’s position that the whole of the order limits cannot be classed to be the mitigation site, in particular, neither can the standard solar farm landscaping proposed within it, as that is not it’s function and is not proposed to be utilised for mitigation, as per the applicant’s proposal. The site in the Natural England blog refers to a development site of 107ha and a mitigation site of 275ha. The mitigation site for this development is almost three times the size of the development. In the Frodsham Solar Farm case, the development site is 337.5ha and the mitigation area (NBBMA) is 63ha, so the mitigation area is much smaller than the development area, so a wholly different scenario. In addition, the mitigation proposed is an enhancement of what was already provided by part of the Frodsham Windfarm Mitigation, as does not align with points 1, 2 or 3 of Natural England’s User Guidance.

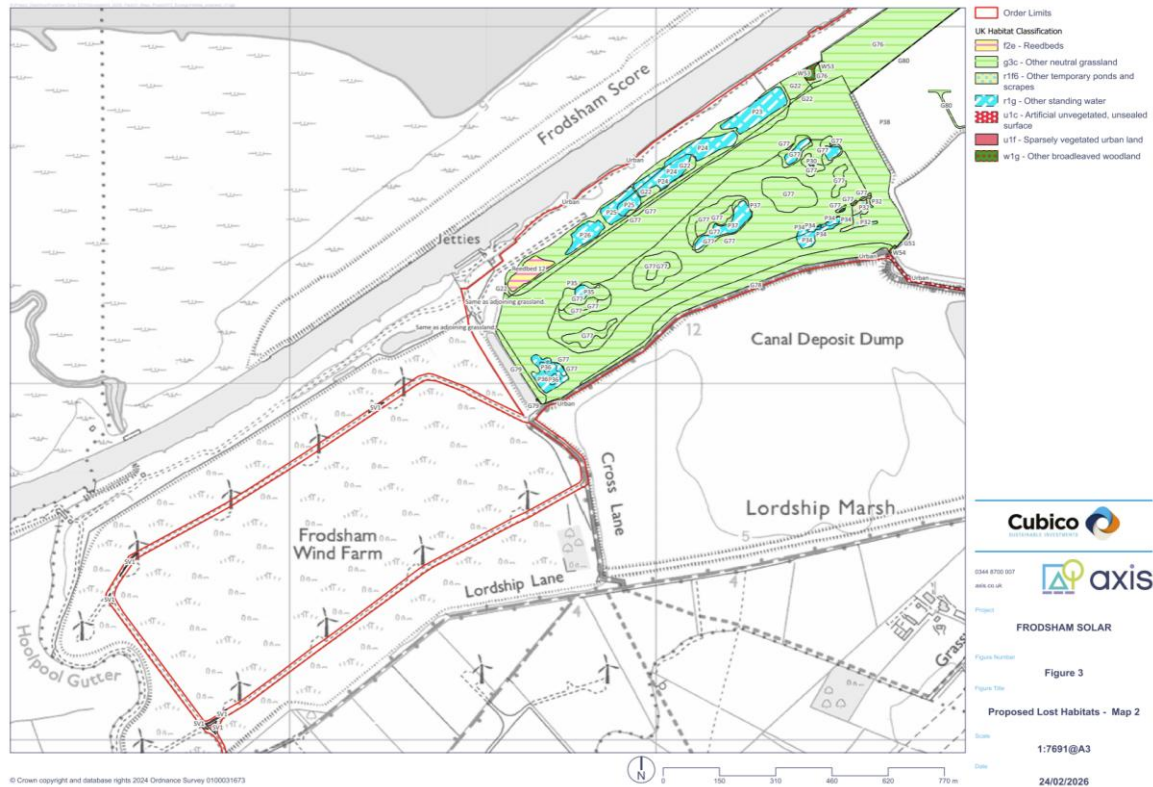
			<u>General:</u> In terms of the Applicant’s Response to CWCC’s Relevant Representation [PD2-027] at para 7.133 of CWCC’s Relevant Representation [RR-037], it is stated that habitats of high distinctiveness have been avoided as far as possible across the Order Limits and that the development has avoided higher value habitats where reasonably practicable. These are general statements, with no project-specific justification and the metric provided evidences this, with the deficit in trading rules demonstrated. This is not in line with the mitigation hierarchy. In terms of the Applicant’s Response to CWCC’s Relevant Representation [PD2-027] at para 7.134 of CWCC’s Relevant Representation [RR-037], references to existing reedbed being lost to succession are made, which is not relevant to the biodiversity gain metric, as already pointed out by CWCC in 7.132 of CWCC’s Relevant Representation [RR-037]. The Applicant asserts again, that the mitigation hierarchy has been applied “to avoid and reduce losses where possible”, with no detailed project specific justification. Generally, although reedbed habitats are not directly associated with the bird species associated with the Estuary (although Teal have been recorded near to the Lum which has reedbed habitats) per se, in terms of wetland habitats and hydrology, the reedbed habitats will be complementary to the overall wetland network on and adjacent to the site that these species will be using. There are also bird species recorded on site not associated with the Estuary, that utilise the reedbed habitats. Reedbeds are a priority habitat of high distinctiveness and should be retained.
2.4.4	Applicant	Trading rules – net loss of reedbed habitat The applicant states in section 6.3 of the deadline 4 Biodiversity Net Gain Report [REP4-038], that there would be a deficit of reedbed habitat type and scrub broad habitat type, see screen shot below. <u>6.3 -Trading Rules</u> <u>6.3.1 There is a deficit of -10.95 units in reedbed habitat type required to achieve trading rules, which is a high distinctiveness habitat requiring the same habitat type to offset losses. Annex 3 discusses the baseline classification of reedbed.</u> <u>6.3.2 There is a deficit of -2.23 units of scrub broad habitat type required to achieve trading rules, which is a medium distinctiveness habitat requiring the same broad habitat type to offset losses.</u>	

Table 6.1 [REP4-038] provides a summary of area and unit change for each habitat type within the draft order limits. A screen shot is provided below for the first line concerning reedbeds.

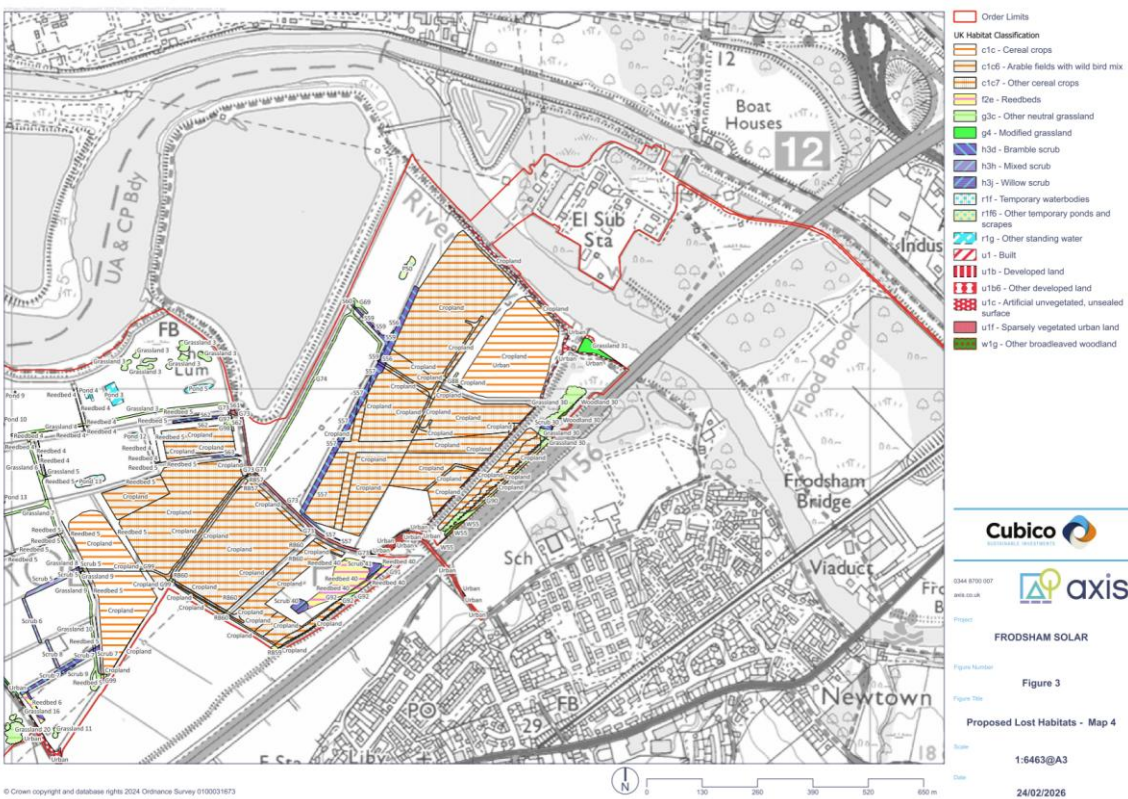
Table 6.1: Summary of Area and Unit Change for each Habitat Type within the draft Order Limits								
Distinctiveness	Group	Habitat Description	Existing area baseline (ha)	Existing units baseline	Area post development (ha)	Units post development	Area change (ha)	Net unit change
	Wetland	Reedbeds	14.83	184.13	15.34	173.19	0.51	-10.95

- 1) Can the applicant explain why post development there would be an increase in reedbed area but a decrease in reedbed units? What is it about the properties of the post development reedbed area that cause the calculation of resulting BNG units to fall?
- 2) The ExA acknowledges that BNG requirements are not yet mandatory for NSIP applications and that the applicant has clearly stated that the trading rules for reedbeds are not proposed to be met. Nevertheless, the mitigation hierarchy should still be adhered to. The ExA would like the applicant to explain how much reedbed is proposed to be lost for each of the areas given below and provide justification as to why these areas of reedbed are proposed to be lost and not retained:

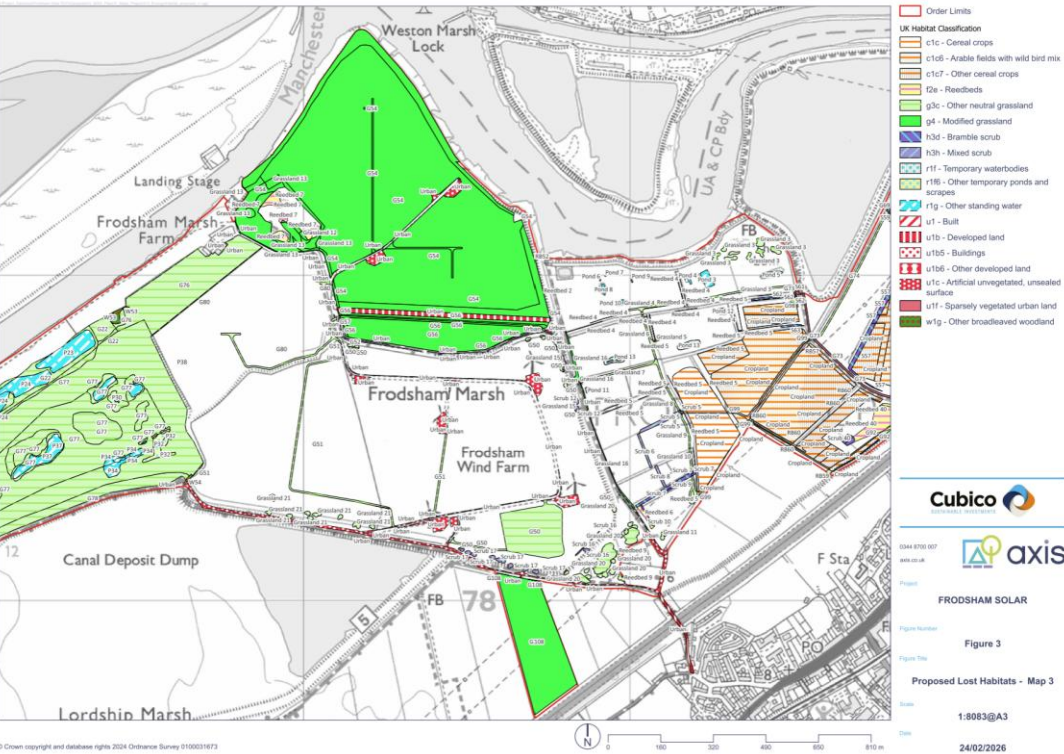
a. Reedbed 12 shown in the NBBMA (see screenshot below from Map 2 of Figure 3 of the deadline 4 Biodiversity Net Gain Report [REP4-038])



- b. Reedbed 40 (see screenshot below from Map 4 of Figure 3 of the deadline 4 Biodiversity Net Gain Report [REP4-038])



c. Reedbed 7 near Marsh Farm (see screenshot below from Map 3 of Figure 3 of the deadline 4 Biodiversity Net Gain Report [\[REP4-038\]](#))



		3) Can the applicant explain why it has not proposed more areas of reedbed to be retained or the creation of more reedbed habitat to achieve at least a no net loss? Would this be possible? If not, explain why not. 4) Can the applicant explain why it has not proposed more areas for the retention or creation of scrub broad habitat to achieve at least a no net loss? Would this be possible? If not, explain why not. 5) Can the applicant explain how it has adhered to the principle of the mitigation hierarchy in relation to these two habitat types (reedbed and scrub broad habitat)?	
2.4.5	NE CWCC CWT	BNG metric Rule 4 The applicant has provided further explanation of its application of Rule 4 to the proposed development within its deadline 4 Biodiversity Net Gain Report [REP4-038], citing a case study from NE in Annex 4. 1) Do you agree with the way the applicant has applied Rule 4 to the proposed development? 2) Do you agree with the comparison the applicant has made between the proposed development and the case study in Annex 4?	1) The Council does not agree with the way the Applicant has applied Rule 4 to the proposed development. 2) The Council does not agree with the comparison the Applicant has made between the proposed development and the case study in Annex 4. It is the Council's position that this development does not comply with the requirements of Rule 4 as above. The proposal is to enhance an existing mitigation area, while providing standard green infrastructure and general mitigation as found in other solar farm proposals. The answers to the above two questions are further detailed below. CWCC has already submitted representations on this in REP4-068 at Deadline 4, in table REP3-041 8.28 Applicant's Response to Written Representations (D4.3.3.01). In terms of trading rules, the Annex 1 Biodiversity Net Gain Metric OL (REP4-061) shows a Trading rule error for reedbeds habitats of 10.95 units. As per the statutory User guide and previous non-statutory metrics, if trading rules have not been satisfied then a net gain in biodiversity cannot be claimed unless trading rules are resolved. CWCC has already submitted representation on this in REP4-068 at Deadline 4, in table REP3-041 8.28 Applicant's Response to Written Representations (D4.3.3.01). Page 17 to 18 of Natural England's Statutory User Guide on the Biodiversity Metric, (already submitted into the Examination) states the following in terms of the use of Rule 4: "You should not use rule 4 for most projects. It may be used in exceptional ecological circumstances, occurring when:

			• the site has optimal conditions (such as soil condition, hydrology, nutrient status) for restoration of a wildlife-rich or historic natural habitat, • and the project team has the expertise and resource to deliver the habitat with negligible risk of failure. It can only be used where one or more of the following applies: 1. Highly complex landscape scale habitat changes such as creation of heathland, heathland grassland mosaic or other mosaic habitats 2. River re-meandering, or 3. Large-scale restoration of natural processes Deviation from biodiversity metric trading rules can occur when there is a clear ecological justification for the habitat intervention which is not being reflected by the biodiversity metric tool.” In terms of optimal conditions, the applicant does not address this element as described by the user guide, in terms of soil condition, hydrology and nutrient status, but instead refers to a Natural England blog post, which references connectivity to other wildlife sites, which this site currently is. This development will reduce that connectivity between the Local Wildlife site and the Mersey Estuary, in reducing the area of land for protected species and qualifying species for the Mersey Estuary SPA. Therefore, this requirement is not met. In terms of expertise, the Applicant references that the NBBMA will be managed by a suitably experienced nature conservation organisation. This is not yet secured and so this requirement is not met. The Applicant then goes on to comment on landscape-scale changes, which is assumed to address points 1 to 3 of the user guide above. The Applicant states that “the mitigation site in the Natural England blog post is described as ‘exceptionally large, at 275 hectares’. The Frodsham Solar Order Limits total approximately 337.5ha, with extensive landscaping provided across the Solar Array Development Area (246ha) and NBBMA (66.7ha). As such, the landscaped area for the Proposed Development considerably exceeds that of the Case Study Site and the Frodsham Solar Site must be considered to be of a landscape scale.” It is CWCC’s position that the whole of the order limits cannot be classed to be the mitigation site, in particular, neither can the standard solar farm landscaping proposed within it, as that is not it’s

			function and is not proposed to be utilised for mitigation, as per the Applicant's proposal. The site in the Natural England blog refers to a development site of 107ha and a mitigation site of 275ha. The mitigation site for this example development is almost three times the size of the development. In the Frodsham Solar Farm case, the development site is 337.5ha and the mitigation area (NBBMA) is 63ha, so the mitigation area is much smaller than the development area and a wholly different scenario. In addition, the mitigation proposed is an enhancement of what was already provided by part of the Frodsham Windfarm Mitigation, as does not align with points 1, 2 or 3 of Natural England's User Guidance.
Mitigation measures			
2.4.6	Applicant	Damaged or end of life batteries The ExA requests that the applicant: 1) Acknowledges within the ES that batteries can cause chemical pollution and present a fire risk if not managed appropriately that could cause a decrease in water quality if any surface runoff became contaminated. 2) Inserts within the Outline Battery Safety Management Plan [REP3-026] that where a battery storage area is provided external to the BESS unit, that it would be impermeable, covered and bunded, and that battery storage would be confirmed as part of the detailed design and submitted for approval by the EA in writing.	
2.4.7	CWT	Area required for adequate skylark mitigation In your deadline 4 submission [REP4-075] you state that: <i>'The literature commonly used to determine the necessary hectarage for skylarks states that a pair requires 3.3ha per territory. As there are 21 pairs of skylarks at peak count on the site, this would amount to about 70ha'.</i> Please provide the references for the literature that you refer to substantiate this position.	
2.4.8	Applicant	Skylark mitigation area (SMA) In your response to ISH2 action points [REP4-055] you state that: <i>'The SMA is not presented as replacing the entirety of 21 recorded (possible to probable breeding) territories across the Order Limits. Rather, it provides higher-quality breeding habitat (managed meadow grassland tailored to the species-specific needs) than the existing baseline sub-optimal arable land, thereby supporting improved breeding productivity per pair (which will breed several times across the breeding period). The focus of the SMA is maintenance of ecological and ornithological function and enhancement of breeding output successes'.</i> In ES Chapter 8: Ornithology section 8.8.40 [APP-041] you state that: <i>'Breeding skylark and lapwing would be permanently displaced from breeding within the SADA, depending on the time of year that construction works are undertaken. Skylarks will be temporarily displaced from nesting within the</i>	

		<i>NBBMA but are likely to return once grassland establishes. It should be noted that, although skylarks are assumed to be permanently displaced from solar farms for nesting, skylark will still use operational solar farms, including as 'nursery' habitat for their fledged young (Fox, 2022). Areas of suitable nesting habitat will however remain available in retained open habitats onsite.'</i> In ES Chapter 8: Ornithology section 8.8.45 [APP-041] you state that: <i>'Skylarks are considered likely to continue to utilise marginal habitats and areas between solar panels in the SADA for foraging, and larger gaps between panelled areas are also potentially suitable for nesting birds. The enhancement works within the NBBMA will also provide suitable breeding habitat for skylark (c. 34 ha of grassland), so the skylark population would be maintained at similar levels to pre-development conditions.'</i> In ES Chapter 8: section 8.8.48 [APP-041] you state that: <i>The construction of the Proposed Development is therefore anticipated to result in minor adverse effects on skylark and lapwing, which is not significant.'</i> 1) If the SMA would not replace the entirety of the 21 recorded skylark territories area, how many skylark territories is it anticipated to mitigate for? What evidence is there that this improvement in quality of habitat would be sufficient to mitigate for said number of skylark territories? 2) How many skylark territories are anticipated to be mitigated by the: a. NBBMA. Justify the number skylark territories anticipated to be mitigated given the habitat within the NBBMA would not be tailored to the species specific needs and maintained in the same way as the SMA. b. The marginal habitats, areas between solar panels and larger gaps. What area does this amount to? Justify the number of skylark territories anticipated to be mitigated given the habitat within these areas would not be tailored to the species-specific needs and maintained in the same way as the SMA. 3) Clearly explain why the proposed SMA, NBBMA and other areas (marginal habitats, areas between solar panels and larger gaps) would be adequate to mitigate the construction and operational effects of the proposed development to skylark. 4) You stated in response to questioning at ISH2 [REP4-057] agenda item 3f ii e regarding the adequacy of long-term management and monitoring for skylark, that: <i>'...success is primarily about maintaining the quality of the grassland habitat through the oLEMP management regime. He stated that there is no proposal for routine skylark nest surveys because locating nests is difficult and population counts can be variable; however, the measures proposed are widely adopted and well researched for conservation outcomes, and the Applicant has a high degree of confidence provided habitat quality is maintained.'</i> Can you explain how you can be confident adequate mitigation would be provided when significant sections of land incorporated to mitigate for the 21 skylark territories identified would not be managed to the same quality of grassland habitat as the SMA, which you have stated would not mitigate for the 21 territories alone?	

		5) The ExA is not currently convinced the difficulty and scientific uncertainty cited by the applicant are sufficient reasons to exempt the need for monitoring. The ExA suggests the applicant incorporates a monitoring and reporting regime into the proposals to be able to evaluate whether or not the proposed development had provided sufficient mitigation for skylark if it were to be constructed, along with an adaptive management proposal including any necessary triggers, to be enacted if it were shown not to have been adequate. The ExA would like the applicant to clarify which organisation would undertake the monitoring and suggests that a sensible solution could be for the skylark mitigation monitoring to be part of the monitoring undertaken by the organisation responsible for the long-term management of the NBBMA. The ExA would like to point out to the applicant that monitoring, reporting and adaptive management measures were included by the Secretary of State in requirement (25) for farmland bird compensation in the Five Estuaries Offshore Wind Farm made DCO The Five Estuaries Offshore Wind Farm Order 2025.	
2.4.9	CWCC	Mitigation for wintering wader species including golden plover, lapwing and curlew CWCC's representation at ISH2 highlighted ongoing concerns regarding mitigation proposals for wintering wader species including golden plover, lapwing and curlew. 1) Can CWCC explain whether the proposed mitigation for skylark would also be appropriate for lapwing as the applicant suggests in ES Chapter 8 [APP-041]. If it is appropriate for wintering lapwing, would it also provide good habitat for wintering golden plover? 2) Golden plover is listed as a qualifying feature of the Mersey Estuary SPA and curlew is listed as part of the waterbird assemblage in Table 8-8 of ES Chapter 8 [APP-041]. Can CWCC further explain its specific concerns regarding this species?	1) It is not clear which paragraph the ExA are referring to in ES Chapter 8 [APP-041]. However, it is noted that in this document, the Skylark Mitigation Area is presented as mitigation for breeding lapwing, rather than wintering lapwing, in Table 8-20; Assessment of likely significant effects. Please advise if any further response from CWCC is required. 2) To clarify, from REP4-074, CWCC's point was that the Frodsham Windfarm HCMP was to maintain the fields for the duration of a lifetime of the wind farm, in a condition that is favourable for all wintering wader species, not exclusively for Golden plover, lapwing and curlew. Please advise if any further response from CWCC is required.
2.4.10	Applicant	Mitigation for wintering wader species including golden plover, lapwing and curlew CWCC's representation at ISH2 [REP4-074] highlighted ongoing concerns regarding mitigation proposals for wintering wader species including golden plover, lapwing and curlew. Can the applicant explain how sufficient mitigation would be provided for these species?	
2.4.11	NE RSPB CWT	Mitigation for wintering wader species including golden plover, lapwing and curlew Do you have any ongoing concerns regarding mitigation proposals for these species?	

5. Habitats Regulations Assessment	CWCC Response
2.5.1	RSPB Confirmation of conclusions Having read your deadline 4 response [REP4-067], you state: <i>“Following consultation with our in-house Casework Team, and subject to the matters outlined in section (c), we are satisfied that the proposed enlarged NBBMA is capable of supporting the applicant’s conclusion of no Adverse Effect on the Integrity of the Mersey Estuary SPA.”</i> In section (c) you request that the <u>entirety</u> of Cell 2 is incorporated into the NBBMA. The ExA reads into this that, as the proposal <u>currently</u> stands, the RSPB considers an Adverse Effect on Integrity (AEol) could not be ruled out because the entirety of Cell 2 is not included. 1) Is that correct? 2) If the applicant <u>does not</u> alter the project, and <u>does not</u> incorporate cell 2 into the NBBMA, would you object to the proposed development on the grounds of insufficient mitigation and an Adverse Effect on Integrity being unable to be ruled out? 3) In light of (2) above, if the project is not altered to your satisfaction, would you pull out of any agreement for the RSPB to take over as the responsible conservation body? 4) Elsewhere in your representation, it is stated <i>“For RSPB to take any proposal through our internal approval procedures, we require a clear and detailed understanding of the mitigation design, management expectations, and long-term obligations.”</i> Are you stating there is insufficient information at this time such that support cannot be garnered towards the project OR are you content that such detail could be developed at the detailed design stage of this project should development consent be forthcoming?

		of incorporating all of Cell 2 into the mitigation area? Justify your response. 2) If Cell 2 as a whole remained outside the scope of the NBBMA (i.e. as currently proposed) would you stand by your position that an AEol would not occur? If so, why? 3) If the project does not change and the RSPB is not willing to progress with the applicant, do you remain confident in the wording secured in the NBBMS? 4) Set out any other agreements and disagreements or clarity on why NE's position on AEol is tenable in the circumstances.	
2.5.3	Applicant	NBBMA and the mitigation hierarchy 1) In light of the positions held by some interested parties that Cell 2 should be used for mitigation rather than as part of the solar array development area, can you state whether using all or part of Cell 2 for mitigation would or would not render the proposed development commercially unviable? If you consider it would, provide financial evidence to justify this position. 2) The latter part of paragraph 4.2.24 of NPS EN-1 states: <i>'There may be exceptional circumstances where the mitigation could have a significant benefit and warrant a small reduction in generation capacity and function. In these circumstances, the Secretary of State may decide that the benefits of the mitigation to reduce the effects outweigh the marginal loss of function'.</i> Would the use of Cell 2 for mitigation fit this definition? Justify your answer.	
2.5.4	Applicant	Without prejudice derogations case If agreement between the applicant, NE, RSPB, CWCC and the Cheshire Wildlife Trust cannot be reached on the potential for AEol to the Mersey Estuary SPA and Ramsar site, the ExA requests that you submit a without prejudice derogation case into the examination by deadline 5 to satisfy the requirements of the HRA in the circumstance that the Secretary of State (SoS) decides there could be AEol to the Mersey Estuary SPA and Ramsar from the proposed development. Interested parties would then be required to comment on the without prejudice derogation case at deadline 6 (22 April 2026) and the applicant would have the right of reply at deadline 7 (29 April 2026).	
2.5.5	CWCC CWT RSPB NE	Adaptive management approach to the NBBMA The ExA is interested to understand your position on the adaptive management proposals from the applicant. The applicant proposed that the management of the NBBMA would be through an adaptive approach, setting out the detail in section 4.4 of the Outline Non-Breeding Bird Mitigation Strategy [REP4-048] which states that on-going conservation management of the NBBMA would be secured through Requirement 9(j) of the draft DCO and	Note: The following comments are solely in respect of the Adaptive Management Plan and does not negate wider outstanding concerns. 1) The Adaptive Management Plan has some positive suggestions, including monitoring of wet grassland, scrape and bare areas extent, numerical targets for scrub coverage and grassland sward height. Monitoring of bird usage is also committed to, which was absent from previous versions. The AMP is committed to be agreed with CWCC and other consultees at the detailed stage and

		the final NBBMS would include an Adaptive Management Plan (AMP). The combination of Requirement 9(1) and (2)(j) means the final NBBMS and AMP would have to be agreed with consultees including NE and the RSPB and approved by CWCC as the Local Planning Authority. 1) Is the detail on adaptive management throughout the Outline Non-Breeding Bird Mitigation Strategy [REP4-048] and particularly within section 4.4 which has been updated by the applicant at deadline 4, sufficient for you to have confidence that the AMP would ensure adequate mitigation could be achieved for all species of concern? If not, what additional measures would you like to see? 2) Do you consider it likely that the AMP would be adequately flexible to provide the required mitigation? If this was not shown to be the case what would the implications be?	engagement of consultees and costs are committed to by the Applicant. Grassland management and targets are also specified. In 4.4.5 some adaptive actions are listed and there are concerns with two of these actions: Island creation, extension, reduction, maintenance and reprofiling; CWCC has concerns that this is significant in terms of potential impacts, in terms of requirements for machinery and no extent of change detailed. It is not clear how these are controlled and linked back to control documents such as the oCEMP or OLEMP. For example, island creation, extension, reduction or reprofiling could have significant impacts on non-breeding birds if carried out at a sensitive time of year with unregulated methodologies. Breeding birds and water voles would also be potentially impacted. Implementation of reasonable design or layout refinements within the Order Limits, where necessary and considered proportionate; there is no indication as to what would be considered reasonable, the parameters for that judgment and how that would be controlled. 2) It is not possible to ascertain whether the AMP would be adequately flexible to provide the required mitigation, until the detail is reviewed and assessed at the final NBBMS stage, however, the majority of principles do seem to be present in the latest revision. If the AMP was not flexible enough, this could lead to the failure of the NBBMA, due to the lack of mechanism to alter the NBBMA appropriately, or lack of funding. It should be stated in Section 4.4 that any remedial measures required would be fully-funded by the applicant. In addition, the frequency of meetings and a draft MOU, including control, oversight and commitments set out in a Terms of Reference, of the Steering Group, should be set out in the oNBBMS. This should set out that the RSPB/conservation body will be the lead in the maintenance and management of the successful NBBMA. An effective steering group with clear terms of reference is essential to the long-term success of the NBBMA.
2.5.6	Applicant	Adaptive management approach to the NBBMA Do you consider it likely that the AMP would be adequately flexible to provide the required mitigation? If this was not shown to be the case, what would the implications be and how could this be rectified?	
2.5.7	CWCC CWT RSPB NE	NBBMA mitigation verses compensation evidence provided by the applicant at deadline 4 The issue of whether the NBBMA proposal would be classified as mitigation or compensation according to the Habitats Regulations Assessment was discussed at ISH2. The applicant subsequently provided case law examples at deadline 4 [REP4-055]. In light of this evidence, do you agree with the applicant's position that the NBBMA proposals would be mitigation and not compensation in relation to the HRA? If not, clearly explain why not.	Further to Action Point 33 and ExA Q2 - Q2.5.7 regarding NBBMA mitigation versus compensation evidence / case law provided by the Applicant in response to ISH2 Action Point 31 [REP4-055] CWCC acknowledges that the case law directs the decision maker to consider the protected selection feature / basis of designation at risk (which may be particular species rather than a particular habitat) and that there is a distinction between proposed replacement habitat in a situation directly affecting a protected site (e.g. Mersey Estuary SPA) and those in a situation where the replacement is near (e.g. linked to) but outside the protected site. It is also acknowledged that in Natural England's response at Deadline 4 [REP4-069] they state that the measures proposed by the applicant within the NBBMA in the appropriate assessment are considered to be mitigation as they will

			reduce the impacts of the loss of FLL on the SPA/Ramsar population and so avoid an adverse effect on site integrity. Notwithstanding the above, this is an unusually complicated scenario, where Cell 3 and other parts of the FLL on the Marshes already comprises mitigation for the impacts of the Frodsham Wind Farm (FWF) on the Mersey Estuary SPA, and whilst the proposed measures in the Frodsham Solar scheme are presented as additive to that existing mitigation, the point remains that not only is the NBBMA proposed on land that is FLL in its own right (i.e. without the FWF) it is also replacing the existing mitigation provided as a result of FWF. It may be that in HRA terms the proposed NBBMA is mitigation not compensation, but in policy hierarchy terms CWCC considers it more appropriate to consider it as compensation.
2.5.8	Applicant CWT NE	NBBMA mitigation verses compensation positions The ExA acknowledges the applicant's deadline 4 submissions justifying why it believes the NBBMA would be classified as mitigation and not compensation [REP4-055]. CWCC has raised in its various representations that as Cell 3 would be <u>lost and then reinstated</u> this makes it compensation. Could you respond to this statement please.	See response above. It should be noted that in this situation, although it could be accepted that on their own, the measures proposed by the Applicant within the NBBMA in the appropriate assessment are considered to be mitigation as they will reduce the impacts of the loss of FLL on the SPA/Ramsar population, that this project proposes loss and replacement of already established mitigation. On a broader note, CWCC has raised the issue over a lack of clarity in the Applicant's various submissions regarding whether elements of the project are mitigation, compensation or enhancement. This point has been raised with the Applicant, and CWCC has suggested that it would assist the ExA if a up to date 'Table of Mitigation' (as advocated in 5.2 16. Securing mitigation to the Advice Note Fifteen: drafting Development Consent Orders) be provided, setting out precisely how and where mitigation measures relied upon in the ES are secured in the draft DCO and clearly distinguishing this from compensation and enhancement proposals.
2.5.9	Applicant	NBBMA long-term management To give reassurance to the SoS that there would be an alternative if the RSPB were to withdraw its interest in long-term management of the NBBMA, can the applicant state whether it has spoken to any other organisations who would be suitable to act as a nature conservation body for the long-term management of the NBBMA? If so, is the applicant in a position to name any of the other reserve organisations it has spoken to? If the applicant has not spoken to any other organisations specifically, could the applicant name any organisations that could be potential candidates?	
2.5.10	Applicant	NBBMS and funds Can the applicant confirm, in light of the RSPB's submission [REP4-067], that there would be a mechanism and security within the NBBMS for the payment of a "financial package" to the RSPB that ensures the long-term success of the mitigation measures?	

		If such a package is going to be paid for by the applicant (and bearing in mind the NBBMA is said to be mitigation for impacts the proposed development would have) should this be secured by a legal agreement or development consent obligation?	
2.5.11	Applicant	RSPB requirements In light of the RSPB's list of requirements and stipulations [REP4-067] , will the NBBMS, the extent of the NBBMA or the scope of the Works Plans be updated in any way? If you are not going to act upon the RSPB's requests, set out a detailed justification as to why not and set out clearly why the SoS should trust in your position?	
2.5.12	CWT	Highly Pathogenic Avian Influenza (HPAI) At ISH2, concerns were raised regarding the clustering of birds on a smaller parcel of land and the potential for HPAI, or other diseases, to spread more rapidly. Please set out clearly as to why you feel the risks would increase to an extent to be deleterious to the bird species involved, and comment on the position that the RSPB has taken [REP4-067] that HPAI risks would not be significant.	
2.5.13	Applicant NE	Flight lines Provide comment on CWCC's position [REP4-074] that flight paths would be disrupted through Cells 2 and 5 down to Cell 6, which CWCC states is a favoured cell by the birds.	
2.5.14	Applicant	Timing and delivery CWCC has identified that the NBBMA would take 6 to 9 months to deliver, but the applicant has committed to providing the NBBMA outside of the sensitive 6-month season [REP4-057] . Explain how the NBBMA delivery would be timetabled and the sequence of delivery works, and how these would avoid the sensitive seasons for birdlife.	
2.5.15	CWCC	Baseline recreational pressure Regarding CWCC's position that there is a lack of baseline data relating to recreational use, does CWCC have any evidence of its own regarding recreation and tourism use that could inform the ExA as to current usage and pressures experienced in the locality?	CWCC's point was that there is a lack of baseline data to make an assessment on the impacts of recreational pressure. However, the information that is available suggests that recreational pressure is liable to be an issue in terms of ecology. The HRA screening report for the Local Plan Issues and Options (June 2025)(Aecom) (Appendix 1) in relation to background recreational pressure provides some general comment and refers to recreational pressure in paragraphs 3.14-3.16 (page 20) and at 3.18 it is noted that dog walking leads to a significantly higher reduction in bird diversity and abundance compared to hiking, and scientific evidence also suggests that key disturbance parameters, such as areas of influence and flush distance, are significantly greater for dog walkers than hikers. The Mersey Estuary SPA/Ramsar is susceptible to recreational pressure (as acknowledged in the Nature 2000 – Standard Data Form Special Protection Areas under the EC Birds Directive). and Frodsham solar farm has the potential to impact the designated site by virtue of

			recreational pressure (see Table 4-2 with regard to Frodsham on page 30 of the HRA screening report). The Strategic Environmental Assessment (SEA) for the Frodsham Neighbourhood Plan (Sept 2023) (Aecom) (Appendix 2) identifies “Mixed effects are predicted for biodiversity; minor negative effects are highlighted in relation to policy EDVE2 which has the potential to increase recreational pressures on the Frodsham Marshes and the Mersey Estuary biodiversity sites. See paragraphs 9.14 to 9.17 of the SEA. The SEA includes the Frodsham Neighbourhood Plan SEA Scoping Report (Dec 2021) which highlights (paragraphs 3.19-3.22) recreational pressure as one of the factors threatening priority species and habitats within Frodsham. Natural England response to the Regulation 18 Local Plan consultation (Appendix 3) mentions the specific requirement to mitigate for recreational pressure in the Merseyside/Cheshire Region and it also specifically mentions Frodsham wind and solar farms and the requirement for mitigation. Extrapolating from the Applicant’s ES Chapter 12 Table 12-11 Summary of baseline activity [APP-045] and the reference to an estimated 250,000 walkers per annum, then using The Cheshire Sandstone Ridge Visitor Survey 2024 Sandstone report (Appendix 4); Frodsham Marsh was one of several included in the ‘other’ destinations referred to as being visited (or to be visited in the previous/next 6 months. 3.6% of those surveyed referred to these other destinations, so extrapolating from the 1,005 (on-site survey) responses, 3.6% of visitors to the Sandstone Ridge had or would be liable to visit other locations, which would be 9,000 per annum. Not all of which would be to Frodsham Marshes, but equally, not all of the users of the Marshes would be visiting the Sandstone Ridge. Frodsham Marshes is the third named ‘other’ destination in the report, out of six, so conservatively taking 1/6th of 9,000 that would be 1,500 per annum. This is clearly very indicative, and does not even represent the number of times visitors would make a trip within the period (e.g. local residents might be expected to make multiple trips. It is noted that Frodsham Hill was a destination on the ridge that had been visited by 4.7% of visitors to the ridge, 5th highest destination of 14 named destinations (and rising to 8.6% when factoring in locations to be visited in next 6 months). In conclusion there is a lack of robust baseline data to make an assessment on the impacts of recreational pressure. The applicant should have done their own survey / investigation to assess this recognised impact on the Marsh.
2.5.16	Applicant	Effect of any required unexploded ordnance (UXO) detonations During ISH2 the applicant confirmed that it would restrict any required UXO detonations to a time that was not sensitive to birds. The ExA would like this to be explained in some more detail to understand how this would work in practice alongside health and safety considerations for workers on the site and users of nearby public rights of way. The ExA considers there would likely be a need to make the UXO safe as soon as possible, without delay, regardless of the time of year.	

		1) Explain how delaying any controlled planned UXO detonation for the benefit of ecological receptors would be practicable and realistic. 2) Explain in more detail what is meant in section 8.2.66 of the Information to Inform the HRA [REP4-012] that any planned detonations would take account of sensitive receptors. 3) Explain the apparent inconsistency between whether UXO detonations would be unplanned, accidental or planned events, stated in the first and last lines of section 8.2.66 of the Information to Inform the HRA [REP4-012]: <i>'a UXO detonation would represent an <u>unplanned and (or) accidental event</u>, but then 'a UXO specialist overseeing the works at all times during the construction phase and ensure that <u>any planned detonations</u> take account of sensitive receptors'.</i> The ExA expects that the UXO Management Plan which would accompany the final Construction Environmental Management Plan must include sufficient mitigation to render the accidental detonation of a UXO as close to zero as possible, for the safety of personnel.	
2.5.17	NE	Effect of any required unexploded ordnance detonations Could NE comment on the applicant's approach to UXO detonations in relation to designated features of the Mersey Estuary SPA and Ramsar. Is NE content with the applicant's conclusions of no AEoI to the Mersey Estuary SPA and Ramsar site from the risk of UXO detonations?	
2.5.18	Applicant, CWCC, Liverpool Bay CCS Limited, NE	HRA in-combination effects Please see the questions in section 2.9 of this document.	

6. Historic environment

Historic environment

2.6.1		No questions on this topic at this time

7. Landscape and visual			
Landscape and visual			
2.7.1		No questions on this topic at this time	

8. The water environment			CWCC Response
Assessment			
2.8.1	Environment Agency (EA)	Water Framework Directive (WFD) Provide an update on whether the WFD Assessment [REP3-008] and its conclusions, as amended, now accord with NPS EN-1.	
Flood risk			
2.8.2	Applicant	EA issue 'EA007' relating to the position of bridge abutments and soffit levels The EA's deadline 4 submission [REP4-071] states clear actions that could be taken by the applicant to resolve issue EA007. Therefore, the ExA requests the applicant to: 1) Update the design of CP22 to include a 300mm freeboard above the design flood level of Ince and Frodsham fluvial model. 2) Submit the following documents into the examination: a. Integrity of New Bridges in Flood Event. Document 14740-WCD-XX-XX-TN-S-001 b. The bridge design drawings: Proposed Crossing CP14 Elevation & Sections drawing 14740-WCD-XX-XX-SK-S-002 c. Proposed Crossing CP22 Elevation & Sections drawing 14740-WCD-XX-XX-SK-S-003 d. Proposed Crossing CP14 & CP22 Existing Sections drawing 14740- WCD-XX-XX-SK-S-004 e. Proposed Crossing CP17 Elevation & Sections drawing 14740-WCD-XX-XX-SK-S-005 If the applicant chooses not to undertake the above, please provide a clear justification as to why not.	
2.8.3	Applicant	EA issue 'EA010' relating to flood risk The EA's deadline 4 submission [REP4-071] states clear actions that could be taken by the applicant to resolve issue EA010. Therefore, the ExA requests the applicant to: 1) Include the following wording within the outline Construction Environmental Management Plan (oCEMP), Commitment Register or draft DCO: <i>'the height of the bridge deck will not fall below 5.3m AOD based on current data, with designs to be refined for approval in writing by the EA at the detailed design stage'.</i>	

		2) Should the applicant include wording that outlines if at detail design stage the deck height would fall below 5.30AOD, then the wording within the oCEMP, Commitment Register or draft DCO should also include a commitment that an updated technical note 'Integrity of New Bridges in Flood Event' must be completed at the new deck height and submitted for approval by the EA in writing. If the applicant chooses not to undertake the above, please provide a clear justification as to why not.	
2.8.4	EA	Construction compound flood risk impact note Given the applicant's statement in the construction compound flood risk impact note in Appendix F of the applicant's response to ISH2 action points [REP4-055] that the impact of the marginal land raising in the location of the construction compounds has not been factored into the hydraulic modelling, could the EA review the construction compound flood risk impact note and state whether or not it concurs with the applicant's conclusion that floodplain displacement from the construction compounds would not increase flood risk elsewhere?	

9. Other planning issues			CWCC Response
Air quality			
2.9.1		No questions on this topic at this time	
Glint and glare, aviation and defence			
2.9.2	CWCC	Updated Glint and Glare Assessment Do you have any outstanding concerns following your review of the applicant's updated Glint and Glare Assessment [REP4-016]? If yes, please set them out and how you think that they should be addressed.	CWCC raises no further concerns.
Green Belt			
2.9.3	Applicant CWCC	CWCC's Green Belt Assessment CWCC has noted that this document is expected to be published for consideration by its Scrutiny Committee on 27 April 2026. The ExA assumes that, in accordance with the Local Government Act 1972, the draft would be published five clear days before the Committee meeting. If so, and given that the examination is scheduled to close on 30 April 2026: 1) could CWCC provide a copy of this draft document to the applicant as soon as it is published and to the ExA at deadline 6 (Wednesday 22 April 2026); 2) could CWCC and the applicant provide any observations on the draft document (insofar as it relates to the application site or the arguments that they have put forward) at deadline 7 (Wednesday 29 April 2026); and 3) could CWCC provide details of the Scrutiny Committee's decision in respect of the draft document at deadline 7?	CWCC will proactively update the ExA (and Applicant) as requested.
Human health, fire risk, safety and security			
2.9.4	National Highways	BESS and the Battery Safety Management Plan Are you content with the amendment to Requirement 7 (Battery Safety Management) in [REP4-004]?	
2.9.5	Applicant Cheshire Fire & Rescue Service (CFRS)	CFRS 1) Please provide a response to all matters addressed to CFRS in [EV10-024]. 2) Could the CFRS read Appendix D of the applicant's submission at deadline 4 [REP4-055] and provide comment as to whether chemical concentrations of those recorded are of concern to CFRS in relation to a battery fire? 3) Could CFRS read the applicant's response to action point 42 on pages 28 to 30 [REP4-055] and respond as to whether it has any residual concerns about responding to a battery fire at the BESS in light of this information.	
Noise, vibration and nuisance			
2.9.6	CWCC	Nuisance Are you satisfied with the updated wording of Article 8 in [REP4-004]?	Yes, CWCC welcomes the omission of operation and use from Article 8 [REP4-004].
Socio-economics and public rights of way			

2.9.7	Applicant	Maintenance of Public Rights of Way (PRoW) during the construction and operational phases Given comments from National Highways (NH) at deadline 4 [REP4-070] that any resurfacing of a bridge which forms part of the PRoW may impact the structure beneath, including compromising the waterproofing layer which sits just below the surface layer, the ExA requests that the applicant includes NH as a consultee in the outline Public Rights of Way Management Plan and named in Requirement 15 of the draft DCO as a consultee.	
2.9.8	Applicant	Closure of the River Weaver The applicant sets out six organisations that use the Weaver Navigation or the River Weaver in ES Chapter 12: Tourism and Recreation [APP-045]. The applicant confirms in section 12.8.65, that only two of these organisations use the section of the River Weaver adjacent to the site of the proposed development, Frodsham Kayaking and the Weaver Sailing and Ski Club. The applicant states in section 12.8.20 of ES Chapter 12 [APP-045] that construction works are not expected to have an impact on the activities of the Runcorn Rowing Club, the Danny Steamship, Mersey Ferries and Frodsham Water Sports which take place on the Weaver Navigation, the Manchester Ship Canal or upstream on the River Weaver. 1) The ExA notes the information in Table 12-4 of ES Chapter 12 regarding engagement activities, but for completeness could the applicant confirm the consultation it undertook in relation to the proposed closure of the River Weaver with the Weaver Sailing and Ski Club and Frodsham Kayaking, including dates this occurred and the details of the proposed closure that were conveyed? Could the applicant confirm if any specific objections or concerns were received from these organisations regarding the temporary closure of the River Weaver? 2) Again, the ExA notes the information in Table 12-4 of ES Chapter 12 [APP-045], but for completeness, could the applicant confirm the consultation it has undertaken in relation to the proposed closure of the River Weaver with these organisations to determine this conclusion, including dates this occurred and the details of the proposed closure that were conveyed? If the applicant's attempts to contact any of the above organisation was not successful, as is stated in section 12.4.5 of ES Chapter 12 published in May 2025, has the applicant made any subsequent attempts to contact them since then? Did the applicant receive any objections or concerns from any of these organisations regarding the proposed closure of the River Weaver?	
2.9.9	CWCC Applicant	Proposed closure of the River Weaver Is either the applicant or CWCC aware of any commercial use of the River Weaver that could be impacted by the proposed closure? If yes, has the applicant undertaken a socio-economic assessment of the potential impact of said closure on that commercial use? If not, why not.	Reference has been made to the following organisations in the Applicant's Environmental Statement (Ch 12: Tourism and Recreation) (APP-045): Weaver Sailing & Ski Club, Frodsham Kayaking, Frodsham Water Sports, Runcorn Rowing Club, The Daniel Adamson Steamship (The Danny). CWCC has sought details of any other organisations from the Canal & River Trust (and internally), and no other information, body or commercial use has been identified.

Traffic, transport, and access			
2.9.10	Applicant	Planned emergency use of Brook Furlong bridge and Weaver Lane bridge The ExA notes that the Outline Operational Environmental Management Plan [REP4-028] refers to access to the Site for emergency vehicles from Frodsham in section 2.2 page 7. A qualification of that is then provided within sections 2.4.18 and 2.4.19. Can the applicant review section 2.2 and consider if clarification on emergency access should also be made there?	
2.9.11	Applicant	Delivery of the car park on Moorditch Lane 1) Given the updates to the Outline Operational Environmental Management Plan [REP4-028] which reduces the possibility of a car park being delivered at all, can the applicant confirm whether this change has any impacts of the conclusions of ES Chapter 12: Tourism and Recreation [APP-045]? 2) ES Chapter 12 [APP-045] section 12.8.53 states that ‘<i>formal car parking area(s) would also be provided...</i>’. Could the applicant explain whether this refers only to the proposed car park for Moorditch Lane or whether there are other potential car parking areas proposed?	
Waste			
2.9.12	Applicant	Major replacement works In [REP2-003], Q9.6.3] and in response to the Local Impact Report [REP3-042], point 23.9] you state that major replacement work campaigns (plural) would take place every 10-15 years. It was stated at ISH2 that only one major replacement campaign would take place over the lifetime of the project (for solar panels), in accordance with the table 2-13 in ES Chapter 2 [APP-035]. The ExA requests that either ES Chapter 2, or the Technical Note on Major Replacement Works or the dDCO are amended to make it crystal clear on the situation regarding major replacement works and their frequency. The applicant is also advised to submit a separate contextualised response with regard to how the approach to major replacement works would accord with the waste management policies and expectations of NPS EN-1 and NPS EN-3.	
2.9.13	Applicant CWCC	Post-project management At deadline 3 [REP3-047], page 18], CWCC raised a concern that there was reliance on private agreements with landowners in respect to the situation at, and immediately after, decommissioning. 1) Could CWCC elaborate on its concerns and whether they are fundamental or cause conflict with any national policy statement? 2) Applicant, are you able to comment on this matter at all or, if possible, provide an extract of the heads of terms you have agreed with landowners that could give some clarity or comfort in this regard?	CWCC’s representations on the benefits of a Requirement for a decommissioning fund have been set out previously. It is accepted that there is no provision in the NPS’s requiring such provision. The provision of a decommissioning fund requirement is liable to add weight to the public’s acceptance of such a large-scale infrastructure project; and that the means to secure decommissioning is in place without undue burden on the public purse in relation to securing removal of the development at the end of the life of the DCO. Whilst the Applicant comments relating to safeguards concerning the transfer of the benefits of the DCO to another undertaker are acknowledged. The transfer on expiration of the DCO to a subsequent landowner may present greater challenges.

2.9.14	Applicant	Waste Management Plan CWCC [REP4-074] has requested certain stipulations be added into the waste management plan, including an adaptive approach to deal with future waste streams. Incorporate these requests accordingly or, if not, explain with reasons.	
Cumulative and inter-related effects			
2.9.15	Applicant, CWCC, Liverpool Bay CCS Limited	Tripartite memorandum of understanding With respect to the Runcorn Spur, the three bodies named in this question are requested to submit a joint statement setting out a clear pathway to resolving the approach to the cumulative effects assessment that, without prejudice to any party, accords with the Habitats Regulations and ensures an Adverse Effect on the Integrity of the Mersey Estuary Special Protection Area (and its functionally-linked land) could be ruled out.	CWCC provided comments in relation to the cumulative and in-combination impacts of the proposed development in its Deadline 4 submissions [REP4-065 and REP4-066]; in particular in response to ISH2 Agenda Item 3f and Action Point 39. The Applicant provided its cumulative assessment with Scenario 3 for Pipeline Construction after Frodsham Solar [REP4-053] at Deadline 4. Please see CWCC's comments on the Deadline 4 submissions accompanying this Deadline 5 submission. Please also see the covering letter with further summary responses to the outstanding ISH2 Action Points. In the Applicant's response to the ISH2 actions [REP4-055] (Action Point 39) there is acknowledgement in relation to the note on the interaction of the two projects: <i>"This demonstrates that the pipeline would cause an impact to the NBBMA and, given that area forms mitigation for the Proposed Development, could cause effects to Functionally Linked Land and the birds that use it. To mitigate that effect cannot be controlled by the Applicant – the NBBMA is in place, the impact is to it, and so the only mitigation can be done by the pipeline project"</i> The Applicant has circulated a draft Memorandum of Understanding (MoU) to CWCC and Liverpool Bay CCS Ltd. It is understood that neither of the other parties envisage progressing a legal agreement, as originally suggested by CWCC, and that the Applicant does not consider CWCC's suggestion (action point 39 following ISH2 [REP4-066] of a requirement on the DCO to impose a temporary restriction on other development following establishment of the NBBMA) is appropriate, in particular because it seeks to control matters outside the scope of the DCO application. CWCC acknowledges the Applicant's cumulative assessment with the CO2 spur pipeline [REP4-053] and in particular the suggestion of minimising the impact through trenchless crossing methods. It is not known whether Liverpool Bay CCS Ltd intend to comment on this, but at present trenchless crossing has not been specifically

			proposed/secured and therefore this would not necessarily represent a worst-case scenario in terms of the in combination effect. From discussion with the Applicant, their proposals would leave control to CWCC under the TCPA application for the CO2 spur pipeline (i.e. No specific control in relation to the DCO) other than engagement via a joint working party.
2.9.16	NE	HRA in-combination effects from the Runcorn Spur pipeline The ExA notes that you stated in your deadline 1 submission [REP1-056] in relation to issue NE35 HRA in-combination effects that: <i>‘Natural England has ongoing concerns with regards to the potential impacts on the NBBMA as a result of the Runcorn CO₂ spur pipeline. We continue to encourage the applicants of both developments to work together to minimise impacts and welcome the joint working group proposed by the applicant. The applicant must consider any factors that may undermine the success of the proposed habitats within the NBBMA. If works to the pipeline are undertaken before or at the same time as the habitats within the NBBMS are created, this creates a risk for the applicant in terms of the success of the NBBMA. The route of the pipeline in its current form shows the route passing through the NBBMA between the Canal Pools area and the wetland habitats. It is not clear how locating the pipeline in this area will impact on the water supply mechanisms to the wetland habitats and how it may alter the movement of water within the NBBMA. We advise assessment of the in combination operational impacts of the pipeline should be addressed within the HRA’.</i> At deadline 2 you stated [REP2-009] in response to ExA written question Q5.1.5 regarding the in-combination assessment that: <i>‘NE welcomes the additional information provided by the applicant with regards to in-combination however we consider that there are matters outstanding which require further consideration by the applicant. Our detailed advice is given within our WR’.</i> (NE’s written representation is REP1-056 quoted above). NE did not submit a representation at deadline 3 but the applicant submitted an updated (unsigned) Statement of Common Ground between itself and NE which stated the following on this issue which was recorded as ‘amber’: <i>‘NE require additional information in relation to matters NE35 and NE36. The Applicant has confirmed within its written responses to the NE Written Representation and also within the updated HRA how, once implemented, the pipeline would not affect the functioning of the NBBMA’.</i> Your deadline 4 submission states [REP4-069] that you believe the matter regarding HRA in-combination effects of the Runcorn Spur pipeline is now resolved due to the additional information provided by the applicant and the clarification provided within the HRA and confirmed the issue as ‘green’.	

		Particularly in light of question 2.9.15 above, can you explain in more detail the reason you believe the matter regarding HRA in-combination effects of the Runcorn Spur pipeline is now resolved. The ExA would like to understand what has changed since you made your deadline 1, 2 and 3 submissions quoted above to bring NE to its current conclusion.	
2.9.17	Applicant	NBBMA + The ExA is slightly confused by the applicant's position that, in the 'after scenario', the proposed development plus the NBBMA would not lead to a cumulative effect as indicated [REP1-041]: <i>"As such, in the After Scenario, the NBBMA will be an ecological future baseline for the Runcorn Spur Pipeline to consider. Put another way, there can be no 'Runcorn Spur Pipeline plus NBBMA' cumulative/ in-combination effect, as the NBBMA does not cause effects."</i> 1) As the ExA understands it, the cumulative effect is upon the birds, first by being displaced and re-provided for by the proposed development on the NBBMA, only then to be disturbed and potentially displaced from the NBBMA by construction activities by the Runcorn Spur. Should then consideration be given to the cumulative effect of the proposed development <u>plus</u> the Runcorn Spur upon SPA bird mitigation features? If not, why not? 2) Once the NBBMA is established and a conservation body (potentially the RSPB) takes over long term management and maintenance of the feature, would the applicant retain any interest, responsibility or liability over the NBBMA or the success of it as effective mitigation? If so, then would it not be the applicant responsible for restoring the NBBMA to its original condition prior to the Runcorn Spur being laid? If not, then which organisation would be responsible for restoring the NBBMA?	
Good design			
2.9.18		No questions on this topic at this time	

10. Compulsory acquisition and related matters		
Compulsory acquisition and related matters		
2.10.1	Applicant	Justification for CA of Land Paragraph 1.1.6 of the Statement of Reasons (SoR) [APP-018] states that the current design for the proposed development would enable the generation of approximately 147 megawatts (MW) of electricity, that the precise generating capacity and storage capacity will be subject to detailed design, but that at present the grid connection offer from the District Network Operator (DNO) is for 100 MW export and 50 MW import. Paragraph 1.1.3 of the SoR says that a private wire electricity connection would provide “<i>the opportunity</i>” to supply renewable energy generated by the proposed development directly to nearby industrial businesses. In that context: 1) is Plot 3-36 (Cheshire Green Property Ltd) likely to be needed to achieve the 100 MW of electricity for export to the grid? 2) with reference to paragraph 3.15 of [REP4-056], is Plot 3-36 needed to achieve the applicant’s expected grid connection date? 3) are there any agreements in place for the supply of energy to nearby industrial businesses? If yes, for how many MW of electricity? 4) please provide any examples of where overplanting has been accepted as a justification for the compulsory acquisition of land.
2.10.2	Applicant	Critical National Priority In your opinion, where Critical National Priority (CNP) Infrastructure is proposed, does the CNP status alone mean that compulsory acquisition of all land within the order limits should be confirmed? If yes, please set out your justification and any policy or guidance that supports your position. If no, please explain the other considerations that should be taken into account.
2.10.3	Applicant INOVYN Chlorvinyls Limited	Option Agreement and Deed of Easement Please provide an update on negotiations in respect of INOVYN Chlorvinyls Limited’s interests.
Protective Provisions		
2.10.4	EA	Protective Provisions Having regard to your position in respect of the disapplication of flood risk activity permits, are you content with the Protective Provisions for the Protection of the EA at Schedule 23 of the dDCO [REP4-004]?
2.10.5	National Highways (NH)	Protective Provisions Having regard to your position in respect of the Brook Furlong and Weaver Lane bridges, are you content with the Protective Provisions for the Protection of National Highways Limited at Schedule 27 of the dDCO [REP4-004]?

11. The draft Development Consent Order (DCO)			CWCC Response
General matters			
2.11.1	All interested parties and Statutory Undertakers	Residual issues with the dDCO The DCO [REP4-004] has been updated and progressed over the past few deadlines. A proportion of what has been requested by interested parties has been included in the Order, another proportion has been addressed through the updating of associated management plans and other elements the applicant has resisted with reasons. Under this question, please: 1) Outline any remaining or residual issues that you have with any articles, requirements or schedules of the dDCO. 2) Set out why the applicant has not yet resolved your concerns or why you are not content with the applicant's justification. 3) Define what remedy or solutions are available to meet your satisfaction and explain (make your case) as to why the applicant, ExA and SoS should consider such amendments to the DCO.	Please refer to CWCC's comments on Deadline 4 documents and the DCO section submitted at Deadline 5 in conjunction with these ExAQ2 responses (and response to 2.11.16 below). It has not been practical in the time available to provide comments on all the documents submitted at Deadline 4, nor to provide a comprehensive review in relation to earlier representations (e.g. as to whether comments have been satisfactorily addressed). However, the Applicant and CWCC are intending to engage further before Deadline 6 to address outstanding concerns where practical, and the ExA will be updated as appropriate.
2.11.2	CWCC	Permitted preliminary works Following amendments and reasoning given at deadline 4, does CWCC retain any particular concerns about the scope or extent of permitted preliminary works?	CWCC continues to prefer that site clearance is omitted from the definitions of permitted preliminary works (PPW). However, noting that site clearance is defined as a closed list comprising vegetation removal and demolition of existing buildings and structures [paragraph 4.2.2.(d) REP4-007] and that Requirement 8 provides that the permitted preliminary works must be carried out in accordance with the measures set out in appendix 2-3 of the ES [REP4-015]; and also that: Requirement 9 – Landscape and ecology management plan stipulates that no phase of the authorised development may commence, no part of the permitted preliminary works for that phase comprising vegetation removal may start, until a written landscape and ecological management plan for that phase has been submitted and approved, CWCC make the following comments/suggestions: Part 1 Preliminary – definition of permitted preliminary works (PPW) CWCC notes the Applicant's comments on PPW [REP4-052] referring to site clearance being controlled via the CEMP under Requirement 12(4). However, 12 (3) only refers to the 'construction of any phase of the authorised development' and CWCC is concerned that control over site clearance would not be triggered even though the carrying out of PPW would constitute 'commencement', and it would be covered by the CEMP, it would not fall within control without some amendments to 12(3). Possible re-wording might be: <i>(3) The implementation and/or construction of any phase of the authorised development and any associated works (including site clearance) must be carried out in accordance with the approved construction environmental management plan for that phase.</i> The Applicant has not yet responded to the suggestion that Requirement 12 (4) referring to elements of PPW as being commencement of development for the

			NBBMA, be extended to Marsh Farm and The Lum (currently in Work No. 6A but preferably denoted as a new 6D). In the definition of permitted preliminary works it is also suggested (k) site clearance be moved to the top of the list, and that the following works be only carried out after site clearance of the relevant phase or area of PPW: (d) receipt and erection of construction plant and equipment (<i>i.e. not just for Work No 6C as provide for in 1.2.1 of REP4-014</i>); (g) remedial work in respect of any contamination (<i>i.e. not just for Work No 6C as provide for in 1.2.1 of REP4-014</i>); (h) diversion and laying of apparatus; (l) access and highway improvements to create streets, roads, haul roads and access points. This is to ensure that the above works are not carried out in advance of the protections provided by triggering site clearance under the PPW, to the detriment of habitat requirements. CWCC's concerns in relation to the carrying out of PPW cover more than just the NBBMA. There are still concerns regarding the definition of Permitted Preliminary Works. In the reference to the Construction Environmental Management Plan (CEMP) (REP4-026/027) it is stated in paragraph 1.2.1 that in accordance with Requirement 12 of the draft DCO a CEMP will be submitted to and approved by the relevant planning authority prior to undertaking any of the following permitted preliminary works: i) above ground site preparation for temporary facilities for the use of contractors; ii) site clearance (comprising vegetation removal, demolition of existing structures or buildings and removal of plant and machinery); iii) receipt and erection of construction plant and equipment to be utilised for Work No. 6C; and iv) remedial work in respect of any contamination or other adverse ground conditions where this relates to Work No. 6C. It is not clear if items i and ii relate to the whole of the order limits and this should be clarified. In terms of iii, this should also apply to construction plan within range of the NBBMA that could have impacts on NBB. In terms of iv, this should also apply to the whole of the solar array, as badgers, breeding birds etc could be impacted by land remediation. It is also not clear how vegetation removal relates to biodiversity net gain targets, if the time between habitat removal and replacement is extended and

			also if areas meant for retention are in fact, subject to vegetation removal and ground remediation. In Table 1- Permitted Preliminary Works Mitigation, the commitments “Avoid removal of any vegetation other than that essential to undertake the investigation works” and “Provision of a CEMP for works within the NBBMA pursuant to DCO Requirement 12.” have been removed, and it is not clear why this is.
2.11.3	Applicant	Permitted preliminary works The explanatory memorandum [REP3-004] states the drafting for permitted preliminary works takes inspiration from the Cory Decarbonisation Project Order 2025. It is noted that at deadline 4 [REP4-052], it is stated that the applicant’s approach is “<i>well precedented</i>”. Provide the names of other orders where such wording has been tested by the SoS and incorporated into a made DCO. In addition, CWCC’s concern regarding item (k) of the permitted preliminary works extends beyond site clearance and demolition of the vent shafts, referring as well to disturbance to wildlife. This aspect does not appear to have been commented on in your response [REP4-052]. Explain the implications accordingly.	
Articles			
2.11.4	Applicant	Article 39 Hedgerows to be removed CWCC suggested a pragmatic approach of recording tree losses by canopy area to assist with assessing the actual loss, and that tree canopy area information be provided as a useful metric. Could the applicant respond to this suggestion?	
2.11.5	Applicant	Disapplication of Flood Risk Activity Permits (FRAP) Following the submission from the EA regarding the continued lack of technical detail [REP4-071], the ExA requests that you remove the disapplication of FRAP from the Order and update associated documents.	
Requirements			
2.11.6	CWCC	New Requirements Following on from Q2.11.1 above, if CWCC is unsatisfied with the rationale provided by the applicant for not providing the ‘new’ requirements referred to by CWCC in earlier submissions and still believe that new requirements are needed to mitigate for certain aspects, the ExA invites CWCC to provide draft wording for the dDCO.	Please see CWCC’s submission comments on the Deadline 4 submissions accompanying this Deadline 5 submission. It has not been practical in the time available to provide details comments / drafting. However, the Applicant and CWCC are intending to engage further before Deadline 6 to address outstanding concerns where practical, and the ExA will be updated as appropriate. In summary new (or amended) requirements are suggested in relation to the following:

			New requirements: • Provision relating to community liaison group. (see Requirement 4 of The Fenwick Solar Farm Order 2026) • Provision relating to permissive paths (see Part 2 Requirements (no 61) of The Oaklands Farm Solar Park Order (2025)) • Contaminated land – unexpected contamination • Decommissioning bond/security • In combination control (as submitted for Deadline 4) Key amendments to requirements: • Requirement 3(4): add requirement for notification of the gross electrical output capacity / export capacity of each phase (and the cumulative total) to be confirmed as part of the notice. • Requirement 6: add design details of power cables and associated conduits (or other arrangement to facilitate removal on decommissioning) • Requirement 8: LPA to be given 14 days notice of the commencement of PPW in any phase. • Requirement 9: Clarification to refer to “measures to achieve a net gain in biodiversity”, and clarification of which PPW will need which surveys, • Requirement 12 (CEMP) – suggested rewording (see response to Q12.11.12 above) • Requirements 13 to 15 • Requirement 18 (Archaeological) - adding no PPW to commence until the archaeological mitigation strategy is approved (as per Requirement 17) • Requirement 19 (skills and supply chain) – the timing of the requirement needs amendment to be effective, and operational before commencement • Requirement 20 Decommissioning
2.11.7	CWCC	Power cables and Requirement 6 The ExA requires clarification from CWCC. Is the request to have ‘power cables’ listed in the detailed design requirement in relation to the above ground pylon crossing to Frodsham Substation? Explain with reasons.	The request in relation to the power cables was directed principally at ensuring the underground cables were designed to facilitate their removal on decommissioning, with details of conduiting, or some other arrangement to facilitate removal. This was to ensure good design principles are employed from the outset in order to minimise waste/encourage recycling and avoid potential contamination/issues with redundant infrastructure being left in situ. Paragraph 3.6 of REP1-048 and CWCC’s response to ExA Q1 (Q9.9.1) [REP2-005] refer: “Regarding power cables, it is the confirmation of proposals for conduiting that is key; and the reason for seeking details of this is in relation to the ability to facilitate replacement and removal on decommissioning. This could be

			addressed in Requirement 6, or clarification provided in the Design Parameters Statement. For onsite cabling (between PV modules and inverters) and (between cattery containers and inverters) the statement currently refers to the ‘ <i>cabling being buried within underground trenches</i> ’ as opposed to reference to the use of conduits. Proposals for all electrical cabling should be clarified”.
			Notwithstanding the above reason for the original suggestion, given the
2.11.8	Applicant	Permissive Paths The arguments against having a new requirement for permissive paths is noted. However, could the oLEMP be amended so as to include the provisions cited by CWCC, giving reassurance that paths would be open and available for the requisite time periods?	
Schedules			
2.11.9		No questions on this topic at this time	

Appendices

- Appendix 1 HRA screening report for the Local Plan Issues and Options (June 2025) (Aecom)
- Appendix 2 The Strategic Environmental Assessment (SEA) for the Frodsham Neighbourhood Plan (Sept 2023) (Aecom)
- Appendix 3 Natural England response to the Regulation 18 Local Plan consultation
- Appendix 4 The Cheshire Sandstone Ridge Visitor Survey 2024 Sandstone report

Cheshire West and Chester Local Plan Issues and Options

Habitats Regulation Assessment Initial Screening

Cheshire West and Chester Council

June 2025

Quality information

Prepared by

Checked by

Verified by

Approved by

Ecologist

Associate HRA Consultant

Technical Director

Technical Director

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Prepared for:

Cheshire West and Chester Council

Prepared by:

Simon Gosling
Ecologist

AECOM Limited
Midpoint, Alencon Link
Basingstoke
Hampshire RG21 7PP
United Kingdom

T: +44(0)1256 310200
aecom.com

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1. Introduction

Background

- 1.1 Cheshire West and Cheshire Council (CW&C) are currently in the process of producing a new Local Plan which will create a single local plan document that updates and replaces all policies in the current Local Plan (Part One) Strategic Policies adopted in January 2015 and the current Local Plan (Part Two) Land Allocations and Detailed Policies adopted in July 2019. The new plan will guide development to achieve sustainable development. It will include housing, retail and employment uses and may allocate sites required to deliver the level of development needed.
- 1.2 As part of this process CW&C have issued an “issues and options” consultation document which indicates options for growth. Specific sites are not allocated in this document although options for broader areas to be developed are presented.
- 1.3 This Report provides an initial review of potential areas for growth and development and policy approaches and presents a summary of:
 - Habitats Sites which need to be considered;
 - Potential impact pathways to be considered in relation to those habitats; and
 - An assessment of where policies or development areas have a potential for likely significant effects.
- 1.4 The Habitats Regulation Assessment (HRA) of the CW&C Local Plan (CW&C LP) will be required to determine if there are any realistic linking pathways present between a Habitats site and the policies within the Local Plan. Where Likely Significant Effects cannot be screened out, an analysis to inform Appropriate Assessment is undertaken to determine if adverse effects on the integrity of the Habitats sites will occur as a result of the Local Plan, alone or in combination with other projects and plans. Habitats sites are Special Areas of Conservation (SAC), Special Protection Areas (SPA) and as a matter of government policy Ramsar sites. Proposed SACs (pSAC) and (pSPA) are also considered Habitats Sites for the purposes of an HRA.
- 1.5 This report undertakes initial screening of the broad areas for development sites to identify potential pathways and make an initial assessment (Stage 1 of the HRA process).
- 1.6 After formal completion of Stage 1 of the HRA process and Stage 2 (Appropriate Assessment) will be undertaken once the Regulation 19 CW&C LP is available for assessment.
- 1.7 This short form report is provided to inform the decision process for selecting allocations and support the development of the CW&C LP.

Legislative Context

- 1.8 The UK left the European Union (EU) on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 (“the Withdrawal Act”). While the UK is no longer a member of the EU, a requirement for Habitats Regulations Assessment will continue as set out in the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
- 1.9 The HRA process applies the ‘Precautionary Principle’ to Habitats sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the Habitat (formally “European”) site(s) in question. To ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the Plan or project in question. Figure 1 below sets out the legislative basis for Appropriate Assessment.
- 1.10 Plans and projects that are associated with potential adverse impacts on Habitats sites may still be permitted if there are no reasonable alternatives and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.

Conservation of Habitats and Species Regulations 2017 (as amended)

The Regulations state that:

“A competent authority, before deciding to ... give any consent, permission or other authorisation for, a plan or project which – (a) is likely to have a significant effect on a European site ... (either alone or in combination with other plans or project) must make an appropriate assessment of the implications of the plan or project in view of the site’s conservation objectives... The competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site”.

Figure 1: The legislative basis for Appropriate Assessment

- 1.11 Over time the phrase ‘Habitats Regulations Assessment’ (HRA) has come into wide currency to describe the overall process set out in the Regulations from screening through to IROPI. This has arisen in order to distinguish the process from the individual stage described in the law as an ‘Appropriate Assessment’. Appropriate Assessment is not undertaken within this report.
- 1.12 In spring 2018 the ‘Sweetman’ European Court of Justice ruling¹ clarified that ‘mitigation’ (i.e., measures that are specifically introduced to avoid or reduce a harmful effect on a Habitats site that would otherwise arise) should **not** be taken into account when forming a view on Likely Significant Effects. Mitigation should instead only be considered at the Appropriate Assessment stage. This HRA is cognisant of that ruling. Mitigation is not considered at this stage, except where it can be achieved through avoidance of an activity or other legislation provides protection against impacts (e.g. legislation which prevents water pollution from construction).

Habitats site scope of the project

- 1.13 There is no pre-defined guidance that dictates the physical scope of an HRA of a Plan document. Current guidance suggests that the following Habitats Sites should be included in the scope of an HRA assessment:
- All Habitats Sites within the boundary of the CW&C LP;
 - Habitats Sites located within 10km of the District boundary; and
 - Habitats Sites located outside of the District boundary shown to be linked to development in the CW&C LP through a known ‘pathway’ (discussed below).
- 1.14 Generally, it is uncommon for development plans to be deemed to have significant impacts on Habitats Sites situated more than 10km from areas of growth. For example, most core recreational catchments (except for some coastal sites) are under 10km in size and the average vehicle commuting distance of a UK resident is approx. 10km. However, there are exceptions, and it should be noted that the presence of a conceivable impact pathway linking a Plan to a Habitats Site does not mean that Likely Significant Effects (LSEs) will occur.
- 1.15 In particular, development impacts can extend beyond 10km, particularly where hydrological pathways and surface water catchments are involved, which is why the source-pathway-receptor concept is also used to help determine whether there are potential pathways connecting development to Habitats Sites. This takes site-specific sensitivities into account, including issues such as nutrient neutrality or water levels, quantity and flow.
- 1.16 Briefly defined, impact pathways are routes by which the implementation of a policy within a Local Plan document can lead to an effect upon a Habitats Site. An example of this would be new residential development resulting in an increased population and thus increased recreational pressure, which could affect Habitats Sites through, for example, disturbance of ground-nesting birds. Guidance from the Ministry of Housing, Communities and Local Government (MHCLG, now the Department for Levelling Up, Housing and Communities (DLUHC)) states that the HRA should be ‘proportionate to the geographical scope of the [plan policy]’ and that ‘an AA need not be done in any more detail, or using more resources, than is useful for its purpose’ (MHCLG, 2006, p.6).

¹ People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

1.17 This basic principle has also been reflected in court rulings. The Court of Appeal² has ruled that provided the Council (competent authority) was duly satisfied that proposed mitigation could be 'achieved in practice' to satisfy that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to planning permissions (rather than a Plan level document)³. In this case the High Court ruled that for 'a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of Reg 61 of the Habitats Regulations'.

1.18 Habitats Sites discussed this HRA:

- Alyn Valley Woods SAC;
- Berwyn and South Clwyd Mountains SAC;
- Brown Moss SAC;
- Dee Estuary SAC, SPA & Ramsar;
- Deeside and Buckley Newt Sites SAC;
- Fenn's, Whixhall, Bettisfield, Wem and Cadney Mosses SAC;
- Halkyn Mountain SAC;
- Johnstown Newt Sites SAC;
- Liverpool Bay SPA;
- Manchester Mosses SAC;
- Mersey Estuary SPA and Ramsar;
- Mersey Narrows & North Wirral Foreshore Ramsar and SPA;
- Midlands Meres and Mosses Ramsar site (Phase 1 and Phase 2);
- Oak Mere SAC;
- Ribble & Alt Estuaries SPA and Ramsar site;
- River Dee & Bala Lake SAC;
- River Eden SAC;
- Rixton Clay Pits SAC;
- Sefton Coast SAC
- Rostherne Mere Ramsar; and
- West Midlands Mosses SAC.

1.19 The distribution of the above Habitats Sites in relation to Cheshire West and Chester District is shown in **Figure 3** in **Appendix A** and an introduction to the qualifying features (species and habitats), Conservation Objectives, and threats and pressures to the integrity of these Habitats Sites are set out in **Appendix B**.

Quality Assurance

1.20 This report was undertaken in line with AECOM's Integrated Management System (IMS). Our IMS places great emphasis on professionalism, technical excellence, quality, environmental and Health and Safety management. All staff members are committed to establishing and maintaining our

²No Adastral New Town Ltd (NANT) v Suffolk Coastal District Council Court of Appeal, 17th February 2015

³High Court case of R (Devon Wildlife Trust) v Teignbridge District Council, 28 July 2015

certification to the international standards BS EN ISO 9001:2008 and 14001:2004 and BS OHSAS 18001:2007. In addition, our IMS requires careful selection and monitoring of the performance of all sub-consultants and contractors.

- 1.21 All AECOM Ecologists working on this project are members (at the appropriate level) of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct (CIEEM, 2025)

2. Methodology

Introduction

- 2.1 This section sets out the approach and methodology for undertaking the Habitats Regulations Assessment (HRA).

The Process of HRA

- 2.1 This initial report has been carried out with reference to the general EC guidance on HRA⁴ and in accordance with the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, and published guidance from relevant Government departments (referenced when used).

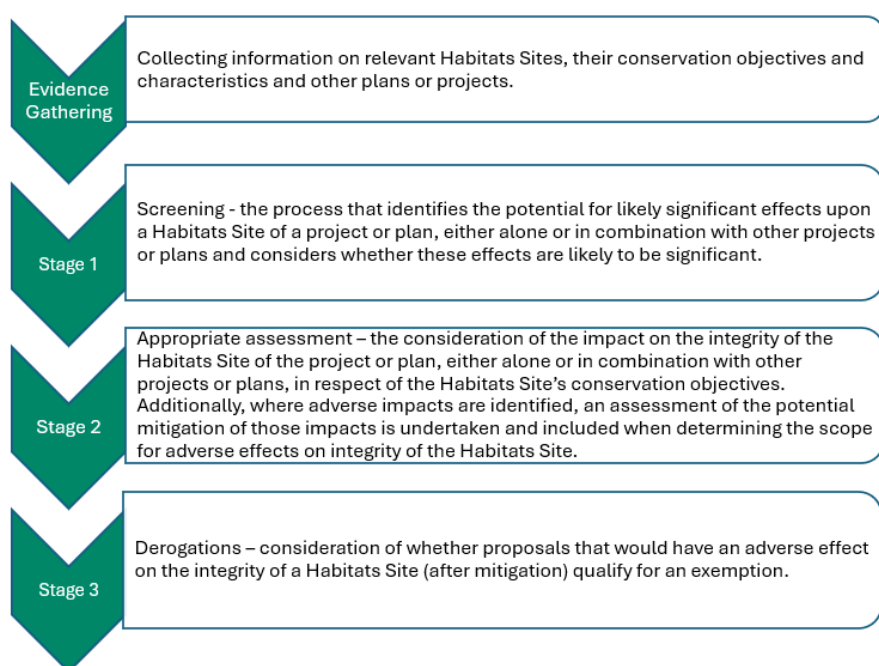


Plate 1. Three Stage Approach to Habitats Regulations Assessment⁵.

- 2.2 Plate 1 above outlines the stages of HRA according to current Department for Environment, Food and Rural Affairs (DEFRA) guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations, and any relevant changes to the Plan until no significant adverse effects remain. This initial report relates only to HRA Task 1: Screening (for Likely Significant Effects)

HRA Stage One: Test of Likely Significant Effects

- 2.3 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Test of Likely Significant Effect (LSEs) - essentially a brief, high-level assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

“Is the plan, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon Habitat sites?”

⁴ European Commission (2001): Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.

⁵ DEFRA 2023 Guidance: Habitats regulations assessments: protecting a European site available at <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site#how-to-carry-out-an-hra>

- 2.4 The objective is to ‘screen out’ those plans and projects that can, without any detailed appraisal, be concluded to be unlikely to result in significant adverse effects upon Habitats sites, usually because there is no mechanism for an adverse interaction.
- 2.5 The LSEs screening is based on identification of the impact source, its pathway to receptors and an appraisal of the specific Habitat site receptors. These are normally designated features but also include habitats and species fundamental for designated features to achieve favourable conservation status (notably functionally linked habitats outside the Habitat site boundary).
- 2.6 In the Waddenzee case⁶, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive, including that:
- An effect should be considered ‘likely’, “if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site” (para 44);
 - An effect should be considered ‘significant’, “if it undermines the conservation objectives” (para 48); and
 - Where a plan or project has an effect on a site “but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned” (para 47).
- 2.7 The LSEs screening consists of two parts: Firstly, it should determine whether there are any policies that could result in negative impact pathways and secondly it establishes whether there are any Habitat sites that might be affected. It identifies Habitat sites that are most likely to be impacted by the Plan and the impact pathways that are most likely to require consideration.
- 2.8 It is important to note that LSEs screening must generally follow the precautionary principle as its main purpose is to determine whether the subsequent stage of AA (i.e., a more detailed investigation) is required.

The Geographic Scope

- 2.9 The Habitats sites included for assessment in this report and their approximate distance from the boundary of the CW&C are listed in **Table 2-1**.

Table 2-1. Physical Scope of the HRA - Habitats Sites of Interest

Habitat Site	Distance to CW&C Boundary
Alyn Valley Woods	10.8km west of CW&C Boundary
Berwyn and South Clwyd Mountains SAC	12.7km southwest of CW&C Boundary
Brown Moss SAC	5km southeast of CW&C Boundary
Dee Estuary SAC / SPA / Ramsar	Within the CW&C Boundary
Deeside and Buckley Newt Sites	4.6km west of CW&C Boundary
Fenn's, Whixhall, Bettisfield, Wern and Cadney Mosses SAC	4.8km south of CW&C Boundary
Halkyn Mountain SAC	7km southwest of CW&C Boundary
Johnstown Newt Sies SAC	11km west of CW&C Boundary
Liverpool Bay SPA	Within the CW&C Boundary
Manchester Mosses SAC	14km of CW&C Boundary
Mersey Estuary SPA / Ramsar	Within the CW&C Boundary

⁶ Case C-127/0216

Habitat Site	Distance to CW&C Boundary
Mersey narrows and North Wirral Foreshore SPA / Ramsar	11.5km northwest of CW&C Boundary
Midland Meres and Mosses Ramsar (phase I)	4.4km east of CW&C Boundary
Midland Meres and Mosses Ramsar (phase II)	Within the CW&C Boundary
Oak Mere SAC	Within the CW&C Boundary
Ribble and Alt Estuaries SPA / Ramsar	18km northwest of CW&C Boundary
River Dee and Bala Lake SAC	Within the CW&C Boundary
River Eden SAC	112km north of CW&C (Included for possible hydrological connection to Haweswater Lake)
Rixton Clay Pits SAC	7km north of CW&C Boundary
Rostherne Mere Ramsar	7km east of CW&C Boundary
West Midlands Mosses SAC	Within the CW&C Boundary
Sefton Coast SAC	18.1 km northwest of CW&C Boundary

Confirming Other Plans and Projects That May Act ‘In Combination’

- 2.10 It is a requirement of the Regulations that the impacts and effects of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the Habitat site(s) in question.
- 2.11 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e., to ensure that those projects or plans (which in themselves have minor impacts) are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in combination assessment is therefore of greatest relevance when the plan, policy or site allocation would otherwise be screened out because its individual contribution is inconsequential. The overall approach is to exclude the risk of there being unassessed likely significant effects in accordance with the precautionary principle. This was first established in the seminal Waddenzee⁷ case.
- 2.12 For the purposes of this HRA, AECOM have determined that the key plans with a potential for in-combination effects are the Local Plans of surrounding authorities.
- 2.13 It should be noted that, while the broad potential impacts of these plans will be considered, this document does not carry out a full HRA of these Plans and projects. Instead, it draws upon existing HRAs that have been carried out on the Plans and projects.

3. Background to Impact Pathways

- 3.1 In carrying out an HRA it is important to avoid confining oneself to effectively arbitrary boundaries (such as Local Authority or parish boundaries), but to use an understanding of the various ways in which Land Use Plans can impact Habitat sites to evaluate whether development is connected with Habitat sites, in some cases many kilometres distant. Briefly defined, impact pathways are routes by which a change in activity

⁷ Waddenzee case (Case C-127/02, [2004] ECR-I 7405)

associated with a development can lead to an effect upon a Habitat site. As highlighted earlier, it is also important to bear in mind MHCLG guidance which states that the AA should be '*proportionate to the geographical scope of the [plan policy]*' and that '*an AA need not be done in any more detail, or using more resources, than is useful for its purpose*'⁸.

- 3.2 Based upon data available in the Designated Sites View⁹ provided by Natural England Site Improvement Plans (SIPs), Supplementary Advice for Conservation Objectives and professional judgement, the impact pathways listed in **Table 3-1** require consideration when assessing site allocations in the CW&C LP.

Table 3-1. Possible impact pathways

Habitat Site	Possible Impact Pathways
Alyn Valley Woods SAC	Public access/disturbance (recreational pressure) Water quality ¹⁰ Water quantity
Berwyn and South Clwyd Mountains SAC	Urbanisation Drainage (water quantity, level and flow) Public access/disturbance (recreational pressure) Air pollution: Impact of atmospheric nitrogen deposition
Brown Moss SAC	Hydrological changes Water pollution (water quality) Air pollution: impact of atmospheric nitrogen deposition
Dee Estuary SAC, SPA and Ramsar	Public access/disturbance (recreational pressure) Water pollution (water quality) Loss of functionally linked habitat Air pollution: Impact of atmospheric nitrogen deposition Urbanisation
Deeside and Buckley Newt Sites SAC	Water quality Public access/disturbance (recreational pressure)
Fenn's, Whixhall, Bettisfield, Wem and Cadney Mosses SAC	Inappropriate water levels (water quantity, level and flow) Water pollution (water quality) Air pollution: Impact of atmospheric nitrogen deposition
Halkyn Mountain SAC	Human induced changes in hydraulic conditions (water quantity, level and flow) Pollution to groundwater (water quality)

⁸ Ministry of Housing, Communities and Local Government. 2019. *Appropriate Assessment*.
<https://www.gov.uk/guidance/appropriate-assessment#:~:text=an%20appropriate%20assessment%20must%20identify,boundaries%20of%20that%20site%20and>

⁹ Available at <https://designatedsites.naturalengland.org.uk/>

¹⁰ See "Background to Water Quality" later in this section for a description of the types of quality issues described.

Habitat Site	Possible Impact Pathways
Johnstown Newt Sites SAC	Water depth (water quantity, level and flow) Presence of pollution (water quality)
Liverpool Bay SPA	Water pollution (water quality) Loss of functionally linked habitat
Manchester Mosses SAC	Hydrological changes Air pollution: impact of atmospheric nitrogen deposition
Mersey Estuary SPA and Ramsar	Public access/disturbance (recreational pressure) Loss of functionally linked habitat Urbanisation Air pollution: Impact of atmospheric nitrogen deposition
Mersey Narrows and North Wirral Foreshore SPA and Ramsar	Public access/disturbance (recreational pressure) Water pollution (water quality) Air pollution: Impact of atmospheric nitrogen deposition Loss of functionally linked habitat
Midland Meres and Mosses Phase I and Phase II Ramsar	Drainage/reclamation for agriculture Eutrophication (water quality) Pollution – pesticides/agricultural runoff (water quality) Urbanisation
Oak Mere SAC	Water pollution (water quality) Hydrological changes (water quantity, level and flow) Air pollution: impact of atmospheric nitrogen deposition
Ribble and Alt Estuaries SPA and Ramsar	Air Pollution: impact of atmospheric nitrogen deposition Hydrological changes (water quantity, level and flow) Public access / disturbance (recreational pressure) Loss of functionally linked habitat
River Dee and Bala Lake SAC	Public access/disturbance (recreational pressure) Water pollution (water quality) Urbanisation
River Eden SAC	Hydrology (water quantity, level and flow)
Rixton Clay Pits SAC	Urbanisation

Habitat Site	Possible Impact Pathways
Rostherne Mere Ramsar	Eutrophication (water quality) Loss of functionally linked habitat Recreational disturbance
Sefton Coast SAC	Hydrology (water quantity, level and flow)
West Midland Mosses SAC	Water pollution (water quality) Hydrological changes (water quantity, level and flow) Air Pollution: impact of atmospheric nitrogen deposition Urbanisation

Background to Atmospheric Pollution

3.3 The main pollutants of concern for Habitats sites are oxides of nitrogen (NO_x), ammonia (NH₃) and Sulphur dioxide (SO₂) and are summarised in **Table 3-2**.

Table 3-2. Main sources and effects of air pollutants on habitats and species.

Pollutant	Source	Effects on habitats and species
Sulphur dioxide (SO ₂)	The main sources of SO₂ are electricity generation, and industrial and domestic fuel combustion. However, total SO₂ emissions in the UK have decreased substantially since the 1980's. Another origin of Sulphur dioxide is the shipping industry and high atmospheric concentrations of SO₂ have been documented in busy ports. In future years shipping is likely to become one of the most important contributors to SO₂ emissions in the UK.	Wet and dry deposition of SO₂ acidifies soils and freshwater and may alter the composition of plant and animal communities. The magnitude of effects depends on levels of deposition, the buffering capacity of soils and the sensitivity of impacted species. However, SO₂ background levels have fallen considerably since the 1970's and are now not regarded a threat to plant communities. For example, decreases in Sulphur dioxide concentrations have been linked to returning lichen species and improved tree health in London.
Acid deposition	Leads to acidification of soils and freshwater via atmospheric deposition of SO₂, NO_x, ammonia and hydrochloric acid. Acid deposition from rain has declined by 85% in the last 20 years, which most of this contributed by lower sulphate levels. Although future trends in Sulphur (S) emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, increased N emissions may cancel out any gains produced by reduced S levels.	Gaseous precursors (e.g., SO₂) can cause direct damage to sensitive vegetation, such as lichen, upon deposition. Can affect habitats and species through both wet (acid rain) and dry deposition. The effects of acidification include lowering of soil pH, leaf chlorosis, reduced decomposition rates, and compromised reproduction in birds / plants. Not all sites are equally susceptible to acidification. This varies depending on soil type, bed rock geology, weathering rate and buffering capacity. For example, sites with an underlying geology of granite, gneiss and quartz rich rocks tend to be more susceptible.

Pollutant	Source	Effects on habitats and species
Ammonia (NH ₃)	Ammonia is a reactive, soluble alkaline gas that is released following decomposition and volatilisation of animal wastes and from some chemical processes and vehicle exhausts. It is a naturally occurring trace gas, but ammonia concentrations are directly related to the distribution of livestock. Ammonia reacts with acid pollutants such as the products of SO₂ and NO_x emissions to produce fine ammonium (NH₄⁺) - containing aerosol. Due to its significantly longer lifetime, NH₄⁺ may be transferred much longer distances (and can therefore be a significant trans-boundary issue). While ammonia deposition may be estimated from its atmospheric concentration, the deposition rates are strongly influenced by meteorology and ecosystem type.	The negative effect of NH₄⁺ may occur via direct toxicity when uptake exceeds detoxification capacity and via N accumulation. Its main adverse effect is eutrophication, leading to species assemblages that are dominated by fast-growing and tall species. For example, a shift in dominance from heath species (lichens, mosses) to grasses is often seen. As emissions mostly occur at ground level in the rural environment and NH₃ is rapidly deposited, some of the most acute problems of NH₃ deposition are for small relict nature reserves located in intensive agricultural landscapes.
Nitrogen oxides (NO _x)	Nitrogen oxides are mostly produced in combustion processes. Half of NO_x emissions in the UK derive from motor vehicles, one quarter from power stations and the rest from other industrial and domestic combustion processes.	Direct toxicity effects of gaseous nitrates are likely to be important in areas close to the source (e.g. roadside verges). A critical level of NO_x for all vegetation types has been set to 30 ug/m³. Deposition of nitrogen compounds (nitrates (NO₃), nitrogen dioxide (NO₂) and nitric acid (HNO₃)) contributes to the total nitrogen deposition and may lead to both soil and freshwater acidification. In addition, NO_x contributes to the eutrophication of soils and water, altering the species composition of plant communities at the expense of sensitive species.
Nitrogen deposition	The pollutants that contribute to the total nitrogen deposition derive mainly from oxidized (e.g. NO_x) or reduced (e.g. NH₃) nitrogen emissions (described separately above). While oxidized nitrogen mainly originates from major conurbations or highways, reduced nitrogen mostly derives from farming practices. The N pollutants together are a large contributor to acidification (see above).	All plants require nitrogen compounds to grow, but too much overall N is regarded as the major driver of biodiversity change globally. Species-rich plant communities with high proportions of slow-growing perennial species and bryophytes are most at risk from N eutrophication. This is because many semi-natural plants cannot assimilate the surplus N as well as many graminoid (grass) species. N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.
Ozone (O ₃)	A secondary pollutant generated by photochemical reactions involving NO_x, volatile organic compounds (VOCs) and sunlight. These precursors are mainly released by the combustion of fossil fuels (as discussed above).	Concentrations of O₃ above 40 ppb can be toxic to both humans and wildlife and can affect buildings. High O₃ concentrations are widely documented to cause damage to

Pollutant	Source	Effects on habitats and species
	Increasing anthropogenic emissions of ozone precursors in the UK have led to an increased number of days when ozone levels rise above 40 parts per billion (ppb) ('episodes' or 'smog'). Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.	vegetation, including visible leaf damage, reduction in floral biomass, reduction in crop yield (e.g. cereal grains, tomato, potato), reduction in the number of flowers, decrease in forest production and altered species composition in semi-natural plant communities.

Source: Information summarised from the Air Pollution Information System (<http://www.apis.ac.uk/>)

- 3.4 SO₂ emissions are overwhelmingly influenced by the output of power stations and industrial processes that require the combustion of coal and oil. As such, it is unlikely that material increases in SO₂ emissions will be associated with the MLP. NH₃ emissions are dominated by agriculture, with some chemical processes also making notable contributions.
- 3.5 NH₃ can have a directly toxic effect upon vegetation, particularly at close distances to the source such as near road verges¹¹. NO_x can also be toxic at high concentrations (far above the annual average Critical Level) but generally only in the presence of elevated SO₂ which is very rare in the UK.
- 3.6 NO_x emissions, however, are dominated by the output of vehicle exhausts (more than half of all emissions). Within a 'typical' housing development, by far the largest contribution to NO_x (92%) will be made by the associated road traffic. Other sources, although relevant, are of minor importance (8%) in comparison¹². Emissions of NO_x could therefore be reasonably expected to increase as a result of greater vehicle use due to the MLP. High levels of NO_x and NH₃ are likely to increase the total N deposition to soils, potentially leading to deleterious knock-on effects in resident ecosystems. Increases in nitrogen deposition from the atmosphere can, if sufficiently great, enhance soil fertility and lead to eutrophication. This often has adverse effects on community composition and the quality of semi-natural, nitrogen-limited terrestrial and aquatic habitats^{13, 14}.
- 3.7 According to the World Health Organisation, the critical NO_x concentration (critical threshold) for the protection of vegetation is 30 µgm⁻³. In addition, ecological studies have determined 'Critical Loads' (CLs)¹⁵ of atmospheric N deposition (that is, NO_x combined with ammonia NH₃) for key habitats within Habitats sites.
- 3.8 According to the Department of Transport's Transport Analysis Guidance, "Beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels *is not significant*"¹⁶ (see Figure 2).

¹¹ http://www.apis.ac.uk/overview/pollutants/overview_NOx.htm.

¹² Proportions calculated based upon data presented in Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. <http://www.airquality.co.uk/archive/index.php>

¹³ Wolseley, P. A.; James, P. W.; Theobald, M. R.; Sutton, M. A. **2006**. Detecting changes in epiphytic lichen communities at sites affected by atmospheric ammonia from agricultural sources. *Lichenologist* 38: 161-176

¹⁴ Dijk, N. **2011**. Dry deposition of ammonia gas drives species change faster than wet deposition of ammonium ions: evidence from a long-term field manipulation *Global Change Biology* 17: 3589-3607

¹⁵ The critical load is the rate of deposition beyond which research indicates that adverse effects can reasonably be expected to occur

¹⁶ www.webtag.org.uk/archive/feb04/pdf/feb04-333.pdf

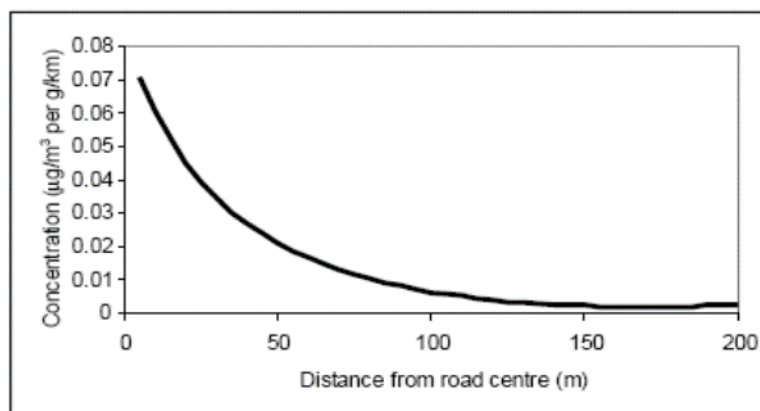


Figure 2: Traffic contribution to concentrations of pollutants at different distances from a road (Source: www.dft.gov.uk/ha/standards/dmr/vol11/section3/ha20707.pdf)

Background to Loss of Functionally Linked Habitat

- 3.9 While most Habitats sites have been geographically defined to encompass the key features that are necessary for coherence of their structure and function, and the support of their qualifying features, this is not necessarily the case. A diverse array of qualifying species including birds, bats and amphibians are not always confined to the boundary of designated sites.
- 3.10 For example, the highly mobile nature of both wader and waterfowl species implies that areas of habitat of crucial importance to the integrity of their populations lie outside the physical limits of Habitats sites. Despite not being part of the formal designation, these habitats are integral to the maintenance of the structure and function of the designated site, for example by encompassing important foraging grounds. Therefore, land use plans that may affect such functionally linked habitat require further assessment.
- 3.11 There is now an abundance of authoritative examples of HRA cases on plans affecting bird populations, where Natural England recognised the potential importance of functionally linked habitat. For example, bird surveys in relation to a previous HRA established that approximately 25% of the golden plover population in the Somerset Levels and Moors SPA were affected while on functionally linked land, and this required the inclusion of mitigation measures in the relevant plan policy wording. Another important case study originates from the Mersey Estuary SPA / Ramsar, where adjacently located functionally linked land had a peak survey count of 108% of the 5 year mean peak population of golden plover. This finding led to considerable amendments in the planning proposal to ensure that the site integrity was not adversely affected.
- 3.12 The identification of an area as functionally linked habitat is not always a straightforward process. The importance of non-designated land parcels may not be apparent and thus might require the analysis of existing data sources (e.g. Bird Atlases or data from records centres) to be firmly established. In some instances, data may not be available at all, requiring further survey work.
- 3.13 An area may be considered as functionally linked if:
- It is of a type likely to be used by a receptor (for example, a bird species) such as grazing salt marsh;
 - The area is within the usual foraging range of the bird species in question (as measured from the habitats site);
 - The area consists of a sufficiently-useful habitat, or habitats, that the area is of value to a receptor. For example, the further a bird of a given species travels to an area, the more energy it has to expend. To be considered of value, the area the bird arrives at must have sufficient appropriate habitat to provide the bird with the possibility of recovering the energy it spent;
 - The area conforms to other characteristics required by the receptor species, for example, clear line of site to avoid predation.

Background to Recreational Pressure

- 3.14 There is growing concern over the cumulative impacts of recreation on key nature conservation sites in the UK, as most sites must fulfil Conservation Objectives while also providing recreational opportunity. Various studies have provided compelling links between increases in housing development and access levels¹⁷, and resulting impacts in Habitat sites^{18 19}.
- 3.15 Recreational use of a site has the potential to:
- Cause disturbance to sensitive species such as ground-nesting birds and wintering wildfowl;
 - Prevent appropriate management or exacerbate existing management difficulties;
 - Cause damage through erosion, trampling and fragmentation; and
 - Cause eutrophication due to dog fouling.
- 3.16 Different types of Habitat sites (e.g., heathland, freshwater, chalk grassland) have a range of vulnerabilities and are sensitive to different types of recreational pressures. Studies across a range of species have shown that the effects from recreation can be complex.

Bird Disturbance

- 3.17 Disturbance effects can have negative impacts on qualifying birds in various ways, with reduced chick provisioning and increased nest predation due to adults being flushed from the nest and deterred from returning. A literature review on the effects of human disturbance on breeding birds found that 36 out of 40 studies reported reduced breeding success due to disturbance²⁰. The main reasons given for the reduction in breeding success were nest abandonment and increased predation of eggs or young. Studies of other species have shown that birds nest at lower densities in disturbed areas, particularly when there is weekday as well as weekend pressure²¹. Recreational disturbance effects on ground-nesting birds are particularly severe, with many studies concluding that urban sites support lower densities of key species, such as stone curlew (*Numenius Arquata*) and nightjar (*Caprimulgus europaeus*)^{22 23}.
- 3.18 Furthermore, there are numerous parameters (e.g. seasonality, type of recreational activity) that may reduce or exacerbate the magnitude of bird disturbance. For example, disturbance in winter may be more impactful because food shortages make birds more vulnerable at this time of year. In contrast, this may be counterbalanced by fewer recreational users in the winter months and lower overall sensitivity of birds outside the breeding season. Evidence in the literature suggests that the magnitude of disturbance clearly differs between different types of recreational activities. For example, dog walking leads to a significantly higher reduction in bird diversity and abundance compared to hiking²⁴. Scientific evidence also suggests that key disturbance parameters, such as areas of influence and flush distance, are significantly greater for dog walkers than hikers²⁵. In addition, dogs, rather than people, tend to be the cause of many management difficulties, notably by worrying grazing animals. A literature review summarised data on the use of semi-natural habitat by dogs²⁶, indicating that the proportion of dog walkers using sensitive sites tends to be high (54%).

¹⁷ Weitowitz D.C., Panter C., Hoskin R. & Liley D. 2019. The effect of urban development on visitor numbers to nearby protected nature conservation sites. *Journal of Urban Ecology* 5. <https://doi.org/10.1093/jue/juz019>

¹⁸ Liley D, Clarke R.T., Mallord J.W., Bullock J.M. (2006a). The effect of urban development and human disturbance on the distribution and abundance of nightjars on the Thames Basin and Dorset Heaths. *Natural England / Footprint Ecology*.

¹⁹ Liley D., Clarke R.T., Underhill-Day J., Tyldesley D.T. (2006b). Evidence to support the appropriate Assessment of development plans and projects in south-east Dorset. *Footprint Ecology / Dorset County Council*.

²⁰ Hockin D.M., Oundsted M., Gorman D., Hill V. & Barker M.A. (1992). Examination of the effects of disturbance on birds with reference to its importance in ecological assessments. *Journal of Environmental Management* 36: 253-286.

²¹ Van der Zande A.N., Berkhuisen J.C., van Letesteyn H.C., ter Keurs W.J. & Poppelaars A.J. (1984). Impact of outdoor recreation on the density of a number of breeding bird species in woods adjacent to urban residential areas. *Biological Conservation* 30: 1-39.

²² Clarke R.T., Liley D., Sharp J.M. & Green R.E. (2013). Building development and roads: Implications for the distribution of stone curlews across the Brecks. *PLOS ONE* [REDACTED]

²³ Liley D. & Clarke R.T. (2003). The impact of urban development and human disturbance on the numbers of nightjar *Caprimulgus europaeus* on heathlands in Dorset, England. *Biological Conservation* 114: 219-230.

²⁴ Banks P.B. & Bryant J.Y. (2007). Four-legged friend or foe? Dog walking displaces native birds from natural areas. *Biology Letters* 3: 14pp.

²⁵ Miller S.G., Knight R.L. & Miller C.K. (2001). Wildlife responses to pedestrians and dogs. *Wildlife Society Bulletin* 29: 124-132.

²⁶ Ibid.

- 3.19 Direct evidence for bird disturbance has been collected in many field studies. For example, observations of bird disturbance were undertaken by Footprint Ecology in North Kent in 2010 / 2011. The study focused on recreational disturbance to wintering waterfowl on intertidal habitats along the North Kent shoreline, stretching between Gravesend and Whitstable, and encompassing three SPAs. From 1,400 events (records of visitors in the bird survey areas) occurring within 200m of the birds, 3,248 species-specific observations were noted, which included no response (74% of observations), major flight (13%), minor flight (5%), short evasive walks away from the stimulus (5%) and alertness (3%).
- 3.20 Dog walking accounted for 55% of all major flight observations, with a further 15% attributed to walkers without dogs. After controlling for distance, major flights were more likely to occur when activities took place on the intertidal zone (compared to water-based or onshore events), when dogs were present, and a higher number of dogs were present in visitor groups. There were significant differences between species with curlew the species with the highest probability of major flight and teal and black-tailed godwit (*Limosa limosa*) the lowest. Tide state was also significant with major flights more likely at high tide, after controlling for distance. There was a significant interaction between distance and tide, indicating that the way in which birds responded varied according to tide. Inter-species differences in responses to disturbance stimuli are also evident from other studies. For example, one study found that there was a significant negative correlation between the degree of urban development and the number of nightjar territories in Dorset heathland sites, but no such impacts were found for woodlark (*Lullula arborea*) and Dartford warbler (*Curruca undata*)²⁷.
- 3.21 However, bird disturbance studies need to be treated with care. For instance, the magnitude of disturbance is not necessarily correlated with the impact of disturbance, i.e., the most easily disturbed species are not necessarily those that will suffer the greatest impacts. For example, it has been shown in some cases, that the most easily disturbed birds simply move to alternative feeding sites, while others remain (likely due to an absence of suitable alternative foraging areas) and thus suffer greater population-level impacts²⁸. A recent literature review undertaken for the RSPB²⁹ also urges caution when extrapolating the results of disturbance studies because responses differ between species and may be impacted by local environmental conditions. This should be considered when predicting the potential impacts of future recreational pressure on Habitat sites.
- 3.22 It should also be emphasised that recreational use is not necessarily a problem. Many Habitat sites are also National Nature Reserves or nature reserves managed by Wildlife Trusts and the RSPB. At these sites, access is encouraged, and resources are deployed to ensure that recreational use is managed appropriately. Bird abundances in many of these sites remain stable or, in some cases, are increasing despite high visitor numbers.

Trampling Damage

- 3.23 Most terrestrial habitats (including heathland, grassland and woodland) can be affected by trampling and other mechanical damage, which dislodges individual plants, leads to soil compaction and erosion. A general effect of trampling on vegetation is reduced species and structural diversity, since only dominant and tolerant plant species persist³⁰. However, many parameters (e.g. vegetation type, recreational activity, weather, and ground conditions) can have marked impacts on the degree of trampling damage. The following provides a brief overview of the impacts of trampling associated with different recreational activities in different habitats:

- A study on experimental trampling of different heathland types under varying weather conditions in Brittany (France) showed that dry heath was more resistant to trampling damage than wet heath³¹. Equally, both heathland habitats showed greater resilience to trampling under dry than wet conditions.

²⁷ Liley D. & Clarke R.T. (2002). Urban development adjacent to heathland sites in Dorset: The effect on the density and settlement patterns of Annex I bird species. English Nature Research Reports, No 463. English Nature, Peterborough. 33pp.

²⁸ Gill et al. (2001). Why behavioural responses may not reflect the population consequences of human disturbance. *Biological Conservation* **97**: 265-268.

²⁹ Woodfield & Langston. (2004). Literature review on the impact on bird population of disturbance due to human access on foot. *RSPB Research Report* No. 9.

³⁰ Santoro R. et.al. (2012). Effects of Trampling Limitation on Coastal Dune Plant Communities. Environmental Management DOI 10.1007/s00267-012-9809-6.

³¹ Gallet S. & Roze F. (2002). Long-term effects of trampling on Atlantic heathland in Brittany (France): Influence of vegetation type, season and weather conditions. *Biological Conservation* **103**: 267-275.

- Wilson & Seney³² examined the degree of track erosion caused by hikers, motorcyclists, horse riders and cyclists in 108 plots along tracks in the Gallatin National Forest, Montana. Although the results proved difficult to interpret, it was concluded that horses and hikers disturbed more sediment on wet tracks, and therefore caused more erosion, than motorcycles and bicycles.
 - Cole et al³³ conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow & grassland communities (each trampled between 0 – 500 times) over five mountain regions in the US. Vegetation cover was assessed two weeks and one year after trampling, and a negative correlation with trampling intensity was discovered. This relationship was weaker after one year than two weeks, indicating some vegetation recovery. Differences in plant morphology was found to explain more variation in response than soil and topographic factors. Low-growing, mat-forming grasses regained their cover best after two weeks and were considered most resistant to trampling, while tall forbs (non-woody vascular plants other than grasses, sedges, rushes and ferns) were considered least resistant. The cover of hemicryptophytes and geophytes (plants with buds below the soil surface) was heavily reduced after two weeks but had recovered well after one year and as such these were considered most resilient to trampling. Chamaephytes (plants with buds above the soil surface) were considered least tolerant to regular trampling disturbance.
 - Cole³⁴ conducted a follow-up study (across four vegetation types) in which shoe type (trainers or walking boots) and trampling weight were varied. Although immediate damage was greater with walking boots, there was no significant difference after one year. Heavier trampers caused a greater reduction in vegetation height than lighter trampers, but there was no differential impact on vegetation cover.
 - Cole & Spildie³⁵ experimentally compared the effects of off-track trampling by hikers and horse riders (at two intensities – 25 and 150 passes) in two woodland vegetation types (one with an erect forb understorey and one with a low shrub understorey). Generally, it was shown that higher trampling intensities caused greater levels of disturbance. Horse trampling resulted in a larger reduction in vegetation cover than hiking. While the forb-dominated vegetation suffered greater disturbance impacts, it recovered rapidly.
- 3.24 In heathland sites, trampling damage can affect the value of a site to wildlife. For example, heavy use of sandy tracks loosens and continuously disturbs sand particles, reducing the habitat's suitability for invertebrates³⁶. Species that burrow into flat surfaces such as the centres of paths, are likely to be particularly vulnerable, as the loose sediment can no longer maintain their burrow. In some instances, nature conservation bodies and local authorities resort to hardening paths to prevent further erosion. However, this is concomitant with the loss of habitat used by wildlife, such as sand lizards (*Lacerta agilis*) and burrowing invertebrates.

Nutrient Enrichment

- 3.25 A major concern for nutrient-poor terrestrial habitats such as dune systems is nutrient enrichment associated with dog fouling, which has been addressed in various reviews (e.g.,³⁷). It is estimated that dogs will defecate within 10 minutes of starting a walk and therefore most nutrient enrichment arising from dog faeces will occur within 400m of a site entrance. In contrast, dogs will urinate at frequent intervals during a walk, resulting in a spread-out distribution of urine. For example, in Burnham Beeches National Nature Reserve it is estimated that 30,000 litres of urine and 60 tonnes of dog faeces are deposited annually³⁸. While there

³² Wilson, J.P. & J.P. Seney. (1994). Erosional impact of hikers, horses, motorcycles and off-road bicycles on mountain trails in Montana. *Mountain Research and Development* **14**:77-88.

³³ Cole, D.N. (1995a). Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. *Journal of Applied Ecology* **32**: 203-214

Cole, D.N. (1995b). Experimental trampling of vegetation. II. Predictors of resistance and resilience. *Journal of Applied Ecology* **32**: 215-224

³⁴ Cole, D.N. (1995c). Recreational trampling experiments: effects of trampler weight and shoe type. Research Note INT-RN-425. U.S. Forest Service, Intermountain Research Station, Utah.

³⁵ Cole, D.N., Spildie, D.R. (1998). Hiker, horse and llama trampling effects on native vegetation in Montana, USA. *Journal of Environmental Management* **53**: 61-71

³⁶ Taylor K., Anderson P., Liley D. & Underhill-Day J.C. (2006). Promoting positive access management to sites of nature conservation value: A guide to good practice. English Nature / Countryside Agency, Peterborough and Cheltenham.

³⁷ Taylor K., Anderson P., Taylor R.P., Longden K. & Fisher P. (2005). Dogs, access and nature conservation. English Nature Research Report, Peterborough.

³⁸ Barnard A. (2003). Getting the facts – Dog walking and visitor number surveys at Burnham Beeches and their implications for the management process. *Countryside Recreation* **11**:16-19.

is little information on the chemical constituents of dog faeces, nitrogen is one of the main components³⁹. Nutrient levels are the major determinant of plant community composition and the effect of dog defecation in sensitive habitats is comparable to a high-level application of fertiliser, potentially resulting in the shift to plant communities that are more typical of improved grasslands.

- 3.26 A recent study has published further compelling evidence on the relative impact of nitrogen (N) and phosphorus (P) deposition arising from dogs. Using 487 direct-count censuses from four peri-urban forests and nature reserves, the modelling data suggested that canine fertilisation rates amount to 11 kg N and 5 kg P per hectare per year respectively⁴⁰. These amounts are significant when compared to atmospheric nitrogen deposition rates and the offsetting achievable through traditional habitat management techniques (e.g. cutting and removal of hay). The nitrogen deposition by dogs is particularly significant given the nitrogen Critical Load (CL) of 10-20 kg N/ha/yr provided for European dry heath and Northern Atlantic wet heath (qualifying feature of the Dorset Heaths SAC) on the Air Pollution Information System (APIS). This implies that the minimum CL of a site may be exceeded by N nitrogen deposition from dogs alone, before atmospheric sources are considered. Nutrient availability is the major determinant of plant community composition and the effect of dog defecation in sensitive habitats is comparable to a high-level application of fertiliser, potentially resulting in a shift towards plant communities that are more typical of improved grasslands.

Summary

- 3.27 Where increased recreational use is predicted to cause adverse impacts on a site, avoidance and mitigation should be considered. Avoidance of recreational impacts at Habitat sites involves locating new residential development further away (where possible). Strategic plans, such as Local Plans provide the mechanism for this. Where avoidance of impacts is not possible, mitigation will usually involve a mix of access management, habitat management and provision of alternative recreational space.

Background to Urbanisation

- 3.28 The natural environment is complex; most plants and wildlife rely on either a particular habitat type (e.g. broadleaved woodland, heathland) or a particular combination of habitats (habitat mosaic) to thrive. In addition to habitat type, habitat conditions and structure (e.g. south facing slope, dead standing wood, patches of bare soil, or areas of scrub adjacent to open areas of heathland etc.) are important factors for survival. Smaller organisms' (e.g. insects and fungi) immediate requirements are often on a more localised scale, for example a single tree, whereas other wildlife like birds may need vast areas for foraging in a single night.
- 3.29 Wildlife needs to be able to move around in order to find food and suitable places to live, breed and raise young; they must also be able to move in order to survive changes in their environment, for example disturbances caused by climate change or development. Movement is also important for the exchanging of genes, the building blocks for diversity and survival. Without this, generations of wildlife may become weaker and lack the ability to thrive.
- 3.30 Urbanisation essentially involves development encroaching on open spaces to such an extent that there is a regular background level of impact (whether recreational activity, cat predation, fly tipping of garden waste and other activities) due to the very close proximity of large amounts of housing. This can have a negative effect on wildlife causing them to retreat further into the body of a site and abandon the edge habitats, or impacting on their breeding success.
- 3.31 For the purposes of this assessment 'urbanisation' is used to refer to all potential impact pathways that stem from the close proximity new development other than those considered elsewhere in this report e.g. lighting, noise, cat predation, fly tipping, inadvertent arson and other pathways.

³⁹ Taylor K., Anderson P., Liley D. & Underhill-Day J.C. (2006). Promoting positive access management to sites of nature conservation value: A guide to good practice. English Nature / Countryside Agency, Peterborough and Cheltenham.

⁴⁰ De Frenne P., Cougnon M., Janssens G.P.J. & Vangansbeke P. (2022). Nutrient fertilization by dogs in peri-urban ecosystems. *Ecological Solutions and Evidence* 3, <https://doi.org/10.1002/2688-8319.12128>

Background to Water Quality

3.32 The quality of the water that feeds Habitats sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:

- At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour.
- Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates water further, augmenting the oxygen depleting effects of eutrophication. In the marine environment, nitrogen is the limiting plant nutrient, and so eutrophication is associated with discharges containing available nitrogen.
- Some pesticides, industrial chemicals, and components of sewage effluent are suspected to interfere with the functioning of the endocrine system, possibly having negative effects on the reproduction and development of aquatic life.

3.33 The main risk associated with the CW&C Local Plan is the discharge of treated sewage effluent from Wastewater Treatment Works (WwTWs) serving the Plan area. This could increase the nutrient concentrations in the water feeding Habitats Sites that are hydrologically linked to waterbodies that receive treated wastewater.

Background to Water Quantity, Level and Flow

3.34 The water level, its flow rates and the mixing conditions are important determinants of the condition of Habitats sites and their qualifying features. Hydrological processes are critical in influencing habitat characteristics in wetlands, terrestrial systems that have hydrological associations (e.g. wet heath) and coastal waters, including current velocity, water depth, dissolved oxygen levels, salinity and water temperature. In turn these parameters determine the short- and long-term viability of plant and animal species, as well as overall ecosystem composition.

3.35 A highly cited review paper summarised the ecological effects of reduced flow in rivers and connected water-dependent ecosystems. Droughts (ranging in their magnitude from flow reduction to a complete loss of surface water) have both direct and indirect effects on dependent floral and faunal communities. For example, the unique nature of wetlands combines shallow water and conditions that are ideal for the growth of organisms at the basal level of food webs, which feed many species of birds, mammals, fish and amphibians.

3.36 Maintaining a steady water supply is of critical importance for many hydrologically dependent SPAs, SACs and Ramsars. For example, in many freshwater bodies and wetlands the hydrological regime is essential for sustaining a variety of foraging habitats for SPA / Ramsar waterfowl species. However, different species vary in their requirements for specific water levels. Splash and / or shallow flooding is required to provide suitable feeding areas and roosting sites for ducks and waders. In contrast, deeper flooding is essential to provide foraging and loafing habitats for Bewick's swans and whooper swans.

3.37 Wetland habitats rely on hydrological connections with other surface waters, such as rivers, streams and lakes. A constant supply of water is fundamental to maintaining the ecological integrity of sites. However, while the natural fluctuation of water levels within narrow limits is desirable, excess or too little water supply might cause the water level to be outside of the required range of qualifying birds, invertebrate or plant species. This might lead to the loss of the structure and functioning of wetland habitats. There are two mechanisms through which urban development might negatively affect the water level in Habitats Sites:

- The supply of new housing with potable water will require increased abstraction of water from surface water and groundwater bodies. Depending on the level of water stress in the geographic region, this may reduce the water levels in Habitats Sites sharing the same catchment.
- The proliferation of impermeable surfaces in urban areas increases the volume and speed of surface water runoff. As traditional drainage systems often cannot cope with the volume of stormwater, sewer overflows are designed to discharge excess water directly into watercourses.

Often this pluvial flooding results in downstream inundation of watercourses and the potential flooding of wetland habitats.

4. Test of Likely Significant Effects

Introduction

- 4.1 When seeking to identify relevant Habitat sites, consideration has been given primarily to identified impact pathways and the source-pathway-receptor approach, rather than adopting purely a 'zones'-based approach. The source-pathway-receptor approach is a standard tool in environmental assessment. In order for an effect to occur, all three elements of this mechanism must be in place, whereas the absence of one or more of the elements means there is no possibility for an effect. Furthermore, even where an impact is predicted to occur, it may not result in significant effects (i.e., those which undermine the Conservation Objectives of a Habitat site).
- 4.2 The likely zone of impact (also referred to as the likely Zone of Influence, Zol) of a plan or project is the geographic extent over which significant ecological effects are likely to occur. The Zol of a plan or project will vary depending on the specifics of a particular proposal and must be determined on a case-by-case basis with reference to a variety of criteria, including:
- the nature, size / scale and location of the plan;
 - the connectivity between the plan and Habitat sites, for example through hydrological connections or because of the natural movement of qualifying species;
 - the sensitivity of ecological features under consideration; and,
 - the potential for in-combination effects.

Approach to Cheshire West and Chester Local Plan Potential Growth Areas and Policy Approaches Screening

- 4.3 This report screens the potential growth areas, spatial strategy policy options and policy approaches for potential impacts on the identified Habitats sites. Details of Spatial Strategy Options and Related Policies can be found in **Appendix C**.
- 4.4 There are no specific allocations so either the growth area (e.g. "Chester") or the development area (e.g. "CH01") have been assessed, as appropriate.
- 4.5 Broad guidelines are set for the assessment of impact pathways against growth areas etc, for example taking into account distance between the growth option and the habitats sites.
- 4.6 An initial assessment of the potential growth areas identified is made using the broad guidelines to determine potential impact pathways (if any) between the growth areas and each of the identified Habitats sites.
- 4.7 These are then explored for each growth area to apply the Test of Likely Significant Effects in relation to the Habitats sites identified for consideration.
- 4.8 Finally, the results are summarised for the purposes of comparing options and growth areas and assessing policies in relation to potential impacts.

Broad parameters for determining inclusion of Habitats sites for growth areas based on impact pathways

4.9 **Table 4-1** summarises the way in which impact pathways considered for impact on each Habitats site.

4.10 Policies which may result in impact pathways do so through:

- Allocation and development of sites (for residential or employment use)
- Development of infrastructure (particularly for transport) associated with the allocation of sites in the previous point.
- Development of a site for abstraction of natural resources (minerals)

4.11 The impact of policies within the issues and options document which are specific in location can be assessed through the site allocation assessments in **Table 4-1**. Note that although changes to infrastructure policies are under consideration there are no specific sites available for assessment at this stage.

4.12 Note that specifics of whether or not a site is vulnerable to a particular threat are considered at the next step of the assessment.

Table 4-1. Impact pathway parameters for considering the interaction between growth areas and Habitats sites.

Impact pathway	Inclusion parameters
Atmospheric pollution: SO ₂ emissions	Habitats sites susceptible to this type of emission within any distance of a growth option where power stations or industrial processes requiring combustion of coal and oil.
Atmospheric pollution: NH ₃	Growth areas where changes to levels of agriculture or increases in chemical production may result from a growth option (none identified)
Atmospheric pollution: NO _x	Growth areas where major vehicle commuting routes to the growth area come within 200m of a Habitats site. 75% of commuters travel less than 10 miles (16km)⁴¹ so sites beyond this distance are screened out. At this screening stage, modelling of the impact of proximity to rail transport has not be modelled and is not considered at this screening stage. It may be a consideration for Appropriate Assessment.
Functionally Linked Land	Habitats sites with highly mobile species (birds / bats / otter) within a precautionary distance of 20km of the growth area
Recreational Pressure	An unpublished report by Footprint Ecology for the Merseyside Environmental Service to inform a recreation mitigation strategy for Habitats sites in the Liverpool City region ⁴² indicated that the mean distance for people in the Liverpool City region travelled a mean distance of 5.5km to reach the coast. Growth areas within 5.5km of a Habitats site have therefore been screened in for recreational pressure (irrespective of whether the Habitats site is coastal)

⁴¹ Department of Transport (2022) *Transport Statistics Great Britain: 2022 Domestic Travel* Available at: <https://www.gov.uk/government/statistics/transport-statistics-great-britain-2023/transport-statistics-great-britain-2022-domestic-travel> [Accessed 05 June 2025]

⁴² Available at [REDACTED]

Urbanisation	A footprint Ecology Review of Literature⁴³ indicated hunting ranges could be over 3km from the home of a domestic cat (one study) although other studies (six of) indicated hunting ranges which were typically smaller than this. It is AECOMs view that this 3km buffer is sufficient for other potential impacts of urbanisation, for example, lighting, sound and fly tipping impacts. A precautionary distance of 3km has been used to screen growth areas for LSE's as a result of this pathway.
Water quality	Where the Wastewater Treatment Works for a growth area are in the same catchment as Habitats sites, the growth area is further considered for screening purposes. Appropriate assessment of the impact of any LSEs will need to give due consideration to relevant water and wastewater management plans and the relevant HRA assessments of those.
Water Quantity, Level and Flow	Where the Wastewater Treatment Works for a growth area are in the same catchment as Habitats sites, the growth area is further considered for screening purposes. Appropriate assessment of the impact of any LSEs will need to give due consideration to relevant water and wastewater management plans and the relevant HRA assessments of those.

Initial Screening of Potential Growth Options

4.13 **Table 4-2** provides an initial assessment of the Habitats Sites to be screened for each growth area based on the pathway guidance provided in **Table 4-1** and possible impact pathways identified in **Table 3-1**.

Table 4-2. Initial assessment of growth area Options for inclusion in screening

4.14

Growth Area	Impact Pathway	Habitats Sites
Chester	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar The Dee Estuary SPA / SAC /Ramsar West Midland Mosses SAC
	Functionally Linked Land	Dee Estuary SPA / Ramsar Liverpool Bay SPA Mersey Estuary SPA / Ramsar
	Recreational Pressure	River Dee and Bala Lake SAC
	Urbanisation	River Dee and Bala Lake SAC
	Water quality	Alyn Valley Woods SAC Deeside and Buckley Newt Sites SAC Halkyn Mountain SAC Johnstown Newt Sites River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar

⁴³ Floydd, L. & Underhill-Day, J. "A literature review on the effects of pet cats on nearby protected wildlife sites" Available at: <https://www.footprint-ecology.co.uk/reports/Floyd.%20L%20and%20Underhill-Day.%20J%20C%20-%202013%20-%20A%20literature%20review%20on%20the%20effects%20of%20pet%20cats%20on%20.pdf> [Accessed 16/05/2025]

	Water Quantity, Level and Flow	Alyn Valley Woods SAC Berwyn and South Clwyd Mountains SAC Halkyn Mountain SAC Johnstown Newt Sites River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar
Ellesmere Port	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Mersey Narrows and Noth Wirral Foreshore SPA / Ramsar Oak Mere SAC The Dee Estuary SPA / SAC /Ramsar West Midlands Mosses SAC
	Functionally Linked Land	Liverpool Bay SPA Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Ribble and Alt Estuaries SPA The Dee Estuary SPA / Ramsar
	Recreational Pressure	Mersey Estuary SPA / Ramsar The Dee Estuary SPA / Ramsar
	Urbanisation	Mersey Estuary SPA / Ramsar
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC
	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
Northwich	Atmospheric pollution: NOx	Manchester Mosses SAC Mersey Estuary SPA Oak Mere SAC West Midlands Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA Rostherne Mere Ramsar
	Recreational Pressure	None

	Urbanisation	Midland Meres Phase II Ramsar
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC
	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Oak Mere SAC West Midland Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar Rostherne Mere Ramsar
	Recreational Pressure	None
	Urbanisation	Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC
Winsford	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC
	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Oak Mere SAC West Midland Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar Rostherne Mere Ramsar
	Recreational Pressure	None
	Urbanisation	Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC
	Atmospheric pollution: SO2 emissions	None
Cuddington and Sandiway	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Oak Mere SAC West Midland Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar Rostherne Mere Ramsar
	Recreational Pressure	None
	Urbanisation	Midland Meres and Mosses Phase II Ramsar
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC

		West Midland Mosses SAC
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC
Farndon	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Berwyn and South Clwyd Mountains SAC
	Functionally Linked Land	None
	Recreational Pressure	None
	Urbanisation	None
	Water quality	Alyn Valley Woods SAC Deeside and Buckley Newt Sites SAC Halkyn Mountain SAC Johnstown Newt Sites River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar
	Water Quantity, Level and Flow	Alyn Valley Woods SAC Berwyn and South Clwyd Mountains SAC Halkyn Mountain SAC Johnstown Newt Sites River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar
Frodsham	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Oak Mere SAC West Midlands Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar Liverpool Bay SPA
	Recreational Pressure	Mersey Estuary SPA / Ramsar
	Urbanisation	Mersey Estuary SPA / Ramsar
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar

		Midland Meres and Mosses Phase II West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC
Helsby	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Oak Mere SAC West Midlands Mosses SAC
	Functionally Linked Land	Liverpool Bay SPA Mersey Estuary SPA / Ramsar The Dee Estuary SPA / Ramsar
	Recreational Pressure	Mersey Estuary SPA / Ramsar
	Urbanisation	Mersey Estuary SPA / Ramsar
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC
	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
Kelsall	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Oak Mere SAC West Midlands Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar
	Recreational Pressure	None
	Urbanisation	None
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC

		West Midlands Mosses SAC
Malpas	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC
	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Brown Moss SAC Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses (SAC) West Midlands Mosses SAC
	Functionally Linked Land	None
	Recreational Pressure	None
	Urbanisation	None
	Water quality	Alyn Valley Woods SAC Deeside and Buckley Newt Sites SAC Halkyn Mountain SAC Johnstown Newt Sites River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar
	Water Quantity, Level and Flow	Alyn Valley Woods SAC Berwyn and South Clwyd Mountains SAC Halkyn Mountain SAC Johnstown Newt Sites River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar
Neston and Parkgate	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Alyn Valley Woods Deeside and Buckley Newt sites Mersey Estuary SPA / Ramsar The Dee Estuary SPA / SAC / Ramsar
	Functionally Linked Land	Liverpool Bay SPA Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Ribble and Alt Estuaries SPA / Ramsar The Dee Estuary SPA / Ramsar
	Recreational Pressure	River Dee and Bala Lake SAC The Dee Estuary SPA / SAC / Ramsar
	Urbanisation	River Dee and Bala Lake SAC
	Water quality	River Dee and Bala Lake SAC

		The Dee Estuary SPA / SAC /Ramsar
Tarpoley	Water Quantity, Level and Flow	Berwyn and South Clwyd Mountains SAC Halkyn Mountain SAC River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar
	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Oak Mere SAC West Midlands Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar
	Recreational Pressure	None
	Urbanisation	None
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC Sefton Coast SAC
Tarvin	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Oak Mere SAC West Midland Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar The Dee Estuary SPA / Ramsar
	Recreational Pressure	None
	Urbanisation	None
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar

		West Midlands Mosses SAC Sefton Coast SAC
Tattenhall	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Oak Mere SAC West Midlands Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar The Dee Estuary SPA / Ramsar
	Recreational Pressure	None
	Urbanisation	None
	Water quality	Alyn Valley Woods SAC Deeside and Buckley Newt Sites SAC Halkyn Mountain SAC Johnstown Newt Sites River Dee and Bala Lake SAC The Dee Estuary SPA / SAC / Ramsar
	Water Quantity, Level and Flow	Alyn Valley Woods SAC Berwyn and South Clwyd Mountains SAC Halkyn Mountain SAC Johnstown Newt Sites River Dee and Bala Lake SAC The Dee Estuary SPA / SAC / Ramsar
Acton Bridge Station	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Oak Mere SAC West Midland Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar Rostherne Mere Ramsar Moss
	Recreational Pressure	None
	Urbanisation	None
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC Sefton Coast SAC

Capenhurst Station	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar The Dee Estuary SPA / Ramsar
	Functionally Linked Land	Liverpool Bay SPA Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar The Dee Estuary SPA / Ramsar
	Recreational Pressure	Mersey Estuary SPA / Ramsar
	Urbanisation	None
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC Sefton Coast SAC
Delamere Station	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Oak Mere SAC West Midland Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar
	Recreational Pressure	None
	Urbanisation	Midland Meres and Mosses Phase I and Phase II Ramsar
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar

		West Midlands Mosses SAC Sefton Coast SAC
Elton Station	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar The Dee Estuary SPA /Ramsar West Midlands Mosses SAC
	Functionally Linked Land	Liverpool Bay SPA Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar The Dee Estuary SPA /Ramsar
	Recreational Pressure	Mersey Estuary SPA / Ramsar
	Urbanisation	Mersey Estuary SPA / Ramsar
	Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC
	Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton SAC
Hooton Station	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar The Dee Estuary SPA /Ramsar
	Functionally Linked Land	Liverpool Bay SPA Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Ribble and Alt Estuaries SPA / Ramsar The Dee Estuary SPA /Ramsar
	Recreational Pressure	Mersey Estuary SPA / Ramsar
	Urbanisation	Mersey Estuary SPA / Ramsar
	Water quality	Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Oak Mere SAC

		West Midlands Mosses SAC
Lostock Gralam Station	Water Quantity, Level and Flow	Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Oak Mere SAC West Midlands Mosses SAC Sefton Coast SAC
	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Oak Mere SAC West Midlands Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar
	Recreational Pressure	None
	Urbanisation	None
	Water quality	Liverpool Bay SPA Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Oak Mere SAC West Midlands Mosses SAC
	Water Quantity, Level and Flow	Liverpool Bay SPA Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Oak Mere SAC West Midlands Mosses SAC Sefton Coast SAC
Mouldsworth Station	Atmospheric pollution: SO2 emissions	None
	Atmospheric pollution: NH3	None
	Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar Oak Mere SAC West Midlands Mosses SAC
	Functionally Linked Land	Mersey Estuary SPA / Ramsar The Dee Estuary SPA / Ramsar
	Recreational Pressure	None
	Urbanisation	None
	Water quality	Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar Oak Mere SAC West Midlands Mosses SAC

Water Quantity, Level and Flow

Mersey Estuary SPA / Ramsar

Mersey Narrows and North Wirral Foreshore SPA
/ Ramsar

Midland Meres and Mosses Phase II Ramsar

Oak Mere SAC

West Midlands Mosses SAC

Sefton Coast SAC

Test of Likely Significant Effects (ToLSE) for Growth Options

Chester

4.15 **Table 4-3** applies the ToLSE to the Chester growth area for impact pathways and Habitats sites identified in **Table 4-3**.

Table 4-3. ToLSE for the Chester growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	The Dee Estuary SPA / SAC /Ramsar	The A458 runs through Chester and is within 200m of these Habitats sites which are vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midland Mosses SAC	No major roads come within 200m of this Habitats site. Screened out for LSE
Functionally Linked Land	Dee Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. Growth area options CH02, CH03, and CH04 are within 15km of these Habitats sites. Screened in for LSE
Functionally Linked Land	Liverpool Bay SPA	None of the qualifying species for this Habitats site forage inland. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. Growth area options CH02, CH03, and CH04 are within 15km of these Habitats sites. Screened in for LSE

Recreational Pressure	River Dee and Bala Lake SAC	The growth area is within the catchment for this Habitat site which is vulnerable to recreational pressure. Screened in for LSE.
Urbanisation	River Dee and Bala Lake SAC	The growth area is within the catchment for this Habitat site which is vulnerable to urbanisation. Screened in for LSE.
Water quality	Deeside and Buckley Newt Sites SAC Halkyn Mountain SAC Johnstown Newt Sites SAC River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar	The growth area is within the catchment for these Habitats sites which are vulnerable to changes in water quality. Screened in for LSE.
Water Quantity, Level and Flow	Berwyn and South Clwyd Mountains SAC Halkyn Mountain SAC Johnstown Newt Sites SAC River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Ellesmere Port

4.16 **Table 4-4** applies the ToLSE to the Ellesmere Port growth area for impact pathways and Habitats sites identified in **Table 4-4**.

Table 4-4. ToLSE for the Ellesmere Port growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The A41 comes within 200m of these Habitats sites and potentially links the growth area to the Habitats sites, These habitats sites are vulnerable to Air pollution: Impact of atmospheric nitrogen. Screened in for LSE
Atmospheric pollution: NOx	Mersey Narrows and North Wirral Foreshore SPA and Ramsar	This Habitats site is within 200m f the A41 which is within 16km of the growth area. Screened in for LSE
Atmospheric pollution: NOx	Oak Mere SAC	The shortest route to this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	The Dee Estuary SPA / SAC /Ramsar	A number of connecting roads come within 200m of this Habitats site and potentially link the growth area. This site is vulnerable to Air pollution: Impact of atmospheric nitrogen. Screened in for LSE
Atmospheric pollution: NOx	West Midlands Mosses SAC	No major roads come within 200m of this Habitats site.

		Screened out for LSE
Functionally Linked Land	Liverpool Bay SPA	None of the qualifying species for this Habitats site forage inland. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. EP01, EP02, and EP03 are within 15km of these Habitats sites. Screened in for LSE
Functionally Linked Land	Mersey Narrows and North Wirral Foreshore SPA / Ramsar	The growth area is not within the inland foraging range of the qualifying species of this Habitats site. Screened out for LSE
Functionally Linked Land	Ribble and Alt Estuaries SPA	Several of the qualifying species for this Habitats site forage inland on farmland (up to 15km) however the nearest allocation option is 19km distant. Screened out for LSE.
Functionally Linked Land	The Dee Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. EP01, EP02, and EP03 are within 15km of these sites. Screened in for LSE
Recreational Pressure	Mersey Estuary SPA / Ramsar	These Habitats sites are vulnerable to Recreational disturbance. Screened in for LSE
Recreational Pressure	The Dee Estuary SPA / Ramsar	These Habitats sites are vulnerable to Recreational disturbance. Screened in for LSE
Urbanisation	Mersey Estuary SPA / Ramsar	These Habitats sites are vulnerable to Urbanisation. Screened in for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Northwich

4.17 **Table 4-5** applies the ToLSE to the Northwich growth area for impact pathways and Habitats sites identified in **Table 4-5**.

Table 4-5. ToLSE for the Northwich growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Manchester Mosses SAC	This Habitats site is not within 200m of a major road. Screened out for LSE.
Atmospheric pollution: NOx	Mersey Estuary SPA	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	Oak Mere SAC	The A556 connects the growth area to the Habitats Site and is within 200m of the Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midlands Mosses SAC	No major roads come within 200m of this Habitats site. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site NOR09, NOR10, NOR11, NOR12 are within 15km of these Habitats sites. Screened in for LSE
Functionally Linked Land	Rostherne Mere Ramsar	The qualifying species for this Habitats site are unlikely to forage more than 500m from the site. Screened out for LSE
Urbanisation	Midland Meres Phase II Ramsar	These Habitats sites are vulnerable to Urbanisation. Screened in for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Winsford

4.18 **Table 4-6** applies the ToLSE to the Winsford growth area for impact pathways and Habitats sites identified in **Table 4-5**.

Table 4-6. ToLSE for the Winsford growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Oak Mere SAC	The A54 connects the growth area to the Habitats Site and is within 200m of the Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midland Mosses SAC	No major roads come within 200m of this Habitats site. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	The Growth area options are greater than 15km from these Habitats Sites. Screened out for LSE.
Functionally Linked Land	Rostherne Mere Ramsar	The qualifying species for this Habitats site are unlikely to forage more than 500m from the site. Screened out for LSE
Urbanisation	Midland Meres and Mosses Phase II Ramsar	This Habitat site is vulnerable to urbanisation. Screened in for LSE
Urbanisation	West Midlands Mosses SAC	These Habitats sites are vulnerable to urbanisation. Screened in for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Cuddington and Sandiway

4.19 **Table 4-7** applies the ToLSE to the Cuddington and Sandiway growth area for impact pathways and Habitats sites identified in **Table 4-7**.

Table 4-7. ToLSE for the Cuddington and Sandiway growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	Oak Mere SAC	The A556 connects the growth area to the Habitats Site and is within 200m of the Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midland Mosses SAC	No major roads come within 200m of this Habitats site. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site CUD001 – CUD005 are within 15km of these Habitats sites. Screened in for LSE
Functionally Linked Land	Rostherne Mere Ramsar	This Habitats site is significantly beyond the foraging range for the qualifying species of this Habitats site. Screened out for LSE
Urbanisation	Midland Meres and Mosses Phase II Ramsar	This Habitats site is vulnerable to urbanisation. Screened in for LSE
Urbanisation	West Midland Mosses SAC	This Habitats site is vulnerable to urbanisation. Screened in for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Farndon

4.20 **Table 4-8** applies the ToLSE to the Farndon growth area for impact pathways and Habitats sites identified in **Table 4-8**.

Table 4-8. ToLSE for the Farndon growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Berwyn and South Clwyd Mountains SAC	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Water quality	Deeside and Buckley Newt Sites SAC Halkyn Mountain SAC Johnstown Newt Sites SAC River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Berwyn and South Clwyd Mountains SAC Halkyn Mountain SAC Johnstown Newt Sites SAC River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Frodsham

4.21 **Table 4-9** applies the ToLSE to the Frodsham growth area for impact pathways and Habitats sites identified in **Table 4-9**.

Table 4-9. ToLSE for the Frodsham growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The shortest route to this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	Oak Mere SAC	The A54/B5152 connect the growth area to this Habitats site. Connected major roads are within 200m of the Habitats site. The Habitats site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midlands Mosses SAC	No major roads come within 200m of this Habitats site. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from

		a roost site FRO01 to FRO03 are within 15km of these Habitats sites. Screened in for LSE
Functionally Linked Land	Liverpool Bay SPA	None of the qualifying species for this Habitats site forage inland. Screened out for LSE
Recreational Pressure	Mersey Estuary SPA / Ramsar	This Habitats site is vulnerable to recreational pressure. Screened in for LSE
Urbanisation	Mersey Estuary SPA / Ramsar	This Habitats site is vulnerable to urbanisation. Screened in for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Helsby

4.22 **Table 4-10** applies the ToLSE to the Helsby growth area for impact pathways and Habitats sites identified in **Table 4-10**.

Table 4-10. ToLSE for the Helsby growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	Oak Mere SAC	The shortest route to this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	West Midlands Mosses SAC	No major roads come within 200m of this Habitats site. Screened out for LSE

Functionally Linked Land	Liverpool Bay SPA	None of the qualifying species for this Habitats site forage inland. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. HEL01 to HEL03 are within 15km of these Habitats sites. Screened in for LSE
Functionally Linked Land	The Dee Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. HEL01 to HEL03 are within 15km of these sites. Screened in for LSE
Recreational Pressure	Mersey Estuary SPA / Ramsar	This Habitats site is vulnerable to recreational pressure. Screened in for LSE
Urbanisation	Mersey Estuary SPA / Ramsar	This Habitats site is vulnerable to urbanisation. Screened in for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Kelsall

4.23 **Table 4-11** applies the ToLSE to the Kelsall growth area for impact pathways and Habitats sites identified in **Table 4-11**.

Table 4-11. ToLSE for the Kelsall growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	Oak Mere SAC	The A54 which comes within 200m of the Habitats Site and connects it to the

		growth area. This Habitats site is vulnerable to Air Pollution: impact of atmospheric nitrogen deposition Screened in for LSE
Atmospheric pollution: NOx	West Midlands Mosses SAC	This site is vulnerable to Air Pollution: impact of atmospheric nitrogen deposition but is not within 200m of any major roads. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. KEL01 and KEL02 are within 15km of these sites. Screened in for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Malpas

4.24 **Table 4-11** applies the ToLSE to the Malpas growth area for impact pathways and Habitats sites identified in **Table 4-11**.

Table 4-12. ToLSE for the Malpas growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Brown Moss SAC	This Habitats site is potentially connected to the growth area by the B5393 through Whitchurch and is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE
Atmospheric pollution: NOx	Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC	The Habitats site is not within 200m of any major roads. Screened out for LSE.
Atmospheric pollution: NOx	West Midlands Mosses SAC	The Habitats site is vulnerable to Air pollution: Impact of atmospheric

		nitrogen deposition. However, there are no major roads within 200m of the site. Screened out for LSE.
Water quality	Deeside and Buckley Newt Sites SAC Halkyn Mountain SAC Johnstown Newt Sites SAC River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Berwyn and South Clwyd Mountains SAC Halkyn Mountain SAC Johnstown Newt Sites SAC River Dee and Bala Lake SAC The Dee Estuary SPA / SAC /Ramsar	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Neston and Parkgate

4.25 **Table 4-13** applies the ToLSE to the Neston and Parkgate growth area for impact pathways and Habitats sites identified in **Table 4-13**.

Table 4-13. ToLSE for the Neston and Parkgate growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The A41 comes within 200m of these Habitats sites and potentially links the growth area to the Habitats sites, These habitats sites are vulnerable to Air pollution: Impact of atmospheric nitrogen. Screened in for LSE
Atmospheric pollution: NOx	The Dee Estuary SPA / SAC / Ramsar	The B5134 comes within 200m of this Habitats site and links it to the growth area. This site is vulnerable to Air pollution: Impact of atmospheric nitrogen. Screened in for LSE
Atmospheric pollution: NOx	Alywn Valley Woods SAC	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Functionally Linked Land	Liverpool Bay SPA	None of the qualifying species for this Habitats site forage inland. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. NEP01 to NEP06 are within 15km of these sites.

		Screened in for LSE
Functionally Linked Land	Mersey Narrows and North Wirral Foreshore SPA / Ramsar	The growth area is not within the inland foraging range of the qualifying species of this Habitats site. Screened out for LSE
Functionally Linked Land	Ribble and Alt Estuaries SPA / Ramsar	Several of the qualifying species for this Habitats site forage inland on farmland (up to 15km) however the nearest allocation option is 19km distant. Screened out for LSE.
Functionally Linked Land	The Dee Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. NEP01 to NEP06 contain farmland and are within 15km of these sites. Screened in for LSE
Recreational Pressure	River Dee and Bala Lake SAC	This Habitats site is vulnerable to Recreational Pressure. Screened in for LSE
Recreational Pressure	The Dee Estuary SPA / SAC / Ramsar	This Habitats site is vulnerable to Recreational Pressure. Screened in for LSE
Urbanisation	River Dee and Bala Lake SAC	This Habitats site is vulnerable to Urbanisation. Screened in for LSE
Water quality	River Dee and Bala Lake SAC The Dee Estuary SPA / SAC / Ramsar	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	River Dee and Bala Lake SAC The Dee Estuary SPA / SAC / Ramsar	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Tarporley

4.26 **Table 4-14** applies the ToLSE to the Tarporley growth area for impact pathways and Habitats sites identified in **Table 4 14**.

Table 4-14. ToLSE for the Tarporley growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Oak Mere SAC	The A49/A54 Connects the growth area to this Habitats site which is within 200m of the site. The site is vulnerable to Air

		pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midlands Mosses SAC	The site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. However, there are no major roads within 200m of the site. Screened out for LSE.
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site, however all site allocations in this growth area are more than 15km away from this Habitats Site. Screened out for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Tarvin

4.27 **Table 4-15** applies the ToLSE to the Tarvin growth area for impact pathways and Habitats sites identified **Table 4-15**.

Table 4-15. ToLSE for the Tarvin growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	Oak Mere SAC	The A54 is within 200m of the Habitats site and connects it to the growth area. The site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition.

		Screened in for LSE.
Atmospheric pollution: NOx	West Midland Mosses SAC	The Habitats site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. However, there are no major roads within 200m of the site. Screened out for LSE.
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. TARV01 to TARV03 are within 15km of these sites. Screened in for LSE
Functionally Linked Land	The Dee Estuary SPA / Ramsar	Several of the qualifying species for this Habitats site forage inland on farmland (up to 15km) however the nearest allocation option is 19km distant. Screened out for LSE.
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Tattenhall

4.28 **Table 4-16** applies the ToLSE to the Tattenhall growth area for impact pathways and Habitats sites identified **Table 4-16**.

Table 4-16. ToLSE for the Tattenhall growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Oak Mere SAC	The A54/A49, which is within 200m of the Habitats site, connects the growth area to this Habitats site. The site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midland Mosses SAC	The site is vulnerable to Air pollution: Impact of atmospheric nitrogen

		deposition. However, there are no major roads within 200m of the site. Screened out for LSE.
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. TAT01 to TAT07 are within 15km of these sites. Screened in for LSE
Functionally Linked Land	The Dee Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. TAT01 to TAT07 are within 15km of these sites. Screened in for LSE
Water quality	Deeside and Buckley Newt Sites SAC Halkyn Mountain SAC Johnstown Newt Sites SAC River Dee and Bala Lake SAC The Dee Estuary SPA / SAC / Ramsar	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Berwyn and South Clwyd Mountains SAC Halkyn Mountain SAC Johnstown Newt Sites SAC River Dee and Bala Lake SAC The Dee Estuary SPA / SAC / Ramsar	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Acton Bridge Station

4.29 **Table 4-17** applies the ToLSE to the Acton Bridge Station growth area for impact pathways and Habitats sites identified **Table 4-17**.

Table 4-17. ToLSE for the Acton Bridge Station growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	Oak Mere SAC	The A54/A556, which is within 200m of the Habitats site, connects the growth area to this Habitats site. The site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midland Mosses SAC	The site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. However, there are no major roads within 200m of the site.

		Screened out for LSE.
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. ACB01 to ACB05 are within 15km of these sites. Screened in for LSE
Functionally Linked Land	Rostherne Mere Ramsar	The qualifying species for this Habitats site are unlikely to forage more than 500m from the site. Screened out for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Capenhurst Station

4.30 **Table 4-18** applies the ToLSE to the Capenhurst Station growth area for impact pathways and Habitats sites identified **Table 4-18**.

Table 4-18. ToLSE for the Capenhurst Station growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The A550, which is within 200m of the Habitats sites, connects the growth area to these Habitats sites. The site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	Mersey Narrows and North Wirral Foreshore SPA / Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	The Dee Estuary SPA / Ramsar	The A550/A548 connects the growth area to this Habitats site. Major roads connected via this route are within 200m of the Habitats site. The site is

		vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Functionally Linked Land	Liverpool Bay SPA	None of the qualifying species for this Habitats site forage inland. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. CAP01 and CAP02 are within 15km of these Habitats sites. Screened in for LSE
Functionally Linked Land	Mersey Narrows and North Wirral Foreshore SPA / Ramsar	The growth area is not within the inland foraging range of the qualifying species of this Habitats site. Screened out for LSE
Functionally Linked Land	The Dee Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. CAP01 and CAP02 contain farmland and are within 15km of these Habitats sites. Screened in for LSE
Recreational Pressure	Mersey Estuary SPA / Ramsar	This site is vulnerable to recreational pressure. Screened in for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Delamare Station

4.31 **Table 4-19** applies the ToLSE to the Delamare Station growth area for impact pathways and Habitats sites identified **Table 4-19**.

Table 4-19. ToLSE for the Delamare Station growth area

Pathway	Habitats Site	ToLSE

Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	Oak Mere SAC	The A54/A556/B5152 connect the growth area to this Habitats site. Connected major roads are within 200m of the Habitats site. The Habitats site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midland Mosses SAC	The Habitats site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. However, there are no major roads within 200m of the Habitats site. Screened out for LSE.
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. DEL01 is within 15km of these Habitats sites. Screened in for LSE
Recreational Pressure	Midland Meres and Mosses Phase I and Phase II Ramsar	This Habitats site is not vulnerable to recreational pressure. Screened out for LSE
Recreational Pressure	Oak Mere SAC	This Habitats site is not vulnerable to recreational pressure. Screened out for LSE
Recreational Pressure	West Midland Mosses SAC	This Habitats site is not vulnerable to recreational pressure. Screened out for LSE
Urbanisation	Midland Meres and Mosses Phase I and Phase II Ramsar	This Habitats site is vulnerable to urbanisation. Screened in for LSE
Urbanisation	Oak Mere SAC	This Habitats site is not vulnerable to urbanisation. Screened out for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow.

	Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC	Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Elton Station

4.32 **Table 4-20** applies the ToLSE to the Elton Station growth area for impact pathways and Habitats sites identified **Table 4-20**.

Table 4-20. ToLSE for the Elton Station growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	The Dee Estuary SAC/ SPA /Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Functionally Linked Land	Liverpool Bay SPA	None of the qualifying species for this Habitats site forage inland. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. ELT01 to ELT04 are within 15km of these Habitats sites. Screened in for LSE
Functionally Linked Land	Mersey Narrows and North Wirral Foreshore SPA / Ramsar	The growth area is not within the inland foraging range of the qualifying species of this Habitats site. Screened out for LSE
Functionally Linked Land	The Dee Estuary SPA /Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. However, these growth area options are greater than 15km from the Habitats site.

		Screened out for LSE
Recreational Pressure	Mersey Estuary SPA / Ramsar	This Habitats site is vulnerable to recreational pressure. Screened in for LSE
Urbanisation	Mersey Estuary SPA / Ramsar	This Habitats site is vulnerable to urbanisation. Screened in for LSE
Water quality	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Oak Mere SAC Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Hooton Station

4.33 **Table 4-21** applies the ToLSE to the Hooton Station growth area for impact pathways and Habitats sites identified **Table 4-21**.

Table 4-21. ToLSE for the Hooton Station growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Liverpool Bay SPA	This Habitats site is not vulnerable to Air Pollution: impact of atmospheric nitrogen deposition. Screened out for LSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The A41 comes within 200m of this Habitats site and is directly connected to the growth area. Screened in for LSE.
Atmospheric pollution: NOx	Mersey Narrows and North Wirral Foreshore SPA / Ramsar	The Habitats site is not vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened out for LSE.
Atmospheric pollution: NOx	The Dee Estuary SPA / Ramsar	Various major roads connect the growth area to within 200m of this Habitats. The Habitats site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition.

		Screened in for LSE.
Functionally Linked Land	Liverpool Bay SPA	None of the qualifying species for this Habitats site forage inland. Screened out for LSE
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. HOO01 to HOO04 are within 15km of these Habitats sites. Screened in for LSE.
Functionally Linked Land	Mersey Narrows and North Wirral Foreshore SPA / Ramsar	The growth area is not within the inland foraging range of the qualifying species of this Habitats site. Screened out for LSE
Functionally Linked Land	Ribble and Alt Estuaries SPA / Ramsar	Several of the qualifying species for this Habitats site forage inland on farmland (up to 15km) however the nearest allocation option is 19km distant. Screened out for LSE.
Functionally Linked Land	The Dee Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. HOO01 to HOO04 are within 15km of these Habitats sites. Screened in for LSE
Recreational Pressure	Mersey Estuary SPA / Ramsar	This site is vulnerable to recreational pressure. Screened in for LSE
Urbanisation	Mersey Estuary SPA / Ramsar	This site is vulnerable to urbanisation. Screened in for LSE
Water quality	Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Oak Mere SAC West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Oak Mere SAC West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Lostock Gralam Station

4.34 **Table 4-22** applies the ToLSE to the Lostock Gralam Station growth area for impact pathways and Habitats sites identified **Table 4-22**.

Table 4-22. ToLSE for the Lostock Gralam Station growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Oak Mere SAC	The A54/A556 connect the growth area to this Habitats site. Connected major roads are within 200m of the Habitats site. The Habitats site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midlands Mosses SAC	The Habitats site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. However, there are no major roads within 200m of the Habitats site. Screened out for LSE.
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. However, these growth area options are greater than 15km from the Habitats site. Screened out for LSE
Water quality	Liverpool Bay SPA Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Oak Mere SAC Rostherne Mere Ramsar West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Liverpool Bay SPA Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Oak Mere SAC Rostherne Mere Ramsar West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

Mouldsworth Station

4.35 **Table 4-23** applies the ToLSE to the Mouldsworth Station growth area for impact pathways and Habitats sites identified **Table 4-23**.

Table 4-23. ToLSE for the Mouldsworth Station growth area

Pathway	Habitats Site	ToLSE
Atmospheric pollution: NOx	Mersey Estuary SPA / Ramsar	The shortest route to within 200m of this Habitats site which is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition is greater than 16km. Screened out for LSE
Atmospheric pollution: NOx	Oak Mere SAC	The A54 and B5152 connect the growth area to this Habitats site which is within 200m of major roads. The Habitats site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. Screened in for LSE.
Atmospheric pollution: NOx	West Midlands Mosses SAC	The Habitats site is vulnerable to Air pollution: Impact of atmospheric nitrogen deposition. However, there are no major roads within 200m of the Habitats site. Screened out for LSE.
Functionally Linked Land	Mersey Estuary SPA / Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. MOU01 to MOU03 are within 15km of these Habitats sites. Screened in for LSE
Functionally Linked Land	The Dee Estuary SPA /Ramsar	Plover can use lowland farmland in winter and can forage up to 15 km from a roost site. However, these growth area options are greater than 15km from the Habitats sites. Screened out for LSE
Water quality	Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar Oak Mere SAC West Midlands Mosses SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.
Water Quantity, Level and Flow	Mersey Estuary SPA / Ramsar Mersey Narrows and North Wirral Foreshore SPA / Ramsar Midland Meres and Mosses Phase II Ramsar Oak Mere SAC West Midlands Mosses SAC Sefton Coast SAC	The growth area is within the catchment for these Habitats sites which are potentially vulnerable to changes in water quantity, level and flow. Screened in for LSE.

5. Summary of Screening

5.1 Fifty-nine policies, growth areas and growth strategies have been presented for screening within this HRA. Of the 59 assessed 21 have been screened in for further assessment and are listed below;

- SS1 Housing needs
- SS2 Employment needs
- SS3 Spatial strategy principles
- SS5 Spatial strategy options
- Option A – retain the green belt
- Option B - Follow current Local Plan level and distribution of development
- Option C - Sustainable transport corridors
- CH1: Chester
- EP1: Ellesmere Port
- EP2: Origin - Stanlow and Thornton Science Park
- EP3: Origin – Protos
- NO1: Northwich
- NO2: Gadbrook Park
- WI1: Winsford
- WI2: Winsford Industrial Estate
- FR1: Frodsham
- NP1: Neston and Parkgate
- MI1: Middlewich
- TA2: Local transport infrastructure priorities
- GT1: Gypsy and Traveller and Travelling Showpersons accommodation
- MS1: Minerals supply

5.2 The above policies, growth areas and growth strategies have been screened in for further assessment within an Appropriate Assessment due to them discussing net new residential development and/or net new employment development or other potentially impactful development and/or locations for the development. The information at this stage is high-level and therefore the assessment of likely significant effects is also high-level.

5.3 Table 5-1 summarises the growth areas which have been screened in for Appropriate Assessment for each of the option. Appropriate Assessment is not included in this report and will be undertaken once allocations for inclusion in the Regulation 18 Local Plan have been confirmed. Only screened in growth area / Habitats site / Option combinations which result in an LSE are included in this table.

5.4 Sites screened in at Task 1 of the HRA process do not necessarily result in a conclusion of likely significant effects following Appropriate Assessment. Further review of the allocations cannot be completed without a full draft of the Regulation 19 CW&C LP so no further conclusions can be drawn at this stage.

Table 5-1. Screened in growth areas by option.

Impact Pathway	Habitats Site	Option A	Option B	Option C
Air pollution: Impact of atmospheric nitrogen	Brown Moss SAC	Malpas	Malpas	Malpas
	Mersey Estuary SPA / Ramsar	None	Ellesmere Port	Ellesmere Port
			Neston and Parkgate	Neston and Parkgate Capenhurst Station
	Mersey Narrows and North Wirral Foreshore SPA / Ramsar	None	Ellesmere Port	Ellesmere Port Hooton Station
	Oak Mere SAC	Northwich	Northwich	Northwich
		Winsford	Winsford	Winsford
		Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway
		Kelsall	Frodsham	Frodsham
		Tarporley	Kelsall	Kelsall
		Tarvin	Tarporley	Tarporley
		Tattenhall	Tarvin	Tarvin
			Tattenhall	Tattenhall
				Acton Bridge Station
				Delamere Station
Loss of Functionally Linked Land	Mersey Estuary SPA / Ramsar	None		Lostock Gralam Station
				Mouldsworth Station
			Chester	Chester
			Neston and Parkgate	Neston and Parkgate Capenhurst Station Hooton Station
			Ellesmere Port	Ellesmere Port
			Cuddington and Sandiway	Cuddington and Sandiway
			Northwich	Northwich
			Kelsall	Kelsall
			Tarvin	Tarvin
			Tattenhall	Tattenhall
			Frodsham	Frodsham
			Helsby	Helsby
			Kelsall	Kelsall
			Neston and Parkgate	Neston and Parkgate
			Tarvin	Tarvin
			Tattenhall	Tattenhall
				Acton Bridge Station
				Capenhurst Station

				Delamere Station Elton Station Hooton Station Mouldsworth Station
	The Dee Estuary SPA / SAC /Ramsar	Ellesmere Port Tattenhall	Chester Ellesmere Port Helsby Tattenhall	Chester Ellesmere Port Helsby Tattenhall Capenhurst Station
Recreational Pressure	Mersey Estuary SPA / Ramsar	None	Ellesmere Port Frodsham Helsby	Ellesmere Port Frodsham Helsby Capenhurst Station Elton Station Hooton Station
	River Dee and Bala Lake SAC	None	Cheshire Neston and Parkgate	Cheshire Neston and Parkgate
	The Dee Estuary SPA / SAC /Ramsar	None	Ellesmere Port Neston and Parkgate	Ellesmere Port Neston and Parkgate Hooton Station
Urbanisation	Mersey Estuary SPA / Ramsar	None	Ellesmere Port Frodsham Helsby	Ellesmere Port Frodsham Helsby Elton Station Hooton Station
	Midland Meres Phase I Ramsar	None	None	Delamere Station
	Midland Meres Phase II Ramsar	Northwich Cuddington and Sandiway	Northwich Cuddington and Sandiway	Northwich Cuddington and Sandiway Delamere Station
	Oak Mere SAC	Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway Delamere Station
	River Dee and Bala Lake SAC	None	Chester	Chester
	West Midlands Mosses SAC	Winsford Cuddington and Sandiway	Winsford Cuddington and Sandiway	Winsford Cuddington and Sandiway

Water Quality	Alyn Valley Woods SAC	Farndon	Chester	Chester
		Malpas	Farndon	Farndon
		Tattenhall	Malpas	Malpas
			Neston and Parkgate	Neston and Parkgate
			Tattenhall	Tattenhall
	Deeside and Buckley Newt Sites SAC	Farndon	Chester	Chester
		Malpas	Farndon	Farndon
		Tattenhall	Malpas	Malpas
			Neston and Parkgate	Neston and Parkgate
			Tattenhall	Tattenhall
	Halkyn Mountain SAC	Farndon	Chester	Chester
		Malpas	Farndon	Farndon
		Tattenhall	Malpas	Malpas
			Neston and Parkgate	Neston and Parkgate
			Tattenhall	Tattenhall
	Johnstown Newt Sites	Farndon	Chester	Chester
		Malpas	Farndon	Farndon
		Tattenhall	Malpas	Malpas
			Neston and Parkgate	Neston and Parkgate
			Tattenhall	Tattenhall
	Mersey Estuary SPA / Ramsar	Ellesmere Port	Ellesmere Port	Ellesmere Port
		Northwich	Northwich	Northwich
		Winsford	Winsford	Winsford
		Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway
		Kelsall	Frodsham	Frodsham
		Tarpoley	Helsby	Helsby
		Tarvin	Kelsall	Kelsall
			Tarpoley	Tarpoley
			Tarvin	Tarvin
				Acton Bridge Station
				Capenhurst Station
				Delamere Station
				Elton Station
				Hooton Station
				Lostock Gralam Station
				Mouldsworth Station

Mersey Narrows and North Wirral Foreshore SPA / Ramsar	Ellesmere Port	Ellesmere Port	Ellesmere Port
	Northwich	Northwich	Northwich
	Winsford	Winsford	Winsford
	Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway
	Kelsall	Frodsham	Frodsham
	Tarpoley	Helsby	Helsby
	Tarvin	Kelsall	Kelsall
	Lostock Gralam Station	Tarpoley	Tarpoley
		Tarvin	Tarvin
	Mouldsworth Station		Acton Bridge Station
			Capenhurst Station
			Delamere Station
			Elton Station
			Hooton Station
			Lostock Gralam Station
			Mouldsworth Station
Midland Meres and Mosses Phase I and Phase II	Ellesmere Port	Ellesmere Port	Ellesmere Port
	Northwich	Northwich	Northwich
	Winsford	Winsford	Winsford
	Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway
	Kelsall	Frodsham	Frodsham
	Tarpoley	Helsby	Helsby
	Tarvin	Kelsall	Kelsall
		Tarpoley	Tarpoley
		Tarvin	Tarvin
			Acton Bridge Station
			Capenhurst Station
			Delamere Station
			Elton Station
			Hooton Station
			Lostock Gralam Station
			Mouldsworth Station
Oak Mere SAC	Ellesmere Port	Ellesmere Port	Ellesmere Port
	Northwich	Northwich	Northwich
	Winsford	Winsford	Winsford
	Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway

	Kelsall	Frodsham	Frodsham
	Tarpoley	Helsby	Helsby
	Tarvin	Kelsall	Kelsall
		Tarpoley	Tarpoley
		Tarvin	Tarvin
			Acton Bridge Station
			Capenhurst Station
			Delamere Station
			Elton Station
			Hooton Station
River Dee and Bala Lake SAC	Farndon	Chester	Chester
	Malpas	Farndon	Farndon
	Tattenhall	Malpas	Malpas
		Neston and Parkgate	Neston and Parkgate
		Tattenhall	Tattenhall
The Dee Estuary SPA / SAC /Ramsar	Farndon	Chester	Chester
	Malpas	Farndon	Farndon
	Tattenhall	Malpas	Malpas
		Neston and Parkgate	Neston and Parkgate
		Tattenhall	Tattenhall
West Midland Mosses SAC	Ellesmere Port	Ellesmere Port	Ellesmere Port
	Northwich	Northwich	Northwich
	Winsford	Winsford	Winsford
	Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway
	Kelsall	Frodsham	Frodsham
	Tarpoley	Helsby	Helsby
	Tarvin	Kelsall	Kelsall
		Tarpoley	Tarpoley
		Tarvin	Tarvin
			Acton Bridge Station
			Capenhurst Station
			Delamere Station
			Elton Station
			Hooton Station
			Lostock Gralam Station

		Mouldsworth Station		
Water Quantity, Level and Flow	Alwyn Valley Woods	Farndon	Chester	Chester
		Malpas	Farndon	Farndon
		Tattenhall	Malpas	Malpas
			Neston and Parkgate	Neston and Parkgate
			Tattenhall	Tattenhall
	Berwyn and South Clwyd Mountains SAC	Farndon	Chester	Chester
		Malpas	Farndon	Farndon
		Tattenhall	Malpas	Malpas
			Neston and Parkgate	Neston and Parkgate
			Tattenhall	Tattenhall
	Johnstown Newt Sites	Farndon	Chester	Chester
		Malpas	Farndon	Farndon
		Tattenhall	Malpas	Malpas
			Neston and Parkgate	Neston and Parkgate
			Tattenhall	Tattenhall
	Mersey Estuary SPA / Ramsar	Ellesmere Port	Ellesmere Port	Ellesmere Port
		Northwich	Northwich	Northwich
		Winsford	Winsford	Winsford
		Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway
		Kelsall	Frodsham	Frodsham
		Tarpoley	Helsby	Helsby
		Tarvin	Kelsall	Kelsall
			Tarpoley	Tarpoley
			Tarvin	Tarvin
				Acton Bridge Station
				Capenhurst Station
				Delamere Station
				Elton Station
				Hooton Station
				Lostock Gralam Station
				Mouldsworth Station
	Mersey Narrows and North Wirral Foreshore SPA / Ramsar	Ellesmere Port	Ellesmere Port	Ellesmere Port
		Northwich	Northwich	Northwich
		Winsford	Winsford	Winsford
		Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway
		Kelsall	Frodsham	Frodsham

	Tarpoley	Helsby	Helsby
	Tarvin	Kelsall	Kelsall
		Tarpoley	Tarpoley
		Tarvin	Tarvin
			Acton Bridge Station
			Capenhurst Station
			Delamere Station
			Elton Station
			Hooton Station
			Lostock Gralam Station
			Mouldsworth Station
Midland Meres and Mosses Phase I and Phase II	Ellesmere Port	Ellesmere Port	Ellesmere Port
	Northwich	Northwich	Northwich
	Winsford	Winsford	Winsford
	Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway
	Kelsall	Frodsham	Frodsham
	Tarpoley	Helsby	Helsby
	Tarvin	Kelsall	Kelsall
		Tarpoley	Tarpoley
		Tarvin	Tarvin
			Acton Bridge Station
			Capenhurst Station
			Delamere Station
			Elton Station
			Hooton Station
			Lostock Gralam Station
			Mouldsworth Station
Oak Mere SAC	Ellesmere Port	Ellesmere Port	Ellesmere Port
	Northwich	Northwich	Northwich
	Winsford	Winsford	Winsford
	Cuddington and Sandiway	Cuddington and Sandiway	Cuddington and Sandiway
	Kelsall	Frodsham	Frodsham
	Tarpoley	Helsby	Helsby
	Tarvin	Kelsall	Kelsall
		Tarpoley	Tarpoley
		Tarvin	Tarvin
			Acton Bridge Station

			Capenhurst Station Delamere Station Elton Station Hooton Station Lostock Gralam Station Mouldsworth Station
River Dee and Bala Lake SAC	Farndon Malpas Tattenhall	Chester Farndon Malpas Neston and Parkgate Tattenhall	Chester Farndon Malpas Neston and Parkgate Tattenhall
The Dee Estuary SPA / SAC /Ramsar	Farndon Malpas Tattenhall	Chester Farndon Malpas Neston and Parkgate Tattenhall	Chester Farndon Malpas Neston and Parkgate Tattenhall
West Midland Mosses SAC	Ellesmere Port Northwich Winsford Cuddington and Sandiway Kelsall Tarpoley Tarvin	Ellesmere Port Northwich Winsford Cuddington and Sandiway Frodsham Helsby Kelsall Tarpoley Tarvin	Ellesmere Port Northwich Winsford Cuddington and Sandiway Frodsham Helsby Kelsall Tarpoley Tarvin Acton Bridge Station Capenhurst Station Delamere Station Elton Station Hooton Station Lostock Gralam Station Mouldsworth Station
Sefton Coast SAC	Ellesmere Port Northwich Winsford Cuddington and Sandiway	Ellesmere Port Northwich Winsford Cuddington and Sandiway	Ellesmere Port Northwich Winsford Cuddington and Sandiway

Kelsall	Frodsham	Frodsham
Tarpoley	Helsby	Helsby
Tarvin	Kelsall	Kelsall
	Tarpoley	Tarpoley
	Tarvin	Tarvin
		Acton Bridge Station
		Capenhurst Station
		Delamere Station
		Elton Station
		Hooton Station
		Lostock Gralam Station
		Mouldsworth Station

Appendix A Figures

Figure 3 Habitats sites in relation to the CW&C unitary authority area

Appendix B Background to Habitat Sites

Alyn Valley Woods SAC

Introduction

- 5.5 The site predominantly occupies the steep Carboniferous Limestone escarpment alongside the river Alyn, together with adjoining areas. The site supports a large stand of semi-natural broadleaved woodland namely the SAC feature 'Tilio – Acerion forests of slopes, screes and ravines', arising along the steep gorge of the river Alyn and the Alyn's tributaries Nant Gain and Aber Eilun. Narrow woodland strips along the valley bottom and on the wetter ground of the floodplain around Aber Eilun are dominated by wet woodland corresponding to the SAC feature 'Alluvial forest with *Alnus glutinosa* and *Fraxinus excelsior* (Alno – Padion, *Alnion incanae*, *Salicion alvae*)'.
- 5.6 Several small areas of species rich calcicolous grassland constitute the third SAC feature 'Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco – Brometalia*)'⁴⁴.

Conservation Objectives⁴⁵

- 5.7 The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species.
- The conservation status of a natural habitat will be taken as favourable when: • Its natural range and areas it covers within that range are stable or increasing, and
 - The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
 - The conservation status of its typical species is favourable.
- 5.8 The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' when:
- population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
 - the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
 - there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis."

Qualifying Features⁴⁶

- 5.9 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I:
- H9180 Tilio-Acerion forests of slopes, screes and ravines;
 - H6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites); and

⁴⁴ https://naturalresources.wales/media/638421/SSSI_0241_Map0022df4.pdf [Accessed 29/05/2025]

⁴⁵ *ibid*

⁴⁶ *ibid*

- H91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*).

Environmental Vulnerabilities

5.10 Threats and pressures defined by the core management plan are:

- Invasive species;
- Non-native species;
- Livestock grazing;
- Recreational pressure;
- Water quality;
- Water quantity; and
- Scrub encroachment.

Brown Moss SAC

Introduction

5.11 The Eden is an outstanding floristically rich, northern river on sandstone and hard limestone. The catchment includes headwaters running off the Yorkshire Dales, the North Pennines and the eastern fells of the Lake District and the major standing water body of Ullswater. Streams flowing from limestone are calcareous, whilst those flowing off the Pennines and the Lake District fells are more acidic. The nutrient status gradually changes along the Eden's length as nutrient loadings naturally increase in the lower reaches⁴⁷.

Conservation Objectives⁴⁸

- 5.12 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;
- 5.13 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;
- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
 - The structure and function (including typical species) of qualifying natural habitats;
 - The structure and function of the habitats of qualifying species;
 - The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
 - The populations of qualifying species, and,
 - The distribution of qualifying species within the site.

Qualifying Features⁴⁹

5.14 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following species listed in Annex I:

⁴⁷ <https://publications.naturalengland.org.uk/file/6126323676217344> [Accessed 13/0/2025]

⁴⁸ <https://publications.naturalengland.org.uk/file/5498402913910784> [Accessed 02/06/2025]

⁴⁹ <https://publications.naturalengland.org.uk/file/6126323676217344> [Accessed 13/0/2025]

- S 1831 Floating water-plantain *Luronium natans*

Environmental Vulnerabilities

5.15 With regards to the Site Improvement Plan for Brown Moss SAC (SIP031)⁵⁰, the following are listed as environmental vulnerabilities:

- Hydrological changes;
- Water pollution;
- Invasive species;
- Siltation; and
- Air Pollution: impact of atmospheric nitrogen deposition.

Berwyn and South Clwyd Mountains SAC

Introduction

5.16 The Berwyn and South Clwyd Mountains SAC is a large upland site (27,132 ha), the largest area of blanket bog and European dry heath in Wales. It comprises three discrete sites, Berwyn SSSI, Llandegla Moor SSSI and Ruabon and Llantysilio Mountains and Minera SSSI. All of these sites are predominantly a mixture of dry heath and blanket bog vegetation with patches of transition mires and quaking bogs vegetation found as an intricate mosaic, usually on acidic rock types, and can together be described as upland moorland⁵¹.

Conservation Objectives⁵²

5.17 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

5.18 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Qualifying Features⁵³

5.19 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I:

- H4030 European dry heaths;
- H7130 Blanket bogs;

⁵⁰ <https://publications.naturalengland.org.uk/file/4968513861058560> [Accessed 02/06/2025]

⁵¹ [https://naturalresources.wales/media/670888/Berwyn%20man%20plan%20\(E\)%20\(table%20revis%2010.09.09\).pdf](https://naturalresources.wales/media/670888/Berwyn%20man%20plan%20(E)%20(table%20revis%2010.09.09).pdf) [Accessed 29/05/2025]

⁵² *ibid*

⁵³ *ibid*

- H6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites);
- H7140 Transition mires and quaking bogs;
- H8120 Calcareous and calcshist screes of the montane to alpine levels (*Thlaspietea rotundifolii*); and
- H8210 Calcareous rocky slopes with chasmophytic vegetation.

Environmental Vulnerabilities

5.20 With regards to the Site Improvement Plan for the Dee Estuary SAC⁵⁴, the following are listed as environmental vulnerabilities:

- Fire;
- Grazing;
- Stock distribution;
- Heather management;
- Tree/scrub encroachment;
- Drainage;
- Peat digging;
- Recreational disturbance;
- Atmospheric deposition (N);
- Heather beetle;
- Invasive species;
- Game management;
- Climate change;
- Drainage (water table);
- Nutrient enrichment;
- Quarrying; and
- Predation.

Dee Estuary SAC

Introduction

5.21 The Dee Estuary / Aber Dyfrdwy Special Area of Conservation (SAC) includes the Dee Estuary itself and areas of intertidal flats on the north-west coast of the Wirral (North Wirral Foreshore) and on the north east Wales coast, east of Prestatyn (Gronant Dunes and Talacre Warren). Gronant Dunes and Talacre Warren also includes the largest remaining area of a once extensive dune system along this section of Welsh coast. The SAC has been designated because of its size and biological interest including its saltmarshes, intertidal mudflats and sandflats, sand dunes, drift line vegetation and sea cliffs, the presence of petalwort *Petalophyllum ralfsii*, and sea lamprey *Petromyzon marinus* and river lamprey *Lampetra fluviatilis* that migrate through the area⁵⁵.

⁵⁴ <https://publications.naturalengland.org.uk/file/5140799320752128> [Accessed 29/05/2025]

⁵⁵ <https://publications.naturalengland.org.uk/file/4614138265337856> [Accessed 29/05/2025]

Conservation Objectives⁵⁶

- 5.22 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;
- 5.23 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;
- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
 - The structure and function (including typical species) of qualifying natural habitats;
 - The structure and function of the habitats of qualifying species;
 - The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
 - The populations of qualifying species, and,
 - The distribution of qualifying species within the site.

Qualifying Features⁵⁷

- 5.24 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I:
- H1140 Mudflats and sandflats not covered by seawater at low tide;
 - H1310 Salicornia and other annuals colonizing mud and sand
 - H1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)
 - H1130 Estuaries
 - H1210 Annual vegetation of drift lines
 - H1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts
 - H2110 Embryonic shifting dunes
 - 2120 "Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")"
 - 2130 "Fixed coastal dunes with herbaceous vegetation ("grey dunes")" * Priority feature
 - 2190 Humid dune slacks
- 5.25 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following species listed in Annex I:
- S1095 Sea lamprey *Petromyzon marinus*;
 - S1099 River lamprey *Lampetra fluviatilis*; and
 - S1395 Petalwort *Petalophyllum ralfsii*;

Environmental Vulnerabilities

- 5.26 With regards to the Site Improvement Plan for the Dee Estuary SAC⁵⁸, the following are listed as environmental vulnerabilities:
- Public Access/Disturbance;

⁵⁶ <https://publications.naturalengland.org.uk/file/5834949009866752> [Accessed 29/05/2025]

⁵⁷ <https://sac.jncc.gov.uk/site/UK0030131> [Accessed 29/05/2025]

⁵⁸ <https://publications.naturalengland.org.uk/file/5140799320752128> [Accessed 29/05/2025]

- Changes in species distributions;
- Invasive species;
- Climate change;
- Coastal squeeze;
- Inappropriate scrub control;
- Water pollution;
- Fisheries: Commercial marine and estuarine;
- Inappropriate coastal management;
- Overgrazing;
- Direct Impact from third party;
- Marine litter;
- Predation;
- Planning permission, general;
- Marine consents and permits;
- Wildfire/ arson;
- Air pollution: Impact of atmospheric nitrogen deposition and
- Transportation and service corridors.

Dee Estuary Ramsar and SPA

Introduction

5.27 The Dee Estuary lies on the border between England and Wales on the north-west coast of Britain. It is a large, funnel-shaped, sheltered estuary, which supports extensive areas of intertidal sand and mudflats and saltmarsh. Where agricultural reclamation has not occurred, the saltmarshes grade into transitional brackish and swamp vegetation on the upper shore. The site also includes the three sandstone islands of Hilbre, with their important cliff vegetation and maritime heathland and grassland. The two shorelines of the estuary show a marked contrast between the industrialised usage of the coastal belt in Wales and residential and recreational usage in England. The site is of major importance for waterbirds; during the winter the intertidal flats, saltmarshes and fringing habitats including coastal grazing marsh/fields, provide feeding and roosting sites for internationally important numbers of ducks and waders; in summer the site supports nationally important breeding colonies of two species of tern. The site is also important during migration periods, particularly for wader populations moving along the west coast of Britain and for Sandwich terns post-breeding.

Conservation Objectives⁵⁹

- 5.28 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:
- The extent and distribution of the habitats of the qualifying features;
 - The structure and function of the habitats of the qualifying features;
 - The supporting processes on which the habitats of the qualifying features rely;

⁵⁹ <https://publications.naturalengland.org.uk/file/5008539580104704> [Accessed 29/05/2025]

- The population of each of the qualifying features, and,
- The distribution of qualifying features within the site.

Qualifying Features

5.29 With regard to the SPA⁶⁰, the site is designated as an SPA for the following features:

- Waterfowl assemblage (20,000 birds)
- Wintering Birds
- Bar-tailed godwit (*Limosa lapponica*),
- Black-tailed godwit (*Limosa limosa islandica*),
- Curlew (*Numenius arquata*),
- Dunlin (*Calidris alpina alpina*),
- Grey plover (*Pluvialis squatarola*),
- Knot (*Calidris canutus*),
- Oystercatcher (*Haematopus ostralegus*),
- Pintail (*Anas acuta*),
- Redshank (*Tringa totanus*),
- Shelduck (*Tadorna tadorna*),
- Teal (*Anas crecca*),
- Breeding Birds
- Common tern (*Sterna hirundo*),
- Little tern (*Sterna albifrons*),
- Passage
- Sandwich tern (*Sterna sandvicensis*)

5.30 With regard to the Ramsar⁶¹, the site is designated for the following features:

Ramsar Criteria 1

Extensive intertidal mud and sand flats (20 km by 9 km) with large expanses of saltmarsh towards the head of the estuary.

Ramsar Criteria 5

Species with peak counts in winter; Non-breeding season regularly supports 120,726 individual waterbirds

Ramsar Criteria 6

Species with peak counts in spring/autumn:

- Redshank (*Tringa totanus*)

Species with peak counts in winter:

- Teal (*Anas crecca*),
- Shelduck (*Tadorna tadorna*),
- Oystercatcher (*Haematopus ostralegus*),
- Curlew (*Numenius arquata*),
- Pintail (*Anas acuta*),

⁶⁰ https://assets.publishing.service.gov.uk/media/5def7657ed915d15f3113d2f/Dee_Estuary_SPA_and_SAC_Factsheet.pdf
[Accessed 02/06/2025]

⁶¹ <https://rsis.ramsar.org/RISapp/files/RISrep/GB298RIS.pdf> [Accessed 02/06/2025]

- Grey plover (*Pluvialis squatarola*),
- Knot (*Calidris canutus*),
- Dunlin (*Calidris alpina alpina*),
- Bar-tailed godwit (*Limosa lapponica*); and
- Black-tailed godwit (*Limosa limosa islandica*).

Environmental Vulnerabilities

5.31 With regards to the Site Improvement Plan for the Dee Estuary SPA⁶², the following are listed as environmental vulnerabilities:

- Public Access/Disturbance;
- Changes in species distributions;
- Invasive species;
- Climate change;
- Coastal squeeze;
- Inappropriate scrub control;
- Water pollution;
- Fisheries: Commercial marine and estuarine;
- Inappropriate coastal management;
- Overgrazing;
- Direct Impact from third party;
- Marine litter;
- Predation;
- Planning permission, general;
- Marine consents and permits;
- Wildfire/ arson;
- Air pollution: Impact of atmospheric nitrogen deposition and
- Transportation and service corridors.

Deeside and Buckley Newt Sites SAC

Introduction

5.32 This composite site in north-east Flintshire is situated on the coastal slopes overlooking the Dee Estuary. The solid geology of the site consists of deposits of Carboniferous Middle Coal Measures. These include siltstone, mudstone, sandstone, fireclay and coal. The clay and coal mineral deposits have been commercially exploited. These are in part overlain by glacial boulder clay. Soils are predominantly loamy to clayey and slowly permeable.⁶³

Conservation Objectives⁶⁴

⁶² <https://publications.naturalengland.org.uk/file/5140799320752128> [Accessed 29/05/2025]

⁶³ https://naturalresources.wales/media/671740/Deeside_and_Buckley_WES32_Plan_English.pdf [Accessed 29/05/2025]

⁶⁴ Ibid

- 5.33 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;
- 5.34 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;
- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
 - The structure and function (including typical species) of qualifying natural habitats;
 - The structure and function of the habitats of qualifying species;
 - The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
 - The populations of qualifying species, and,
 - The distribution of qualifying species within the site.

Qualifying Features⁶⁵

- 5.35 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I:
- H91AO Old sessile woodland with *Ilex* and *Blechnum*.
- 5.36 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following species listed in Annex I:
- S1166 Great crested newt *Triturus cristatus*.

Environmental Vulnerabilities

- 5.37 With regards to the Deeside and Buckley Newt Sites SAC⁶⁶, the following are listed as environmental vulnerabilities:
- Water quality;
 - Invasive species;
 - Predation;
 - Obstacles to movement; and
 - Recreational use.

Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC

Introduction

- 5.38 This is a large lowland raised bog that straddles the English/Welsh border. It is amongst the largest and most southerly raised bogs in the UK. Although much of the site has been subject to peat extraction, areas of partially-cut and uncut mire still remain. In areas formerly subject to commercial peat-cutting, conservation management has led to the regeneration of bog forming vegetation. Mire vegetation includes the bog-mosses *Sphagnum papillosum*, *Sphagnum magellanicum*, and *Sphagnum pulchrum*, all three British species of sundew *Drosera spp.*, cranberry *Vaccinium oxycoccos*, bog asphodel *Narthecium ossifragum*, royal fern *Osmunda regalis*, white beak-sedge *Rhynchospora alba* and bog-rosemary

⁶⁵ Ibid

⁶⁶ Ibid

Andromeda polifolia, together with the nationally scarce moss *Dicranum affine*. Over 1,700 invertebrate species have been recorded here, including 29 nationally rare species.⁶⁷.

Conservation Objectives⁶⁸

- 5.39 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;
- 5.40 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;
- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
 - The structure and function (including typical species) of qualifying natural habitats;
 - The structure and function of the habitats of qualifying species;
 - The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
 - The populations of qualifying species, and,
 - The distribution of qualifying species within the site.

Qualifying Features⁶⁹

- 5.41 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I:
- H7110 Active raised bogs; and
 - H7120 Degraded raised bogs still capable of natural regeneration.

Environmental Vulnerabilities

- 5.42 With regards to the Site Improvement Plan SAC⁷⁰, the following are listed as environmental vulnerabilities:
- Inappropriate water levels;
 - Water pollution;
 - Air pollution: Impact of atmospheric nitrogen deposition;
 - Inappropriate scrub control;
 - Overgrazing;
 - Planning permission, general;
 - Peat extraction; and
 - Invasive species.

Halkyn Mountain SAC

Introduction

- 5.43 The majority of the site is located 4km to the northwest of Mold in Flintshire, and lies at between 100-300m. The site comprises predominantly common land situated on an elongated plateau of Lower

⁶⁷ <https://publications.naturalengland.org.uk/file/4815134182604800> [Accessed 29/05/2025]

⁶⁸ <https://publications.naturalengland.org.uk/file/5216910757330944> [Accessed 29/05/2025]

⁶⁹ <https://publications.naturalengland.org.uk/file/4815134182604800> [Accessed 29/05/2025]

⁷⁰ <https://publications.naturalengland.org.uk/file/6095339759075328> [Accessed 29/05/2025]

Carboniferous Limestone which trends north-south, with the Dee Estuary to the east and the Clwydian Hills to the west. The site supports many former mineral workings including metalliferous mine spoil tips along with small chert and limestone quarries. Three large quarries currently operate on Halkyn Common, two of which are included within Halkyn Common and Holywell Grasslands SSSI for their mineral interest⁷¹.

Conservation Objectives⁷²

5.44 The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species.

- The conservation status of a natural habitat will be taken as favourable when: • Its natural range and areas it covers within that range are stable or increasing, and
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- The conservation status of its typical species is favourable.

5.45 The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' when:

- population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis."

Qualifying Features⁷³

5.46 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I:

- H6130: Calaminarian grassland of the *Violetalia calaminariae* type;
- H4030: European dry heath;
- H6210: Semi-natural dry grassland and scrubland facies on calcareous substrates;
- H6410: Molinia meadows on calcareous peaty or clayey-silt-laden soils (*Molinion caeruleae*); and
- S1166: Great crested newt (*Triturus cristatus*).

Environmental Vulnerabilities

5.47 Threats and pressures defined by the standard data form (UK0030163⁷⁴) are:

- Soil pollution and solid waste (excluding discharges),
- Grazing,
- Human induced changes in hydraulic conditions,
- Outdoor sports and leisure activities, recreational activities,

⁷¹ https://naturalresources.wales/media/672548/Halkyn%20SAC%20Plan%20Eng_.pdf [Accessed 29/05/2025]

⁷² *ibid*

⁷³ *ibid*

⁷⁴ Available at: <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030163.pdf> [Accessed 29/05/2025]

- Hunting and collection of wild animals (terrestrial),
- Mining and quarrying,
- Fire and fire suppression,
- Problematic native species,
- Pollution to groundwater (point sources and diffuse sources),
- Invasive non-native species,
- Utility and service lines, and
- Biocenotic evolution, succession.

Johnstown Newt Sites SAC

Introduction

- 5.48 The site is located in the environs of the village of Johnstown, south west of Wrexham, at an altitude of 130m above mean sea level. It is of special interest for its population of the great crested newt *Triturus cristatus*. This species has suffered a marked decline throughout Great Britain and Continental Europe as a result of habitat loss. Great Britain is considered to support one of the strongholds for this species in Western Europe.
- 5.49 The Bettisfield Formation feldspathic sandstone and coal measures underlie the site and a number of capped mine shafts are present within the boundaries of the site. Where present, natural soils are of over-consolidated till (boulder clay) origin. The majority of the water bodies originated following the cessation of mineral extractive industries including coal mining and quarrying for clay and associated industrial developments. Certain ponds, particularly at Hafod, were specifically created for amphibian conservation purposes.
- 5.50 Surrounding areas of land support a mosaic of scrub and planted trees, grassland, and tall ruderal vegetation. These form important foraging and over wintering areas for adult and juvenile amphibians⁷⁵.

Conservation Objectives⁷⁶

- 5.51 The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species.
- The conservation status of a natural habitat will be taken as favourable when: • Its natural range and areas it covers within that range are stable or increasing, and
 - The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
 - The conservation status of its typical species is favourable.
- 5.52 The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' when:
- population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and

⁷⁵

https://naturalresources.wales/media/672594/Johnstown%20Newt%20Site%20Management%20Plan%20April%202008%20_English_.pdf [Accessed 29/05/2025]

⁷⁶ *ibid*

- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.”

Qualifying Features⁷⁷

5.53 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following species listed in Annex I:

- S1166 Great crested newt *Triturus cristatus*.

Environmental Vulnerabilities

5.54 Threats and pressures defined by the standard data form (UK0030163⁷⁸) are:

- Extent of habitat;
- Macrophyte plant cover;
- Water depth;
- Presence of pollution;
- Extent of shading;
- Extent and quality of terrestrial habitat;
- Dispersal routes
- Presence of fish;
- Presence of water and wildfowl; and
- Presence of non-native aquatic plant species, especially *Crassula helmsii*.

Liverpool Bay SPA

Introduction

- 5.55 The Liverpool Bay / Bae Lerpwl SPA is in the east of the Irish Sea, bordering northern England and north Wales, and running as a broad arc from Morecambe Bay to the east coast of Anglesey.
- 5.56 The seabed of Liverpool Bay / Bae Lerpwl SPA contains a wide range of mobile sediments. Sand is the most common substrate, with a concentrated area of gravelly sand located off the Mersey Estuary. Tidal currents within the Bay are generally weak and do not exceed 2 m/sec. This in conjunction with an extended tidal range of 6–8 m facilitates deposition of sediments and encourages mud and sand belts to accumulate.
- 5.57 The population estimates and important usage areas for non-breeding red-throated diver, common scoter, little gull were identified from data collected using visual aerial survey over five winter seasons (2004/05, 2005/06, 2006/07, 2007/08 and 2010/11). The waterbird assemblage feature was also identified based on these data. Important foraging areas for little tern were identified from shore and boat-based surveys (2009, 2010, 2011) undertaken around the Dee Estuary SPA; while important usage areas for common tern around the Mersey Narrows and North Wirral Foreshore SPA were identified from models of common tern foraging behaviour generated from visual tracking surveys at selected colonies around the UK. The population of little tern expected to forage within the boundary is determined by the population size (a 5-year mean of Apparently Occupied Nests based on data from 2010–2014) at Gronant Beach.

⁷⁷ *ibid*

⁷⁸ Available at: <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030163.pdf> [Accessed 29/05/2025]

Conservation Objectives⁷⁹

5.58 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features, and,
- The distribution of qualifying features within the site.

Qualifying Features

5.59 With regard to the SPA⁸⁰, Natural England has stated that the following species should be considered as likely qualifying species:

- Non-breeding
- Red-throated diver (*Gavia stellata*);
- Common scoter (*Melanitta nigra*)
- Little gull (*Hydrocoloeus minutus*)
- Breeding
- Little tern (*Sternula albifrons*)
- Common tern (*Sterna Hirundo*); and
- Waterbird assemblage.

Environmental Vulnerabilities

5.60 The Site Improvement Plan for Liverpool Bay (SIP123)⁸¹ lists the following threats and pressures:

- Fisheries: Commercial marine and estuarine;
- Transportation and service corridors;
- Fisheries: Recreational marine and estuarine;
- Extraction: non-living Threat Natural England resources;
- Siltation; and
- Water pollution.

Manchester Mosses SAC

Introduction

5.61 Mossland formerly covered a very large part of Greater Manchester, Merseyside, south Lancashire and north Cheshire, and provided a severe obstacle to industrial and agricultural expansion. While most has been converted to agriculture or lost to development, several examples have survived as degraded raised bog, such as Risley Moss, Astley and Bedford Mosses, and Holcroft Moss on the Mersey floodplain. Their surfaces are now elevated above adjacent land due to shrinkage of the surrounding tilled land, and all except Holcroft Moss have been cut for peat at some time in the past. While past drainage has produced

⁷⁹ <https://publications.naturalengland.org.uk/file/6428729689767936> [Accessed 02/06/2025]

⁸⁰ <https://publications.naturalengland.org.uk/file/6035363693068288> [Accessed 02/06/2025]

⁸¹ <https://publications.naturalengland.org.uk/file/5321001921413120> [Accessed 02/06/2025]

dominant purple moor-grass *Molinia caerulea*, bracken *Pteridium aquilinum* and birch *Betula* spp. scrub or woodland, wetter pockets have enabled peat-forming species to survive.⁸²

Conservation Objectives⁸³

- 5.62 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;
- 5.63 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;
- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
 - The structure and function (including typical species) of qualifying natural habitats;
 - The structure and function of the habitats of qualifying species;
 - The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
 - The populations of qualifying species, and,
 - The distribution of qualifying species within the site.

Qualifying Features⁸⁴

- 5.64 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I:
- H7120 Degraded raised bogs still capable of natural regeneration.

Environmental Vulnerabilities

- 5.65 With regards to the Manchester Mosses SAC Site Improvement plan⁸⁵, the following are listed as environmental vulnerabilities:
- Hydrological changes; and
 - Air pollution: impact of atmospheric nitrogen;

Mersey Estuary Ramsar and SPA

Introduction

- 5.66 The special protection area (SPA) covers an estuarine area of 50.23 km² including large areas of saltmarsh and extensive intertidal sand and mudflats, with limited areas of brackish marsh, rocky shoreline and boulder clay cliffs, within a rural and industrial environment. The intertidal flats and saltmarshes provide feeding and roosting sites for large populations of waterbirds. During the winter, the site is of major importance for ducks and waders. The site is also important during the spring and autumn migration periods, particularly for wader populations moving along the west coast of Britain.

Conservation Objectives⁸⁶

- 5.67 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

⁸² <https://publications.naturalengland.org.uk/file/4802857651929088f> [Accessed 29/05/2025]

⁸³ <https://publications.naturalengland.org.uk/file/6584230239010816> [Accessed 29/05/2025]

⁸⁴ <https://publications.naturalengland.org.uk/file/4802857651929088f> [Accessed 29/05/2025]

⁸⁵ <https://publications.naturalengland.org.uk/file/6266576827318272> [Accessed 29/05/2025]

⁸⁶ <https://publications.naturalengland.org.uk/file/5759726675820544> [Accessed 02/06/2025]

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features, and,
- The distribution of qualifying features within the site.

Qualifying Features

5.68 With regard to the SPA, Natural England has stated that the following species should be considered as likely qualifying species⁸⁷:

- Golden plover (*Pluvialis apricaria*);
- Shelduck (*Tadorna tadorna*);
- Teal (*Anas crecca*);
- Pintail (*Anas acuta*);
- Dunlin (*Calidris alpina alpina*);
- Black-tailed godwit (*Limosa limosa islandica*);
- Redshank (*Tringa totanus*); and
- Water bird assemblage of greater than 20,00 individuals.

5.69 With regard to the Ramsar, the site is qualified for the following criterion⁸⁸:

- Large areas of saltmarsh, and intertidal sand and mudflats, with limited areas of brackish marsh, boulder clay cliffs and rocky shore.
- Internationally important numbers of waterfowl feed and roost on the site in winter and nationally important numbers occur during passage periods. Including:
- Common ringed plover (*Charadrius hiaticula*);
- Redshank (*Tringa totanus*); and
- Dunlin (*Calidris alpina alpina*).
- Regularly supports over 20,000 waterfowl in winter. Including internationally important numbers of:
- Shelduck (*Tadorna tadorna*);
- Teal (*Anas crecca*); and
- Pintail (*Anas acuta*);
- The site also supports nationally important wintering numbers of:
- Eurasian wigeon (*Anas penelope*);
- Grey plover (*Pluvialis squatarola*);
- Black-tailed godwit (*Limosa limosa islandica*); and
- Curlew (*Numenius arquata*).

Environmental Vulnerabilities

5.70 The Site Improvement Plan for Liverpool Bay (SIP138)⁸⁹ lists the following threats and pressures:

- Changes in species distribution;

⁸⁷ <https://publications.naturalengland.org.uk/file/6485318211469312> [Accessed 02/06/2025]

⁸⁸ <https://rsis.ramsar.org/RISapp/files/RISrep/GB785RIS.pdf> [Accessed 02/06/2025]

⁸⁹ <https://publications.naturalengland.org.uk/file/6470778514046976> [Accessed 02/06/2025]

- Invasive species; and
- Public Access/Disturbance.

Mersey Narrows and North Wirral Foreshore Ramsar and SPA

Introduction

5.71 The site comprises intertidal habitats at Egremont foreshore, man-made lagoons at Seaforth Nature Reserve and the extensive intertidal flats at North Wirral Foreshore. Egremont is most important as a feeding habitat for waders at low tide whilst Seaforth is primarily a high-tide roost site, as well as a nesting site for terns. North Wirral Foreshore supports large numbers of feeding waders at low tide and includes important high-tide roost sites. The most notable feature of the site is the exceptionally high density of wintering turnstone.

Conservation Objectives⁹⁰

5.72 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features, and,
- The distribution of qualifying features within the site.

Qualifying Features

5.73 With regard to the SPA, the following are qualifying species⁹¹:

- Bar-tailed godwit (*Limosa lapponica*);
- Common tern (*Sterna Hirundo*);
- Little Gull (*Hydrocoloeus minutus*); and
- Knot (*Calidris canutus islandica*).

5.74 With regard to the Ramsar the following are qualifying criterion⁹²:

- Criterion 4
- Regularly supports plant and/or animal species at a critical stage in their life cycles or provides refuge during adverse conditions. (Non-breeding little gulls and common terns)
- Criterion 5
- Regularly supports 20,000 or more waterbirds
- Criterion 6
- Regularly supports >1% of individuals in the populations of *islanda* subspecies and *lapponica* species

Environmental Vulnerabilities

⁹⁰ <https://publications.naturalengland.org.uk/file/4650102664986624> [Accessed 02/06/2025]

⁹¹ <https://publications.naturalengland.org.uk/file/5360161602404352> [Accessed 02/06/2025]

⁹² <https://rsis.ramsar.org/RISapp/files/RISrep/GB2202RIS.pdf> [Accessed 02/06/2025]

5.75 With regards to the Site Improvement Plan for the Mersey Narrows and North Wirral Foreshore SPA⁹³, the following are listed as environmental vulnerabilities:

- Public Access/Disturbance;
- Changes in species distributions;
- Invasive species;
- Climate change;
- Coastal squeeze;
- Inappropriate scrub control;
- Water pollution;
- Fisheries: Commercial marine and estuarine;
- Inappropriate coastal management;
- Overgrazing;
- Direct Impact from third party;
- Marine litter;
- Predation;
- Planning permission, general;
- Marine consents and permits;
- Wildfire/ arson;
- Air pollution: Impact of atmospheric nitrogen deposition; and
- Transportation and service corridors.

Midland Meres and Mosses Ramsar (Phase 1 and Phase 2)

Introduction

5.76 A series of lowland open water and peatland sites set in depressions in glacial drift left by receding ice sheets. The 16 component sites include nutrient-rich water bodies (meres), associated fringing habitats of reed swamps, fen, carr and damp pasture, and floating quaking bog (schwingmoor). The wide range of resulting habitats supports numerous rare species of plants and invertebrates.

Conservation Objectives

5.77 Ramsar sites do not have conservation objectives.

Qualifying Features

5.78 With regard to the Ramsar the following are qualifying criterion⁹⁴:

- Criterion 2a

⁹³ <https://publications.naturalengland.org.uk/file/5140799320752128> [Accessed 29/05/2025]

⁹⁴ <https://publications.naturalengland.org.uk/file/6341545577938944> [Accessed 02/06/2025]

- Supports a number of rare species of plants associated with wetlands, including the nationally scarce cowbane (*Cicuta virosa*) and elongated sedge (*Carex elongata*). Also present are nationally scarce bryophytes.

Environmental Vulnerabilities

5.79 The Ramsar citation⁹⁵ lists the following as adverse factors affecting the ecological value of the site;

- Vegetation succession;
- Drainage/reclamation for agriculture;
- Eutrophication;
- Introduction of invasive or exotic animal species;
- Introduction of invasive or exotic plant species; and
- Pollution – pesticides/agricultural runoff.

Oak Mere SAC

Introduction

5.80 Oak Mere is a shallow lake formed in glacial drift some 15,000 years ago. It is unique because of its unusual water chemistry which gives rise to an outstanding assemblage of aquatic plants, including shore weed *Littorella uniflora* and narrow small-reed *Calamagrostis stricta*, together with a wide diversity of invertebrate groups. Associated with the main lake are a number of surrounding boggy pools and basin mires. The hydrology of the whole site is complex, resulting in fluctuations in water levels which periodically leave wide draw-down zones.

Conservation Objectives⁹⁶

5.81 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features, and,
- The distribution of qualifying features within the site.

Qualifying Features

5.82 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I⁹⁷:

- H3110 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)
- H7140 Transition mires and quaking bogs

Environmental Vulnerabilities

⁹⁵ <https://publications.naturalengland.org.uk/file/6341545577938944> [Accessed 02/06/2025]

⁹⁶ <https://publications.naturalengland.org.uk/file/6099038630051840> [Accessed 02/06/2025]

⁹⁷ <https://publications.naturalengland.org.uk/file/5022779573272576> [Accessed 13/0/2025]

5.83 With regards to the Site Improvement Plan for Oak Mere (SIP158)⁹⁸, the following are listed as environmental vulnerabilities:

- Water pollution;
- Invasive species;
- Hydrological changes; and
- Air Pollution: impact of atmospheric nitrogen deposition.

Ribble and Alt Estuaries Ramsar and SPA

Introduction

5.84 The Ribble and Alt Estuaries special protection area (SPA) lies on the coast of Lancashire and Sefton in northwest England. The SPA overlaps the Ribble Estuary site of special scientific interest (SSSI) and Sefton Coast SSSI. The site consists of extensive areas of sandflats and mudflats, as well as large areas of saltmarsh, particularly in the Ribble. There are also areas of coastal grazing marsh.

Conservation Objectives⁹⁹

5.85 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features, and,
- The distribution of qualifying features within the site.

Qualifying Features

5.86 With regard to the SPA¹⁰⁰, the following are qualifying species:

- Ruff (*Philomachus pugnax*);
- Common Tern (*Sterna Hirundo*);
- Bewick's Swan (*Cygnus columbianus bewickii*);
- Whooper Swan (*Cygnus cygnus*);
- Golden Plover (*Pluvialis apricaria*);
- Bar-tailed Godwit (*Limosa lapponica*);
- Lesser Black-backed Gull (*Larus fuscus graellsii*);
- Ringed Plover (*Charadrius hiaticula*);
- Sanderling (*Calidris alba*);
- Redshank (*Tringa totanus*);
- Pink-footed Goose (*Anser brachyrhynchus*);
- Shelduck (*Tadorna tadorna*);
- Wigeon (*Anas penelope*);

⁹⁸ <https://publications.naturalengland.org.uk/file/5420717696876544> [Accessed 02/06/2025]

⁹⁹ <https://publications.naturalengland.org.uk/file/5617578676584448> [Accessed 02/06/2025]

¹⁰⁰ <https://publications.naturalengland.org.uk/file/4937627014791168> [Accessed 02/06/2025]

- Teal (*Anas crecca*);
- Pintail (*Anas acuta*);
- Oystercatcher (*Haematopus ostralegus*);
- Grey Plover (*Pluvialis squatarola*);
- Knot (*Calidris canutus islandica*);
- Sanderling (*Calidris alba*);
- Dunlin (*Calidris alpina alpina*);
- Black-tailed Godwit (*Limosa limosa islandica*); and
- Waterbird assemblage of greater than 20,000 birds.

5.87 With regard to the Ramsar¹⁰¹, the following are qualifying criterion:

- Criterion 2
- This site supports up to 40% of the Great Britain population of natterjack toads *Bufo calamita*. As plant species: *Petalophyllum ralfsii* (Conservation status: European Red List: Vulnerable; EC Habitats Directive: Annex II)
- Criterion 5
- Species with peak counts in winter (222,038 waterfowl)
- Criterion 6
- Species with peak counts in spring/autumn:
- Black-tailed godwit (*Limosa limosa islandica*);
- Dunlin (*Calidris alpina alpina*);
- Grey plover (*Pluvialis squatarola*);
- Knot (*Calidris canutus islandica*);
- Sanderling (*Calidris alba*); and
- Ringed plover (*Charadrius hiaticula*).
- Species with peak counts in winter
- Bar-tailed godwit (*Limosa lapponica*);
- Oystercatcher (*Haematopus ostralegus*);
- Teal (*Anas crecca*);
- Wigeon (*Anas penelope*);
- Pintail (*Anas acuta*);
- Pink-footed goose (*Anser brachyrhynchus*);
- Bewick's Swan (*Cygnus columbianus bewickii*);
- Whooper swan (*Cygnus cygnus*);

Environmental Vulnerabilities

5.88 With regards to the Site Improvement Plan for Sefton Ribble (SIP212)¹⁰², the following are listed as environmental vulnerabilities:

- Coastal squeeze;
- Air Pollution: impact of atmospheric nitrogen deposition;

¹⁰¹ <https://rsis.ramsar.org/RSapp/files/RSrep/GB325RIS.pdf> [Accessed 02/06/2025]

¹⁰² <https://publications.naturalengland.org.uk/file/6387486347493376> [Accessed 02/06/2025]

- Inappropriate scrub control;
- Invasive species;
- Hydrological changes;
- Public access / disturbance;
- Inappropriate coastal management;
- Fisheries: Commercial marine and estuarine;
- Changes to site conditions; and
- Shooting/ scaring.

River Dee and Bala Lake SAC

Introduction

5.89 The River Dee has its source in Snowdonia at the outflow of Llyn Tegid and it includes the Ceiriog, Meloch, Tryweryn and Mynach tributaries. Its catchment contains a wide spectrum of landscape from high mountains around Bala, rugged peaks near Llangollen, steep sided wooded valleys, and the plains of Cheshire, Flintshire, north Shropshire and Wrexham. There is a tidal influence as far upstream as Farndon and high tides regularly exceed the Chester weir crest level. The aquatic plant community includes Wirtgen's water-crowfoot *Ranunculus x bachii* and pond water-crowfoot *R. peltatus* and also floating water-plantain *Luronium natans*. Watercrowfoot forms extensive beds along the whole length of the Dee where flow conditions are suitable. Other aquatic plants which occur within the site include intermediate water-starwort *Callitriche hamulata*, alternate-flowered water-milfoil *Myriophyllum alterniflorum* and bryophytes including *Rhynchostegium riparoides* and *Fontinalis antipyretica*. Marginal vegetation consists mainly of reed canary-grass *Phalaris arundinacea* with occasional branched bur-reed *Sparganium erectum*. There is good tree cover along the banks of the River Dee and the tributaries, with the Ceiriog being tree lined on both banks along much of its length. The dominant species are alder *Alnus glutinosa* and willow *Salix spp.*, with occasional ash *Fraxinus excelsior* and oak *Quercus spp.* Where sections of the riverbank have been fenced off the vegetation tends to be dominated by bramble *Rubus fruticosus agg.*, nettles *Urtica dioica* and other tall ruderals. The River Dee is recognised as one of North Wales' premier rivers for Atlantic salmon *Salmo salar*. The Mynach, Meloch and Ceiriog tributaries are the most important salmon spawning tributaries in the Dee catchment. Other migratory fish utilising the river system include river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus*. The Dee also supports important populations of non-migratory fish including bullhead *Cottus gobio* and brook lamprey *Lampetra planeri*. The otter *Lutra lutra* is well established throughout the river system, especially where appropriate bank side cover exists.

Conservation Objectives¹⁰³

- 5.90 With regard to the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;
- 5.91 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;
- The extent and distribution of the habitats of the qualifying features;
 - The structure and function of the habitats of the qualifying features;
 - The supporting processes on which the habitats of the qualifying features rely;
 - The population of each of the qualifying features; and
 - The distribution of the qualifying features within the site.

¹⁰³ <https://publications.naturalengland.org.uk/file/5851750921928704> [Accessed 02/06/2025]

Qualifying Features¹⁰⁴

5.92 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I:

- H3260 Water courses of plain to montane levels with the *Ranunculus fluitantis* and *Callitriche-Batrachion* vegetation

Environmental Vulnerabilities

5.93 With regards to the Site Improvement Plan for River Dee and Bala Lake SAC (SIP)¹⁰⁵, the following are listed as environmental vulnerabilities:

- Population – Adult run;
- Water quality;
- Environmental disturbance.

River Eden SAC

Introduction

5.94 The Eden is an outstanding floristically rich, northern river on sandstone and hard limestone. The catchment includes headwaters running off the Yorkshire Dales, the North Pennines and the eastern fells of the Lake District and the major standing water body of Ullswater. Streams flowing from limestone are calcareous, whilst those flowing off the Pennines and the Lake District fells are more acidic. The nutrient status gradually changes along the Eden's length as nutrient loadings naturally increase in the lower reaches.

Conservation Objectives¹⁰⁶

5.95 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

5.96 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Qualifying Features¹⁰⁷

5.97 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I:

¹⁰⁴ <https://sac.jncc.gov.uk/site/UK0030252> [Accessed 02/06/2025]

¹⁰⁵ https://naturalresources.wales/media/673374/river_dee_bala_lake_32_plan.pdf [Accessed 02/06/2025]

¹⁰⁶ <https://publications.naturalengland.org.uk/file/5304322711879680> [Accessed 02/06/2025]

¹⁰⁷ <https://sac.jncc.gov.uk/site/UK0012643> [Accessed 13/0/2025]

- H3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*
- H3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation
- H91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- S1092 White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*
- S1095 Sea lamprey *Petromyzon marinus*
- S1096 Brook lamprey *Lampetra planeri*
- S1099 River lamprey *Lampetra fluviatilis*
- S1106 Atlantic salmon *Salmo salar*
- S1163 Bullhead *Cottus gobio*
- S1355 Otter *Lutra lutra*

Environmental Vulnerabilities

5.98 With regards to the Site Improvement Plan for River Eden SAC¹⁰⁸, the following are listed as environmental vulnerabilities:

- Water pollution;
- Agricultural management practices;
- Physical modification;
- Invasive species;
- Changes in species distributions;
- Forestry and woodland management;
- Hydrological changes;
- Air Pollution: impact of atmospheric nitrogen deposition; and
- Disease.

Rixton Clay Pits SAC

Introduction

5.99 Situated east of Warrington, this site comprises parts of an extensive disused brickworks quarry excavated in glacial boulder clay. The excavation has left a mosaic of water-filled hollows and clay banks. Long-abandoned areas have undergone natural succession to scrub and woodland while more recently worked areas support calcareous grassland. The site is important for great crested newt *Triturus cristatus* and holds the county's largest known breeding population¹⁰⁹.

Conservation Objectives¹¹⁰

5.100 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

¹⁰⁸ <https://publications.naturalengland.org.uk/publication/5920746052255744> [Accessed 02/06/2025]

¹⁰⁹ <https://publications.naturalengland.org.uk/file/4827854495809536> [Accessed 29/05/2025]

¹¹⁰ <https://publications.naturalengland.org.uk/file/6277527941414912> [Accessed 29/05/2025]

5.101 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Qualifying Features¹¹¹

5.102 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following species listed in Annex I:

- S1166 Great crested newt *Triturus cristatus*.

Environmental Vulnerabilities

5.103 With regards to the Manchester Mosses SAC Site Improvement plan (SIP200)¹¹², the following are listed as environmental vulnerabilities:

- Direct Impact from 3rd Party (urbanisation)

Rostherne Mere Ramsar

Introduction

5.104 The mere is the deepest, one of the largest and most northerly of the meres of the Cheshire Plain. It lies in a hollow surrounded by thick deposits of glacial drift overlying Triassic marls and saltbeds. It is internationally important for its birds.

Conservation Objectives

5.105 Conservation objectives are not defined for Ramsar sites.

Qualifying Features

5.106 With regard to the Ramsar¹¹³, the following are qualifying criterion:

- Criterion 1
- Good representative example of the meres of the Shropshire-Cheshire Plain.
- Criterion 3c
- Over winter this site regularly supports nationally important numbers of:
- Shoveler (*Anas clypeata*)
- Pochard (*Aythya ferina*)

Environmental Vulnerabilities

¹¹¹ <https://publications.naturalengland.org.uk/file/4827854495809536> [Accessed 29/05/2025]

¹¹² <https://publications.naturalengland.org.uk/publication/5186918258049024> [Accessed 29/05/2025]

5.107 With regards to the Site Improvement Plan for River Eden SAC¹¹⁴, the following are listed as environmental vulnerabilities:

- Eutrophication; and
- Invasive species.

Sefton Coast SAC

Introduction

5.108 Sefton Coast is a large sand dune system (the fourth largest in Britain, Ratcliffe 1977) in north-west England, stretching over 20 km from Southport in the north (at the mouth of the Ribble estuary) and Crosby in the south (at the mouth of the Mersey). The majority of the dune system site lies within the Sefton Coast National Character Area (NCA 57), but at the southern end its landward margin abuts the Merseyside Conurbation NCA (NCA 58). Ravenmeols Hills LNR also lies within Sefton Coast SAC.

5.109 Much of the SAC has public access and includes Ainsdale Sand Dunes and Cabin Hill National Nature Reserves and Ainsdale and Birkdale Sandhills Local Nature Reserves. There are 5 championship golf courses within the SAC and a military training camp at Altcar. The remainder of the land is owned and managed by the Wildlife Trust, the National Trust and one private owner. This means that most of the SAC has either full public access or is adjacent to public rights of way. The location, adjacent to the Merseyside conurbation, means that there are areas of high public use (around car parks) and the SAC is already at risk from recreational disturbance. This may increase in magnitude as further developments arise.

5.110 The site displays both rapid erosion and active shifting dunes. A substantial stretch of the dune system is fronted by shifting dunes. Marram *Ammophila arenaria* usually dominates the mobile dunes, amidst considerable areas of blown sand. Where rates of sand deposition decline, lyme grass *Leymus arenarius*, sea-holly *Eryngium maritimum* and cat's-ear *Hypochaeris radicata* occur, with red fescue *Festuca rubra* and spreading meadow-grass *Poa humilis* present on the more sheltered ridges. Sea spurge *Euphorbia paralias* and the nationally scarce dune fescue *Vulpia fasciculata* are frequent, while sea bindweed *Calystegia soldanella* is very local. The area of dunes around Formby Point has been eroding since 1906 while areas north and south of this are accreting (where the nature of the coast allows). The rapid erosion is therefore reducing the area of shifting dunes at Formby, and high, steep eroding dunes abut the beach with extensive areas of blown sand immediately inland.

Qualifying Features¹¹⁵

5.111 The site is designated as a SAC for its:

Qualifying Annex I habitats:

- Atlantic decalcified fixed dunes (*Calluno-Ulicetia*). (Coastal dune heathland)*
- Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*). (Dunes with creeping willow)
- Embryonic shifting dunes
- Fixed dunes with herbaceous vegetation ("grey dunes"). (Dune grassland)*
- Humid dune slacks
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"). (Shifting dunes with marram)

Annex I priority habitats are denoted by an asterisk (*).

5.112 Qualifying Annex II species:

- Great crested newt *Triturus cristatus*
- Petalwort

¹¹⁴ <https://publications.naturalengland.org.uk/publication/5920746052255744> [Accessed 02/06/2025]

¹¹⁵ [www.publications.naturalengland.org.uk/publication/6588974160150528](https://publications.naturalengland.org.uk/publication/6588974160150528) [Accessed 02/06/2025]

Conservation Objectives¹¹⁶

5.113 *“With regard to the SAC and the natural habitats and/or species for which the site has been designated (the ‘Qualifying Features’ listed below), and subject to natural change;*

5.114 *Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;*

- *The extent and distribution of qualifying natural habitats and habitats of qualifying species*
- *The structure and function (including typical species) of qualifying natural habitats*
- *The structure and function of the habitats of qualifying species*
- *The supporting processes on which qualifying natural habitats and habitats of qualifying species rely*
- *The populations of qualifying species, and,*
- *The distribution of qualifying species within the site.”*

Environmental Vulnerabilities

5.115 The Site improvement Plan¹¹⁷ identifies the following pressures and threats to the SAC:

- Coastal squeeze
- Air pollution: risk of atmospheric nitrogen deposition
- Inappropriate scrub control
- Invasive species
- Hydrological changes
- Public access/disturbance
- Inappropriate coastal management
- Change to site conditions

West Midlands Mosses SAC

Introduction

5.116 The West Midlands Mosses comprise four sites supporting large basin mires which have developed as quaking bogs, known as Schwingmoors, together with a variety of associated hollows and pools showing various types and stages of mire development. This complexity of habitats gives rise to a diverse assemblage of associated plants and invertebrates of national significance, in particular at Clarepool Moss where the water quality is unusual for this type of site in being base-rich.

Conservation Objectives¹¹⁸

5.117 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the ‘Qualifying Features’ listed below), and subject to natural change;

5.118 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;

¹¹⁶ <https://publications.naturalengland.org.uk/file/5246658212528128> [Accessed 02/06/2025]

¹¹⁷ www.publications.naturalengland.org.uk/publication/6274126599684096 [Accessed 02/06/2025]

¹¹⁸ <https://publications.naturalengland.org.uk/file/6061488964108288> [Accessed 02/06/2025]

- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Qualifying Features¹¹⁹

5.119 With regard to the SAC, the site is designated under article 4.2 of the EC Directive 79/409 as it hosts the following habitats listed in Annex I:

- H3160 Natural dystrophic lakes and ponds
- H7140 Transition mires and quaking bogs

Environmental Vulnerabilities

5.120 With regards to the Site Improvement Plan for West Midlands Mosses SAC (SIP261)¹²⁰, the following are listed as environmental vulnerabilities:

- Water pollution;
- Hydrological changes;
- Air Pollution: impact of atmospheric nitrogen deposition;
- Inappropriate scrub control;
- Game management: pheasant rearing;
- Forestry and woodland management; and
- Habitat fragmentation.

¹¹⁹ <https://sac.jncc.gov.uk/site/UK0013595> [Accessed 02/06/2025]

¹²⁰ <https://publications.naturalengland.org.uk/file/5747088459563008> [Accessed 02/06/2025]

Appendix C Spatial Strategy Options and Draft Policy Approaches

Table 5-2 Draft spatial strategy options

Draft Policy Reference	Draft Policy Text	Test of Likely Significant Effects Assessment
SS1	Housing needs The suggested policy approach is that the Council plans to deliver a minimum of 1,914 new homes each year, over the plan period.	Potential likely significant effects. The policy regards delivering net new residential development. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.
SS2	Employment needs The suggested policy approach is that the Council plans to deliver a minimum of 9.9 employment land each year, over the plan period.	Potential likely significant effects. The policy regards delivering net new employment development. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.
SS3	Spatial strategy principles	Potential likely significant effects.

	The spatial strategy will follow the principle of directing new development and allocating land, towards previously developed sites within settlements first, as they are the most sustainable locations with best access to services and facilities. Redeveloping urban sites comes with a range of choices, especially concerning density and the height of buildings. This approach will require a strong commitment to high quality design to ensure that there is adequate private and shared open space, there are services and access to facilities and issues regarding car parking and travel are resolved. Urban extensions Where there are not enough planning permissions and opportunities for redevelopment within urban areas and towns, the approach will be to develop on the edge of existing settlements in locations with the best access to public transport and existing services and infrastructure, as the next best sustainable option. Depending on the settlement this may require the release of Green Belt land.	The policy regards directing the location of net new development. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.
SS4	Settlement hierarchy The new Local Plan will set out a settlement hierarchy, based on their status and role in providing local infrastructure and services for their relatively larger populations and the surrounding hinterland, for the following places: • Chester (city) • Ellesmere Port (main town) Northwich (main town) • Winsford (main town) • Neston and Parkgate (market town) • Frodsham (market town) An individual place-based policy for each settlement will set out the vision, core features, key issues and clear strategy for what development will take place in each settlement. The following settlements have a level of facilities and services that mean they can meet the day-to-day needs of their residents and those living in surrounding areas: Cuddington and Sandiway; Farndon; Helsby; Kelsall; Malpas; Tarporley; Tattenhall; and Tarvin. Depending on the spatial strategy option selected (see SS 5 'Spatial strategy options' A-C) for the new Local Plan, these settlements may be amended. It is recognised that smaller settlements which have a lower level of services and access to public transport could acceptably accommodate infill development and small previously developed sites to meet local needs. In smaller settlements development should be appropriate in scale and design to conserve that settlements' character and setting and should not exceed the capacity of existing services and infrastructure unless the required improvements can be made.	No likely significant effect. This policy sets out the settlement hierarchy and does not allocate development within the settlements.
SS5	Spatial strategy options We have devised three growth options for where development could be located, that would mean updating Local Plan (Part One) policy STRAT 2. To be clear, no decisions have yet been taken about where development might be located. This is a consultation to hear your views about where the new homes and employment land we need to provide for, should be located. Further technical work to assess the suitability and appropriateness of locations and sites will be necessary to determine the most suitable spatial strategy. The three initial options for growth that we have identified are as follows:	Potential likely significant effects. The policy regards directing the location of net new development.

	• Option A – Retain the Green Belt • Option B – Follow current Local Plan level and distribution of development • Option C – Sustainable transport corridors These options are set out in more detail below. There is no right or wrong answer in respect of these options. Each option generates different impacts and has a range of pros and cons. Each of the three alternatives is illustrative only – they indicate the possible pattern and scale of development which might be required and use a diagram base map to give a visual impression of where growth might take place but without identifying specific locations or sites for development. All options are capable of accommodating at least 29,000 new homes and 149 hectares of employment land. A place identified on the plan indicates a potential capacity across a range of different sites – and would not be necessarily delivered as a single site. It should not be assumed that places identified on the plan for '500-1,500 homes', for example, are expected to accommodate as much as 1,500 (it could be significantly less). Where an option indicates that the development of sites outside of a settlement might be necessary (possibly in the Green Belt and/or the countryside), some potential growth areas are identified in section 5.1 'Potential growth areas'. However, it must be noted that the examiner's report⁽ⁱ⁾ into the Local Plan (Part One) concluded that additional release of Green Belt land around Chester would have a significant adverse effect on the purposes of including land within the Green Belt including to the historic setting, and that the amended Green Belt boundary proposed was capable of enduring and would not need to be altered at the end of the plan period (2030). It is recognised there may be other options/ approaches that could be taken and this consultation provides the opportunity for suggesting amendments to the options proposed or suggesting new options.	There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.
Option A - Retain the Green Belt	Green Belt covers about 42% of Cheshire West across the north of the borough surrounding Chester, Ellesmere Port, Neston and Parkgate, Helsby and Frodsham and the edges of Northwich, Tarvin, Kelsall, and Cuddington and Sandiway. Not all countryside (greenfield land) in the borough is covered by Green Belt as identified on the map accompanying this option. Government advice is that the Green Belt can only be altered in exceptional circumstances, so it is important to demonstrate that all other reasonable options for meeting needs have been fully explored first, such as using brownfield sites in settlements, increased densities and assessing the potential for growth in neighbouring areas. This approach therefore assumes that any new development areas are located outside the Green Belt. For housing development it includes: • Major development in and to the south of Northwich of just over 5,000 homes. • Significant urban extensions to the south/west of Winsford of more than 11,000 homes. • Growth around places that are not located in the Green Belt, such as Tarporley, Tattenhall, Malpas and Farndon. • More limited development to the south/east of Tarvin, Kelsall and Cuddington and Sandiway on sites that are not in the Green Belt. For employment development it includes:	Potential Likely Significant Effects This option sets out retaining the green belt which is environment positive, whoever the strategy does also provide options for where to locate development outside of the greenbelt. Dependent on the location of these there may be linking impact pathways to Habitats Sites. Therefore, this option has been screened in.

	• Refurbishment and redevelopment of sites in existing employment areas, retaining key employment locations of: Origin, Ellesmere Port; Winsford Industrial Estate; Woodford Park; Gadbrook Park; Chester West/Sealand Industrial Estate. • For new large scale industrial/warehousing provision, if this did not deliver enough sites for employment needs, then explore greenfield extensions not located in Green Belt. Indicative locations include: south/ west Gadbrook Park; north/east of Winsford Industrial Estate; west Woodford Park; and east of Protos. • For office development, focus primarily on town centres or established business parks, including Gadbrook Park. • Outside of the main settlements and market towns, potential for smaller scale employment or mixed use development, appropriate to the scale and function of the settlement, to meet local employment needs. Potential growth areas for both housing and employment outside of these settlements are shown in section 5.1 'Potential growth areas'.	
Option B - Follow current Local Plan level and distribution of development	This approach follows the existing Local Plan strategy and settlement hierarchy set out in Local Plan (Part One) Policy STRAT 2, which locates most new development in, or on the edge of the main urban areas, and an appropriate level of new development focused on the smaller settlements which have adequate services and facilities and access to public transport. A key difference between the Local Plan (Part One) and the new Local Plan is that there is a much more limited supply of previously developed land to accommodate new development, and unlike the last plan, larger areas of Green Belt and/or countryside are likely to be needed. In developing this option, the government's new housing target of 28,170 homes has been distributed according to the relative proportions of the existing local plan housing requirement of 22,000 homes as set out in the Local Plan (Part One). This option would need to ensure that peripheral development has good sustainable connectivity and design relating to existing built form. While a proportion of development can be accommodated within existing settlements, much of the new development under this option would need to be located within the Green Belt and/or countryside. For housing development it includes: • Large urban extensions around: Chester; Ellesmere Port; Northwich and Winsford. • Total Green Belt release of sites to deliver 11,000 homes. • Relatively limited development in Cuddington and Sandiway; Farndon; Frodsham; Helsby; Kelsall; Malpas; Neston and Parkgate; Tarporley; Tarvin; and Tattenhall of 3,000 homes in total. • 2,500 homes across the rest of the rural area, including both Green Belt and non-Green Belt land. • For employment development it includes: • Refurbishment and redevelopment of sites in existing employment areas, retaining key employment locations of: Origin, Ellesmere Port; Winsford Industrial Estate; Woodford Park; Gadbrook Park; Chester West/Sealand Industrial Estate; and commercial sites in the Green Belt at Urenco and Chester Business Park.	Potential Likely Significant Effects This option sets out where to locate development within and outside of the greenbelt. Dependent on the location of these there may be linking impact pathways to Habitats Sites. Therefore, this option has been screened in.

	- For new large scale industrial/warehousing provision, if this did not deliver enough sites for employment needs, then explore greenfield extensions. Indicative locations include: south/west Gadbrook Park; north/east of Winsford Industrial Estate; west of Woodford Park; and east of Protos;. In the Green Belt, explore the potential around: Wincham; south of Ellesmere Port; and north of Clayhill Industrial Estate, Neston. - For office development, focus on primarily on town centres or established business parks, including: Chester Business Park and Gadbrook Park. - Outside of the main settlements and market towns, the potential for smaller scale employment or mixed use development, appropriate to the scale and function of the settlement, to meet local employment needs. Potential growth areas for both housing and employment outside of these settlements are shown in section 5.1 'Potential growth areas'.	
Option C - Sustainable transport corridors	This option would see new homes focused in and around settlements on the railway network, and on main bus route corridors (based on those routes with a bus service frequency of at least one per hour). Focusing development in locations currently well-served by trains and buses would maximise opportunities for sustainable travel choices and could support future improvements to services, frequency and hours. In this scenario there would also be brownfield opportunities at all main urban areas including locations where transport hubs could be improved such as at stations and smaller settlements with stations and/or bus connectivity, including long term aspirations for a new rail station at Gadbrook Park. This approach could have a greater impact on the Green Belt if multiple developments took place along corridors potentially adding to the impression of urban sprawl and the merging of settlements. For housing development it includes: - A more distributed pattern of development. - More modest urban extensions around: Chester; Ellesmere Port; Northwich; and Winsford - Smaller settlements with a rail station, such as: Cuddington and Sandiway; Helsby; Frodsham; and Neston and Parkgate would take a bigger role in accommodating development. - Total Green Belt release of sites to deliver more than 12,000 homes. - Potential for further development in the rural area and in places along bus corridors including: Farndon; Malpas; Tarporley; Tarvin; and Tattenhall. - Potential for an enhanced role around rural rail stations including: Acton Bridge; Capenhurst; Delamere; Elton; Hooton; Lostock Gralam; and Mouldsworth. - For employment development it includes; - Refurbishment and redevelopment of sites in existing employment areas, retaining key employment locations of: Origin, Ellesmere Port; Winsford Industrial Estate; Gadbrook Park; and commercial sites in the Green Belt at Urenco, Capenhurst. - For new large scale industrial/warehousing provision, if this did not deliver enough sites for employment needs, then explore greenfield extensions, particularly with multi-modal opportunities (port/rail) for	Potential Likely Significant Effects This option sets out where to locate development within and outside of the greenbelt. Dependent on the location of these there may be linking impact pathways to Habitats Sites. Therefore, this option has been screened in.

	freight, or locations close to existing or planned railway stations for passengers. Indicative locations include: Origin eastern employment area; south/west Gadbrook Park incorporating a new railway station; Wincham, Lostock Gralam; south/east of Winsford Industrial Estate; and north of Clayhill Industrial Estate, Neston. - For office development, focus primarily on town centres or established business parks. This could include well connected sites such as: Chester Business Quarter; and Gadbrook Park subject to a new railway station south/west of Gadbrook Park. - Outside of the main settlements and market towns, the potential for smaller scale employment or mixed use development close to local railway stations, appropriate to the scale and function of the settlement, to meet local employment needs. Potential growth areas for both housing and employment outside of these settlements are shown in section 5.1 'Potential growth areas'.	
SD1: Sustainable development	New developments must, where relevant: Mitigating climate change 1. Maximise opportunities to secure significant reductions in carbon emissions through low carbon design, embodied carbon and energy consumption; 2. Maximise opportunities to generate energy from renewable sources and to re-balance the grid through energy storage. All new buildings should include solar panels unless it can be shown that this is impractical or not viable. Strategic sites should be connected to a district heat network. Where this is not currently feasible, new homes should be built with the necessary infrastructure in place to enable such connections to be easily integrated in the future. Opportunities should be sought to connect commercial development producing sufficient levels of waste heat, with residential development or other developments with demand for heating, where they are located within close proximity; 3. Be designed to make walking, wheeling and cycling as safe and easy as possible. Providing for sustainable transport choices to create healthy and inclusive communities, whilst reducing the need to travel. Incorporating electric vehicle (EV) charging points in every new home with off-street parking, and outside new commercial developments, village halls, community facilities and services; 4. Deliver high quality, interconnected and multifunctional green and blue infrastructure, which will be designed to provide sequester carbon, improve air quality and enhance biodiversity. Tree planting and other carbon sequestering habitat types should be incorporated into new developments; and 5. Maximise resource efficiency and supporting the transition to a circular economy by minimising waste, maximising the reuse of materials, and prioritising low embodied carbon materials. Adapting to climate change 6. Be designed to be resilient and adaptive to the future impacts of climate change. Schemes should minimise the risk of overheating and buildings must be able to withstand the impact of extreme conditions, such as from flooding and heat exposure; 7. Be located in accordance with the Sequential Test and the Exceptions Test (where appropriate) and have regard to the Strategic Flood Risk Assessment. Areas at risk of flooding, both now and in future, should be avoided and development should contribute to reducing flood risk on site without exacerbating flood risk elsewhere. Natural flood management features such as Sustainable Drainage Systems (SuDS) should be incorporated into design of schemes and should also provide amenity value and / or biodiversity improvements;	No likely significant effects. This policy discusses sustainable development and states that it is a requirement of development to protect, enhance or improve the natural environment and seeking opportunities for habitat creation. This is an environment positive policy.

	8. Incorporate water efficiency, water recycling and rainwater harvesting measures to mitigate the impact of drought and reduce resource and associated energy consumption. Additional environmental and social requirements • Protect, enhance or improve the natural and historic environment whilst enhancing or restoring degraded and despoiled land and seeking opportunities for habitat creation; • Encourage the use and redevelopment of previously developed land and buildings and minimising the development of greenfield land as much as possible; • Avoid development in locations of high environmental value and on high-grade agricultural land ; and • Support development that achieves regeneration of the most deprived areas of the borough. The Council will always work proactively with applicants where proposals are not in accordance with the Plan to find solutions which mean that proposals can be made sustainable and approved wherever possible. However, proposals that fundamentally conflict with the above principles or policies within the Local Plan will be refused.	
CH 1: Chester	The suggested approach will reflect the One City Plan to recognise the uniqueness of the city and the opportunity to build on the city's cultural and heritage offer and Chester's strength as a compact, connected centre surrounded by accessible neighbourhoods including: • promoting opportunities for sustainable travel. • increasing opportunities for people to live in the heart of the city through the right mix of housing and creating high quality places. • supporting a vibrant city centre and Chester's role as a sub-regional centre. • providing quality office space. The new Local Plan will set out the level and location of new development with protection of the historic environment and special character of the city remaining the priority. The overall content of Local Plan (Part One) policy STRAT 3 and Local Plan (Part Two) policy CH 1 will be retained, relating to development in Chester and protecting the historic and special character of the city including areas identified as strategic open space. The content of Local Plan (Part Two) policy CH4 for the University of Chester will be retained. The approach will retain Local Plan (Part Two) policies CH 5 and CH 6 to protect the heritage of Chester with the addition of reference to Chester Rows Design Guide. For relevant development proposals within Chester, include the requirement to consult the Chester Archaeological Plan which defines Areas of Archaeological Significance and the Primary and Secondary Archaeological Character Zones (formerly part of Local Plan (Part Two) policy DM 50).	Potential likely significant effects The policy discusses key allocations for development in Chester. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.

Amend policies relating to parking to encourage new residential and other uses in the city centre and surrounding area.

Retain and update content of Local Plan (Part Two) policy GBC 1.A - Chester Zoo - for zoological purposes.

Retain and update content of Local Plan (Part Two) policy GBC 1.B - Countess of Chester Health Park - for medical and associated purposes.

Key Allocations / Policies

Policies will seek to support a vibrant city centre and seek to support and retain uses, including cultural, that contribute to the attractiveness of the city as a place to live and visit.

Retain and update content of Local Plan (Part Two) policy CH 2.B Commonhall Street and policy CH 2.C Chester Castle and Riverside Area.

Update or replace Local Plan (Part Two) policy CH 3 regarding employment allocations:

- Dale Barracks (mixed use) – set out level and type of development and identify areas to be protected and other requirements taking account of local community aspirations set out in the Upton Neighbourhood Plan. Update Local Plan.(Part Two) policy GBC 1.C.
- Chester Gateway (mixed use) (part of Local Plan Part Two) policy CH 2.A) – allocate land for mixed uses including residential where compatible with protecting employment uses and incorporate other aims and try and link in development requirements for provision of infrastructure.
- Chester Business Quarter – currently identified for some apartment accommodation but primarily for 44,000 sq. m of high-quality office space of which 7,800 sq. m has been developed for office. There has been a hotel development granted (3,700 sq. m permitted) with balance of 32,500 sq. m undeveloped. The consultation is seeking views on future allocation of the area for office uses.
- Northgate Phase 2 – current Local Plan (Part Two) policy CH 2.A - anticipated policy approach will be for the next phase to be predominantly residential-led mixed-use development.
- Chester Business Park – current Local Plan (Part One) policy ECON 1 and Local Plan (Part Two) policy GBC 1.D identifies Chester Business Park as a safeguarded strategic employment location for office uses located in the Green Belt.
- Chester West Employment Park and Sealand Industrial Estate – current Local Plan (Part One) policy ECON 1 existing employment land and premises are retained and protected for employment use. Qualitative improvements within these areas will be supported.
- Other sites identified will depend on the chosen spatial strategy (see SS 5 'Spatial strategy options').

Transport and infrastructure

Subject to TA 2 'Key local transport infrastructure priorities' the suggested policy approach will identify the key transport priorities for Chester, which may include:

- Improvements to the A56 Hoole Road Corridor

- Allocating land for a 5th park and ride site
- Supporting capacity improvements at Chester Station

Appropriate provision should be made for access and parking in line with a review of parking standards and parking zones as set out in TA 1 'Transport and accessibility', where there is a concentration of services, increased sustainable transport options and lower levels of car ownership.

Approach to Chester Business ParkLand to the east of Wrexham Road, Chester will continue to identified as an established business park within the Green Belt. Development proposals for office development, Use Class E(g)(i), within the area defined on the policies map will be supported where they are in line with the suggested policy approach set out in EG 1 'Economic growth, employment and enterprise' and providing:

1. they provide for a high-quality development in a parkland setting; and
2. the traffic/transport requirements generated by the development can be safely and satisfactorily accommodated on the highways network.

Proposals for the refurbishment of vacant office premises for continued economic use would be supported.

Proposals for the change of use of vacant office floorspace to an alternative use, would be assessed against he suggested policy approach set out in EG 1 'Economic growth, employment and enterprise'.

The policy approach could consider if flexible employment uses that support jobs (such as research and development, educational or health related use), may be acceptable where there is evidence of long-term vacancy and where this would maintain the vibrancy of the business park. Additional safety/security measures should be provided where appropriate.

New residential development within Chester Business Park would not be permitted.

EP 1: Ellesmere Port

Development in Ellesmere Port has the potential to deliver substantial economic growth, through continued and new investment in the Origin area, the reuse/redevelopment of vacant or redundant sites and the regeneration of the town centre. Further housing will be delivered to complement the settlement's role as a key employment location and support the vitality of the town centre. The new Local Plan will set out the level and location of new development and regeneration, economic growth, industrial decarbonisation and new housing will be priorities.

Key allocations/ policies

Locations will be identified to deliver strategic development needs for new housing and employment development, linked to section 5 'Spatial strategy' of the Plan.

Ellesmere Port Origin is a strategic employment cluster with four distinct zones; Western Advanced Manufacturing Zone; Automotive and related industries, logistics and distribution (covering current Hooton Park Local Plan (Part Two) policy EP 4 and adjacent areas)

Potential likely significant effects

The policy discusses key allocations for development in Ellesmere Port.

There is minimal information and likely needs further detail to be assessed fully at the next stage.

	Central industrial area; industrial and warehousing development (M53 corridor, includes New Bridge Road and Stanlow West in current Local Plan (Part One) policy ECON 1) Stanlow and Thornton; important for petrochemical and related industries, low carbon technology, research and development (Stanlow operational areas and Thornton Science Park, current Local Plan (Part Two) policies EP 4 and EP 5) Eastern Growth Zone; glass manufacturing, environmental and low-carbon technology, energy and waste resource recovery (Encirc, Protos current Local Plan (Part Two) policy EP 6, and former CF Fertilisers site excluding Green Belt and countryside locations) Urenco and Capenhurst Technology Park: located in the Green Belt, close to the Ellesmere Port settlement boundary. The chosen spatial strategy will determine whether Green Belt boundaries will be amended, it is proposed to retain a policy for the site to allow for a continuation of current uses and for operational improvements within the site. The approach to the use, design and location of developments in proximity to hazardous installations or pipelines is set out in section 21 'Health and wellbeing'. In exceptional cases it may be necessary to strike a balance between the need for investment and regeneration within the existing urban area and the degree of risk involved. Transport and Infrastructure • Subject to TA 2 'Key local transport infrastructure priorities' the suggested policy approach will identify the key transport priorities for Ellesmere Port, which may include: • Maximising opportunities for freight transport on the rail network or via the Manchester Ship Canal • Encouraging new links to rail and waterway networks • Supporting improved transport links (including pedestrian and cycle) between the town centre, the Waterfront, Stanlow and Rossfield Park Appropriate provision should be made for access and parking in line with a review of parking standards and parking zones as set out in TA 1 'Transport and accessibility', where there is a concentration of services, increased sustainable transport options and lower levels of car ownership. All developments will be required to support physical and landscape improvements to the gateways, corridors and green spaces within Ellesmere Port including along the M53/Shropshire Union Canal Corridor.	Therefore, this policy has been screened in.
EP 2: Origin - Stanlow and Thornton Science Park	Land at Stanlow (to be identified on the policies map) will be safeguarded for nationally significant petrochemical and related industries. New developments are encouraged to support the low carbon energy transition, and where appropriate include measures to decarbonise heavy industrial processes (see section 28 'Energy' and approach to low carbon fuel). The redevelopment of any surplus vacant, under-used or derelict land for employment or related sui generis uses will be supported. All development proposals must include public safety and security measures and will be required to meet health and safety advice. Proposals involving freight movements, warehousing and logistics should maximise opportunities to transport products by non-road modes of transport including the Manchester Ship Canal and rail network.	Potential likely significant effects The policy discusses key allocations for development at Stanlow and Thornton Science Park. There is minimal information and likely

	Development must minimise and mitigate any impacts on the local environment, health, residential amenity, potential for pollution, noise generation, visual impact and flood risk. Thornton Science Park is located within Stanlow and identified for research and development. The central landscape area is important for the character and quality of the science park and should be retained and enhanced with any development proposals.	needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.
EP 3: Origin - Protos	Land at Protos (to be identified on the policies map) will be safeguarded for the following; - Multi-modal development in connection with resource recovery and waste, reducing carbon emissions and sustainable energy generation. See sections 29 'Managing waste' and 28 'Energy' - Existing and planned port and rail infrastructure, to maximise opportunities for freight movements on the Manchester Ship Canal or rail network and safeguard minerals infrastructure The current policies map will be reviewed and where necessary updated in line with extant consented developments at Protos. The policy approach will seek to ensure development is comprehensively planned and takes account of other operational, planned or consented development in Origin and the surrounding area. The ecological mitigation areas and landscaping that form part of the consented resource recovery park are retained. See section 25 'Green infrastructure, biodiversity and geodiversity' Development should make provision for public access (including public transport), having regard to operational needs of businesses and public safety. Development must minimise and mitigate any local impacts on the local environment, health, residential amenity, potential for pollution, noise generation, visual impact and flood risk.	Potential likely significant effects The policy discusses new development at Protos. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.
NO 1: Northwich	The suggested approach will reflect the objectives and projects identified in the Northwich Town Centre Development Framework and Northwich Transport Strategy recognising the town's potential to reuse/redevelop vacant or redundant sites and the regeneration of the town centre. The intention is to retain the overall policy content of current Local Plan (Part One) policy STRAT 5 and Local Plan (Part Two) policy N1 relating to development in Northwich and safeguarding the character and individuality of the settlements that form the wider built-up area of Northwich. The new Local Plan will set out the level and location of new development within Northwich and the surrounding settlements which make up the Northwich urban area. The key settlement gaps identified under Local Plan (Part Two) policy GBC 3 will be retained to avoid coalescence and the identity function of the gap, see also section 24 'Landscape'. Key sites and land allocations will be identified to deliver strategic development needs for new housing and employment development (linked to section 5 'Spatial strategy' and the chosen spatial strategy of the new Local Plan). Local Plan (Part Two) policies N 3 and N 4 will be retained accordingly and updated as needed to reflect allocations that have been completed and/ or require a new approach. Local Plan (Part Two) policy N 2 for the Northwich regeneration areas (Weaver Square (Local Plan (Part Two) policy N 2.A), Winnington Works (TATA) (Local Plan (Part Two) policy N 2.B), and Wincham (Local	Potential likely significant effects The policy discusses key allocations for development in Northwich. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.

	Plan (Part Two) policy N 2.C), are all proposed to be retained. The boundaries will be reviewed and amended where necessary. The content of Local Plan (Part Two) policy N 6 which protects the unique heritage assets and character of Northwich conservation area, town centre and its outskirts, would be retained. Key allocations/policies • Wincham Urban Village • Northwich Town Centre e.g. Weaver Square, Northwich Market, Barons Quay • Winnington Works (TATA) • Gadbrook Park Other sites to be identified will depend on the chosen spatial strategy. Transport and infrastructure Subject to TA 2 'Key local transport infrastructure priorities' the suggested policy approach will identify the key transport priorities for Northwich, which may include: • Winnington/Barnton Swing Bridge corridor • Improving evening bus services and providing better bus links between the town and the railway station • Providing more dedicated walking and cycling routes from residential areas to the town centre; Appropriate provision should be made for access and parking in line with a review of parking standards and parking zones as set out in TA 1 'Transport and accessibility', where there is a concentration of services, increased sustainable transport options and lower levels of car ownership.	
NO 2: Gadbrook Park	Gadbrook Park and the surrounding area, to be identified on the policies map, will be safeguarded and retained for employment use falling within use classes E(g), B2 and B8. All development proposals within this area must be comprehensively planned and meet the criteria in section 16 'Economic growth, employment and enterprise' regarding new employment development. Proposals for the refurbishment of vacant office premises for continued economic use would be supported. Proposals for the change of use of vacant office floorspace to an alternative use, would be assessed against section 16 'Economic growth, employment and enterprise'. The policy approach could consider if flexible employment uses that support jobs, such as educational or health related use, may be acceptable where there is evidence of long-term vacancy and where this would maintain the vibrancy of the business park. Additional safety/ security measures should be provided where appropriate. New residential development within the policy area would not be permitted. The Council may also take forward Article 4 Directions to remove permitted development rights for residential or other use in the future. Land to the south-west of Gadbrook Park	Potential likely significant effects The policy discusses key allocations for development in Gadbrook Park. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.

	Land to the south-west of Gadbrook Park is identified for large-scale logistics, warehousing and distribution (as currently allocated under existing Local Plan (Part Two) policy N 4.F). Development should be brought forward in line with an agreed development brief that addresses the following, and meets other relevant policies of the new Local Plan: 1. Access, highways and transport infrastructure, 2. Access by walking, cycling and public transport, incorporating active travel measures with the surrounding area 3. Improvements and enhancements to the rail network and safeguards sufficient land for a railway station 4. Landscape and visual impacts 5. High quality design, being of a suitable scale, density, form, massing, height and materials with regard to surrounding landscape character and topography 6. Integrate and enhance ecological networks, green infrastructure and provide biodiversity net gain 7. Minimise and mitigate flood risk Gadbrook Park Railway Station The re-opening of the Sandbach to Northwich line to passenger traffic has previously been identified as a potential scheme to improve connectivity between Cheshire West and the surrounding area. The reinstatement of this service and the potential for a station at Gadbrook Park is to be recognised in the new Local Plan, through the safeguarding of land for a fully accessible new railway station within the area defined on the policies map, subject to further detailed assessment. The layout and design of development proposals should allow for provision for public transport services throughout the site.	
WI 1: Winsford	The suggested policy approach is to reflect the objectives and projects identified in the Winsford Neighbourhood Plan and Winsford Development Framework recognising the town's potential to reuse/redevelop vacant or redundant sites, with a focus on regeneration of the town centre and old High Street, promoting opportunities for town centre living, improvements to open space, the waterfront and leisure routes and improving accessibility to the railway station. The new Local Plan will set out the level and location of new development. The overall content of Local Plan (Part One) policy STRAT 6 and Local Plan (Part Two) policy W 1, relating to development in Winsford, will be retained along with the Station Quarter allocation (allocated through the Winsford Neighbourhood Plan), promoting good design and accessibility, which is also proposed to be retained. Key sites and land allocations will be identified to deliver strategic development needs for new housing and employment development (linked to 5 'Spatial strategy' of the new Local Plan). Local Plan (Part Two) policies W 1 and W 2 will be retained accordingly and updated as needed to reflect allocations that have been completed and/ or require a new approach, and either retain, replace or identify new employment land allocations to meet borough wide needs. Woodford Park Woodford Park is an established employment area and will be safeguarded to meet a range of sizes and types of small-medium business needs. Additional growth areas will be explored around north and west of Woodford Park for a mix of uses.	Potential likely significant effects The policy discusses key allocations for development in Winsford. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.

	Key allocations/ policies • Station Quarter • Town centre regeneration • Old High Street • Winsford Industrial Estate • Winsford Gateway • Winsford Waterfront • Woodford Park • Improvements to open/green space/leisure routes with enhanced access to The Flashes and River Weaver • Improved accessibility to the railway station Other sites to be identified will depend on the chosen spatial strategy. Transport and infrastructure Subject to TA 2 'Key local transport infrastructure priorities' the suggested policy approach will identify the key transport priorities for Winsford, which may include: • Improving journey times between Winsford/Middlewich and link to M6 • Safeguarding land between A54 Winsford Railway Station to Stanthorne in Winsford for road/junction improvements • Improvements around Winsford rail station Appropriate provision should be made for access and parking in line with a review of parking standards and parking zones as set out in TA 1 'Transport and accessibility', where there is a concentration of services, increased sustainable transport options and lower levels of car ownership.	
WI 2: Winsford Industrial Estate	Winsford Industrial Estate Winsford Industrial Estate is a strategic employment location for a range of sizes and types of business falling in use classes E(g), B2 and B8. The refurbishment of premises for continued employment use will be supported. Land within Winsford Industrial Estate will be retained to meet the needs for small, medium and larger enterprises, and expansions needs for specific employers. Additional growth areas will be explored around the east and north of Winsford Industrial Estate to meet large scale industrial, warehouse and distribution needs. These areas would be protected from alternative forms of development. Development proposals for B2/B8 uses should incorporate sufficient space for lorry parking for their anticipated use. The design and location of parking and servicing should minimise visual impact on the street scene. Development must mark the 'gateway' into Winsford through appropriately high quality development.	Potential likely significant effects The policy discusses development in Winsford Industrial Estate. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.
FR 1: Frodsham	Identify Frodsham as a market town in the new Local Plan settlement hierarchy. Set out the level and location of new development in and around the town – depending on the final potential growth option (see SS 5 'Spatial strategy options'), this may require the release of Green Belt land.	Potential likely significant effects

	The policy approach will generally reflect the objectives and projects identified in the Frodsham Neighbourhood Plan, including: • allocating sites FRO/0010, FRO/0038, FRO/0039, S/01, S/07, S/10 for development • providing a mix of new homes, especially affordable housing for young people/families, starter homes, and smaller properties enable downsizing and meeting the needs of older residents • protecting existing and promoting new employment and business opportunities, maintaining the vitality and viability of the retail centre • ensuring new development respects the character of Frodsham in terms of design, materials and scale • protecting the appearance, setting and character of the Frodsham and Helsby Hill ASCV • supporting the development of Frodsham's tourism and visitor economy • protecting and enhancing the network of accessible green and open spaces • managing the potential impact on designated habitats sites • facilitating easy and safe access within the town, for walking, wheeling and cycling, that is designed for the needs of an ageing population • supporting the use of electric vehicles and providing adequate vehicle and cycle parking	The policy discusses key allocations for development in Frodsham. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.
NP 1: Neston and Parkgate	Identify Neston and Parkgate as a market town in the new Local Plan settlement hierarchy. Set out the level and location of new development in and around the town – depending on the final potential growth option (see SS 5 'Spatial strategy options' A-C), this may require the release of Green Belt land. The policy approach will generally reflect the objectives and projects identified in the Neston Neighbourhood Plan, including: • providing a mix of new homes, especially affordable market and social housing for young people, students, families, starter homes, and smaller properties to enable downsizing and meeting the needs of older residents • reviewing the neighbourhood plan policy NNE1 employment allocations for potential inclusion in the new Local Plan • protecting and supporting the development of Clayhill Industrial Estate as a location for employment uses, and reflecting new Class E(g) Commercial Business and Service use class • addressing long term vacancies and supporting the vitality and viability of the town centre • protecting the appearance, setting and character of the Dee Coastal Area ASCV • ensuring new development respects the character of Neston and Parkgate in terms of design, materials and scale • supporting the development of Neston and Parkgate's tourism and visitor economy, recognising the key visitor attractions of Parkgate Parade, Ness Botanic Gardens, the Burton Marsh Greenway and the Wirral Way • protecting and enhancing the network of accessible green and open spaces • managing the potential impact on designated habitats sites • improving transport infrastructure by creating a network of safe walking and cycling connections throughout the area	Potential likely significant effects The policy discusses development in Neston and Park Gate. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.

	protecting existing car parks from development and extended where possible within and adjacent to Parkgate Parade University of Liverpool, Leahurst Campus Located on the outskirts of Neston, in the Green Belt. The policy approach will define a boundary and set out policy for the development of the site for its continued use for education, research and development.	
MI 1: Middlewich	Continue close working and collaboration with Cheshire East in relation to future development needs and infrastructure. Take a pragmatic approach to avoid delays to plan-making to enable land in Cheshire West to meet future needs in Middlewich.	Potential likely significant effects The policy discusses development in Middlewich. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.
GB 1: Green Belt and countryside	Countryside The suggested approach includes the potential to add in other uses appropriate to countryside but will need to ensure the protection of the intrinsic character and beauty the borough's countryside. In addition, it will need to ensure that the protection of rural character is picked up in any update to Local Plan (Part One) policy STRAT 9, or elsewhere, to incorporate elements of Local Plan (Part Two) policies DM 1 and DM 19 (rural character/not urbanise) and that replacement buildings should be for the same use unless policy compliant. The supporting text to Local Plan (Part One) policy STRAT 9 can be amended to delete reference to settlement boundaries and Local Plan (Part Two) as going forward the new Local Plan will be prepared as a single plan. Green Belt The current Local Plan (Part One) policy STRAT 9 may need to be updated if required to set out approach to grey belt and to reflect Green Belt review evidence (to be prepared) in terms of overall approach and to inset areas/washed over settlements. The supporting text to Local Plan (Part One) policy STRAT 9 can be reduced as does not need to quote NPPF or to refer to future work in Local Plan (Part Two). Delete Local Plan (Part Two) policy GBC 1 and cover the commercial sites listed in the policy within the Chester and Ellesmere Port policy sections of the plan, retaining policy requirements if relevant to the site.	No likely significant effects. This is a development management policy which discusses appropriate uses of the greenbelt and countryside and does not allocate development.
TA 1: Transport and accessibility	The overall approach is to minimise the need for travel, particularly travel by solo occupancy cars and vans, by locating development so it is accessible to local services and facilities by a range of transport modes, following a vision-led approach and a sustainable transport hierarchy.	No likely significant effects.

Local Transport Plan Vision

A fairer and more sustainable transport system which enables a stronger, thriving future for all communities of Cheshire West and Chester by 2040, prioritising:

- tackling the climate emergency
- tackling the poverty emergency
- improving health and wellbeing
- boosting our local economy
- creating great places to live

Sustainable transport hierarchy

1. People walking or wheeling
2. People cycling or riding
3. People using public transport
4. People driving ultra-low emission and shared vehicles
5. Delivery and logistics in internal combustion engine vehicles
6. People driving other private motor vehicles

New development

New development will be encouraged in more sustainable locations, recognising that the approach to transport will vary depending on site location.

Fundamentally, developments and places should maximise any opportunities for people to be able to meet their regular day to day needs within a reasonable (10 minute/800 metres) walking distance of their homes, as well as being able to travel outside of their settlements by a range of sustainable travel choices.

New developments will be designed to accommodate and shape future travel demand in a scenario where our LTP vision is achieved, with reduced reliance on private cars, and significantly increased numbers of public transport, walking, wheeling and cycling trips, following the sustainable transport hierarchy.

Applicants will be required to demonstrate through a transport assessment, how their proposal meets our vision, and through a Travel Plan set out plans to monitor and take action where the vision is not being met.

Transport corridors and infrastructure

Current and disused transport corridors and infrastructure, including roads, railway lines, sidings and stations, will be safeguarded from development which would preclude their future transport use.

Opportunities will be sought to extend and improve access to local footpath and cycle networks, including greenways, canal towpaths and the Public Rights of Way networks.

Proposals for new industrial, warehousing, energy and waste development should maximise opportunities to transport materials and waste products by non-road modes of transport and make suitable provision for lorry parking. Sites alongside the Manchester Ship Canal, Weaver Navigation and rail network may be particularly suitable for freight use and these opportunities should be integrated into development proposals where feasible.

Rail lines and stations

This is a development management policy which discusses minimising need for solo travel and promoting sustainable travel. This policy does not allocate development merely encourage development in sustainable locations to enable sustainable approaches to transport.

Proposals for new, re-opening or the enhancement of railway stations, including the expansion and/or improvement of facilities, the provision of cycle and car parking, and the provision of interchange or rail freight facilities will be supported.

Parking

Sufficient parking should be provided as part of the integrated vision-led approach to transport on development sites.

We will review current standards in the Parking Standards SPD and the role of current parking zones, to meet a number of key criteria, including:

- Supporting town centre economies and vitality
- Minimising congestion
- Supporting the uptake of sustainable transport modes
- Enhancing the quality of place
- Adhering to LTP 4 principles, including the sustainable transport hierarchy
- Providing a flexible approach which adapts to the varying levels of non-car connectivity across the borough and leaves room for changes to connectivity levels in future

TA 2: Local transport infrastructure priorities

Key local transport infrastructure priorities

The suggested policy approach is to review the existing transport infrastructure priorities, and consider if any of the schemes need to be amended or deleted in the new Local Plan, or if there are any additional schemes that should be included.

Table 14.1 Current identified transport policies and priorities

Current Policy	Priority
STRAT 7 Middlewich	Potential for improving journey times along A54 between J18 of the M6 and Winsford
STRAT 10 Transport and accessibility	• Chester Transport Strategy (Phase 1) • Chester Bus Interchange • Safeguards New Bridge Road/A5117 link road alignment
EP 1 Ellesmere Port settlement area	• New railway bridge crossing between Rossmore and the town centre • Partnership working with National Highways to achieve M53 smart motorway improvements and upgrading A550
N 5 Gadbrook Park	• Reintroduction of passenger services on the Sandbach Northwich line • Safeguarding of a site for a new station at Gadbrook Park
T 1 Local road network improvement schemes	Focus for s106 contributions: • Chester Western Relief Road • Winsford/Middlewich link to M6

Potential likely significant effects.

Policy discussing upgrading the A550 and other improvements and bridges etc

Dependent on the locations of this development in relation to Habitats Sites, there could be linking impact pathways.

There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.

	Northwich Swing Bridge Safeguards land between A54 Winsford Railway Station to Stanthorne in Winsford for road/junction improvements
T 2 A56 Hoole Road Corridor	- Route of the A56 Hoole Road Corridor - Allocates land for 5th park and ride sites at the junction of the M53/A56
T 3 Railway stations	Safeguards land for expansion/ infrastructure improvements around the following rail stations: - Winsford - Hartford - Northwich - Greenbank - Frodsham - Helsby - Lostock Gralam - Delamere - Acton Bridge - Cuddington
T 4 Rail corridors	Identifies disused rail corridors safeguarded from development at: - Mickle Trafford-Shotton - Helsby/Mouldsworth - Adjacent New Warrington Road - Tattenhall-Whitchurch
T 5 Parking and access	Identifies the parking standards zone boundaries, as defined in the Parking Standards SPD, at: - Chester – City Centre - Chester – Intermediate Zone - Ellesmere Port - Northwich - Winsford
DM 37 Recreational routeways	Identifies the following strategic recreational routeways: - Shropshire Union Canal - The Delamere Loop - The Sandstone Trail - The Baker Way

	• River Dee Corridor • Bishop Bennett Way • The Whitegate Way • North Cheshire Way • The Weaver Way and Weaver Parkway • Longster Trail • The Wirral Way • Trent and Mersey Canal	
ID 1: Infrastructure and developer contributions	The suggested approach is to amend the Local Plan (Part One) policy STRAT 11 to ensure educational needs, including contributions to school transport provision will be required. Net zero goals will be embedded, by upgrading and improving our existing transport network to encourage sustainable transport links like cycleways and bus routes to reduce car dependency and support the 2050 net zero target, and requiring low carbon essential infrastructure, such as EV charging networks and renewable energy connections. Local Plan (Part One) policy STRAT 11 will be strengthened to include greater environmental protections and climate resilience by ensuring we can react to the infrastructure needs of water and sewerage providers, as well as including flood defences. Update and incorporate the requirements and guidance in existing Local Plan (Part Two) policy DM 18 for the provision, expansion and enhancement of electronic communications networks including high-speed broadband. Provide greater detail regarding safeguarding social infrastructure, including village halls and community centres through including elements of Local Plan (Part Two) policy DM 39, and continue with the approach in Local Plan (Part Two) policy DM 39 in relation to public art but consider whether off-site contributions may be appropriate. The policy approach will clarify that where infrastructure is needed to sustain a new development, that off-site contributions may not be acceptable and that the Council will not be expected to fund any shortfall in provision. Local Plan (Part One) policy STRAT 11 will be updated to link with 16 'Economic growth, employment and enterprise', to ensure developments adhere to an employment strategy by maximising employment opportunities for residents, particularly those who are unemployed/under-employed.	No likely significant effects This is a development management policy and does not allocate development.
EG 1: Economic growth, employment and enterprise	The Council will promote sustainable economic growth in the borough and wider sub-region, supporting existing businesses, encouraging indigenous business growth and attracting new inward investment. The creation of new job opportunities across a range of sectors will be supported. The Local Plan will promote competitive town centre environments and bring forward sites to meet a range of town centre uses including commercial, retail, leisure, culture and office uses. Employment land supply	No likely significant effects This is a development management policy and does not allocate development.

To meet future employment land needs across the borough identified in the spatial strategy, a flexible supply of employment land allocations will be identified to cater for a range of types and size of business. These will cover use class B including B2 (General Industrial), B8 (storage or distribution) and Class E (Commercial Business and Service), primarily E(g) (Offices, Research and Development and industrial processes). This supply will be met through extant planning commitments, vacant/previously developed land in established employment areas, expansion land for specific employers or new allocations identified to meet strategic development needs.

A minimum of 40% of the employment land provision established in the plan strategy will contribute towards large scale industrial, warehousing or distribution use. Additional locations for economic use may be identified on the edge of settlements, dependent on the chosen plan strategy..

Established strategic employment locations are identified and safeguarded as essential to meeting the future economic strategy of the plan.

Proposals for new or expanded distribution centres should make provision for sufficient lorry parking to cater for their anticipated use.

In line with current Local Plan (Part One) policy ECON 2, commercial, business and service uses falling within Class E will primarily be directed to town centre locations. The following key employment locations are also safeguarded as being suitable for use class E(g):

- Chester Business Park – see suggested policy approach 6 'Chester'
- Gadbrook Business Park – see suggested policy approach 8 'Northwich'
- Cheshire Oaks Business Park

There are other established employment areas and land allocations that will be identified and protected to meet a range of sizes and types of small-medium business needs.

Protection of employment land and premises

Proposals for alternative uses on allocated employment land must not limit the range, type, choice and quality of employment land available to meet future employment needs.

The refurbishment and enhancement of existing sites and premises for continued employment use will be supported. Redevelopment to non-employment uses will be permitted where;

- the proposal would not limit the range, choice and quality of land or floorspace available in the locality;
- it can be demonstrated that the continued use of the premises for employment use is no longer commercially viable or environmentally acceptable;
- reasonable attempts must have been made (and evidenced) to continuously let or sell the premises for employment use for at least 12 months at a reasonable rate and there is no reasonable prospect of the site being re-used for employment uses; and
- the development is necessary to secure additional employment development that would not otherwise be viable.

Local labour and skills

	The Council will support initiatives and accessibility to further/higher education facilities in the borough including the University of Chester, West Cheshire College and Mid-Cheshire College, improving skills and links to main employers.	
TC 1: Town centres	Retain approach to town centre hierarchy and town centre first Proposals for retail, leisure and other main town centre uses should be located within a town centre, unless demonstrated that no sites are suitable and available through a sequential test. Development should be of an appropriate scale that reflects the size and role of each centre and should not have an unacceptable impact on other centres. Maintaining healthy town centres - Commercial uses with an active frontage should be retained (including shop windows) on street and in Chester at Row level. - Non-commercial uses that support the town centre, such as residential should not lead to the loss of active frontages and should therefore be located on upper floors or the rear of the buildings. - Diversity in goods and services should be provided with no dominance of one type of Main Town Centre Use (excluding shops). Health and community facilities and other uses that promote vibrant and diverse centres will be supported. Applications that involve the loss of a retail and other uses from a town centre will need to demonstrate the unit has been vacant continuously for 12 months, adequately marketed and does not harm the criteria above. Shops, commercial and community uses in District and Local Retail Centres should be retained and allowed to help meet a local community's day-to-day needs. Development of main town centre uses must be consistent with the scale and function of the Local Retail Centre (including village centres) and not undermine the vitality and viability of a centre higher in the hierarchy. Proposals that positively contribute towards creating attractive, vibrant and safe centres that offer a diverse mix of uses that can also extend the time when centres are active will be supported, especially cultural, civic and family activities. Alfresco dining/outdoor seating will be supported (subject to other policy requirements) where this would be located directly in front of a café, restaurant or drinking establishment. Considerations should be made to neighbouring uses, ensuring their compatibility and new residential development must not prejudice the operation of other town centre uses such as nightclubs and live venues. Sequential test The policy will set out the approach to the sequential test to ensure town centre locations are used first and then edge of centre locations. In terms of edge and out-of-centre proposals, preference will be given to accessible sites that are well connected to the town centre. Flexibility should be made in terms of size and format. Where there are no sequentially preferable sites available, existing land and buildings with planning permission for main town centre uses that fall within the catchment area of any new proposal should be considered in the first instance. Impact assessment	No likely significant effects This is a development management policy and does not allocate development. Any sites or development schemes brought forward in the future under this policy would be subject to a policy level HRA.

	Planning applications for main town centre uses outside of existing centres will require an impact assessment according to the following thresholds (gross external floorspace): • Chester and Northwich greater than 1,000 sqm • Ellesmere Port, Winsford, Frodsham and Neston greater than 500 sqm • Local Centres, greater than 200 sqm While small-scale rural developments outside of identified settlements will not be subject to the sequential test (above), they must demonstrate a requirement for a countryside location, be in connection with the land-based business, would not undermine the vitality and viability of local shops or retail centres, and be less than 200 sqm gross external floorspace.	
VE 1: Visitor economy	The expansion of existing tourism assets or the creation of new tourism opportunities will be supported where this would enhance the existing tourism offer, benefit the local economy and be of a suitable design, scale and type for its location. Major leisure, tourism, cultural attractions and visitor accommodation, which will attract a significant number of visitors, should be located within or accessible to Chester, Northwich, Ellesmere Port and Winsford town centres to support the vitality of these centres. Elsewhere in the borough, proposals for visitor attractions or visitor accommodation will be supported in line with other relevant policies of the plan and with regard to NPPF paragraph 88. Caravan and Camping sites Camping and caravan sites are forms of tourism development, which will be supported where there is an unmet need. In addition to the above, proposals should also: • be small in scale to limit impact on neighbouring amenity • utilise or be well related to existing buildings • incorporate existing landscape features and provide open areas into the layout, provide screening and landscape buffers • be capable of connecting to existing utility services • provide ancillary appropriate facilities (such as toilets, showers, drinking water supply) for users of the site Visitor Attractions The following are significant visitor attractions, identified on the policies map. Development proposals will be supported subject to criteria below: • Chester Zoo – zoological purposes a. Refer to Green Belt and Chester policies b. Proposals should be comprehensively planned in line with an agreed development strategy for the wider site • Ellesmere Port Historic Canal Port – National Waterways Museum a. Improve links to and from Ellesmere Port, particularly for pedestrians, cyclists and by public transport b. Development proposals should be supported by a heritage impact assessment Oulton Park – motor sports	No likely significant effects This is a development management policy and does not allocate development. Any sites or development schemes brought forward in the future under this policy would be subject to a policy level HRA.

	a. New development is ancillary to the use of the site for motor sports b. Conditions limiting hours of use, if an increase in the level or duration of noise is likely c. Impacts on air quality are assessed and mitigated d. New built development must be sited either near to existing buildings on the site or in locations where its impact on biodiversity and residential amenity would be reduced	
HO 1: Mix and type of housing in new developments and specialist housing	Current Local Plan (Part One) policy SOC 3 and Local Plan (Part Two) policy DM 20 will be substantially amended to reflect the evidence of the Housing Needs Assessment (to be prepared). The new policy approach will provide detailed policy requirements e.g. % of 1-2 bed dwellings including by tenures; % of plots for self-build and custom housebuilding; requirements to meet the needs of an ageing population and meeting the needs of residents with disabilities. If justified by the evidence a new policy will be brought in to require national space standard to be met for internal space in new homes. Specialist Accommodation The content of Local Plan (Part Two) policy DM 26 concerning the future requirements for extra care, older persons and accessible and adaptable homes in new developments will be incorporated into the overall policy approach to mix and type but locational requirements will be kept ensuring these developments are in accessible areas with good accessibility to range of facilities. The suggested policy approach will resist extra care developments in the countryside outside of settlements. Student accommodation Local Plan (Part One) policy SOC 3 and Local Plan (Part Two) policy DM 27 will be amended to reflect any future needs identified through the Housing Needs Assessment (to be prepared). Local Plan (Part One) policy SOC 3 in relation to support for specialist student accommodation in areas accessible to the University of Chester is proposed to be retained. The suggested policy approach will continue to link to policy for the University of Chester, proposed to be taken forward in CH 1 'Chester', and other Local Plan policy requirements in relation to location and accessibility in terms of walking distance to campus and cumulative impact of proposals. Requirements for standard of accommodation, management plans and future reuse will be retained.	No likely significant effects This is a development management policy and does not allocate development.
HO 2: Delivering affordable housing	The suggested policy approach will replace Local Plan (Part One) SOC 1 and Local Plan (Part Two) DM 23, and will set out the % of affordable housing required across the borough including potentially by sub-area. The approach intends to reflect the government's requirement for housing sites in the Green Belt to provide at least 50% affordable housing. The policy approach will specify the type of affordable housing required. Affordable housing will be required on all sites of 10 or more dwellings but in designated rural areas, the requirement will be triggered by three or more dwellings. This requirement is applicable to all self-contained units, including older persons and student accommodation. Affordable homes will be sought within all new development that include the provision of new homes, unless there are exceptional circumstances which can be demonstrated to justify off site contributions, providing that: - Affordable homes must be indistinguishable from market housing, achieving high quality design and must be dispersed throughout the site. - Provision must be made for affordable homes to remain affordable in perpetuity.	No likely significant effects This is a development management policy and does not allocate development.

HO 3: Proposals for residential development	Local Plan (Part Two) policy DM 19 will either be retained as a separate policy or the general principles incorporated into other policies of the new Local Plan. For residential development in settlements, the approach to protecting garden land and character should continue to be reflected in the new plan, along with criteria relating to development in the countryside, as to where residential development will be allowed. The suggested policy approach is to largely retain Local Plan (Part Two) policies DM 21 and DM 22 with only minor amendments.	No likely significant effects This is a development management policy and does not allocate development.
HO 4: Essential rural workers dwellings	The suggested policy approach is to retain Local Plan (Part Two) policy DM 25 including the requirement that should the need cease, that the dwelling remains available to meet affordable housing needs. Further detail may be added to how the property should remain affordable in the future considering consultation responses. Cross referencing to other planning requirements are proposed to be deleted.	No likely significant effects This is a development management policy and does not allocate development.
HO 5: Rural exception sites	Retain the overall approach in Local Plan (Part One) policy SOC 2 to sites being small in scale and on the edge of identified rural settlements, and be modest and in keeping with the form and character of the settlement. Retain the current approach in Local Plan (Part Two) policy DM 24 to ensure that there is a genuine local need to be identified through an independent assessment prepared or commissioned by the Parish Council. Schemes will need to remain affordable in perpetuity. In addition, the current approach in Local Plan (Part Two) policy DM 24 would be retained to ensure that once a need has been established, a thorough assessment of sites is undertaken led by the Parish Council and in consultation with the local community. This assessment should be evidenced and relate to need identified. This suggested policy approach would keep criteria ensuring that alternative sites within a settlement aren't available to meet the need including on sites for market housing where affordable housing is provided. Add that other sites may be identified through the Brownfield Land Register and Land Availability Assessment. The current restrictions and local connection test would be retained as follows but also that this may differ where set out in a neighbourhood plan: 1. currently live in the parish and have been living there continuously for at least five years; or 2. have permanent employment in the parish; or 3. have close family members (defined as children, parents, siblings only) who have been residing in the parish continuously for at least five years; or 4. people who have previously lived in the parish for a continuous period of at least 10 years.	No likely significant effects This is a development management policy and does not allocate development.
HO 6: Houses in Multiple Occupation	The policy approach will take forward Local Plan (Part Two) policy DM 28 which sets out criteria for when the change of use from a dwelling to a House in Multiple Occupation (HMO) will be supported, where it would: • not increase the concentration of HMOs with 50 metres more than 15% total number of dwellings • not sandwich an existing household between HMOs • meet the Council's amenity standards (Physical Property Standards - Shared houses/flats 2012) • make provision for cycle parking, and waste and recycling facilities	No likely significant effects This is a development management policy and does not allocate development.

	• protect the overall character of an area • be supported by evidence there is no reasonable demand for the existing dwellinghouse	
GT 1: Gypsy and Traveller and Travelling Showpersons accommodation	The new policy will need to set out the criteria for the location of sites and identify sites/areas to meet the needs established through the Gypsy Traveller Accommodation Needs Assessment (GTANA) (in preparation). The policy will set out set out how needs identified in the GTANA will be met for the first five years of the plan, and remainder of the plan period, including potentially requiring provision on larger residential sites. The policy may need to include provision for Travelling Showpeople including for the safe storage and maintenance of equipment.	Potential likely significant effects This policy discusses identifying sites/areas to meet the need for Gypsy and Traveller accommodation. Dependent on where these sites are located there could be linking impact pathways. There is minimal information and likely needs further detail to be assessed fully at the next stage. Therefore, this policy has been screened in.
HW 1: Health and well being	To meet the health and wellbeing needs of our residents, proposals will be supported that provide new or improved health facilities across the borough, supports improved links to healthcare in rural areas and promotes safe and accessible environments and developments. Proposals should also aim to promote high quality access to green space across the borough that will support opportunities to widen and strengthen the boroughs cultural, sport, recreation and leisure offer. Development proposals that give rise to significant adverse impacts on health and quality of life including residential amenity, will not be supported. Where the Council considers it likely that the proposal will result in significant adverse environmental effects during the construction phase a Construction Environmental Management Plan (CEMP) will be required. Health impacts of new developments Development proposals should take every reasonable opportunity to promote and positively contribute to the health of the borough by submitting a statement considering the health implications of new build commercial and residential development. Developments should support and protect cultural, sport, recreation and leisure facilities that are valued by the local community. Where development is likely to have a significant impact, including any cumulative impacts on public health, it must be demonstrated how health and wellbeing has been considered through an assessment	No likely significant effects This is a development management policy and does not allocate development.

Applications that are likely to have a significant health impact must make a positive contribution to health and wellbeing and any negative impacts need to be mitigated.

Impact on residential amenity

All proposals for new development will be expected to safeguard the quality of life for residents within the development and those nearby. Development will only be supported where it does not result in a significant adverse impact upon the residential amenity of the occupiers of existing properties or future occupiers of the proposed development.

Issues impacting residential amenity include, but are not limited to outlook, privacy, light, noise and odour.

Residential development must include an appropriate quantity and quality of outdoor private amenity space, having regard to the type and size of the proposed development.

Noise

Development which generates noise or is sensitive to it, will only be permitted where it does not have an unacceptable adverse impact on human health or quality of life.

It is expected that demolition and construction work shall be carried out during normal working hours, unless it can be demonstrated that significant adverse impact on residential amenity is unlikely.

The Council must be satisfied that the proposed location of any construction or demolition site compound will minimise the noise impact on neighbouring residential uses.

Air quality

Development must not give rise to significant adverse impacts on health and quality of life from air pollution. An air quality assessment will be required for development proposals that have the potential for significant air quality impacts, including those which are classed as major development with the potential for significant emissions and those that are likely to expose people to existing sources of air pollutants.

Applicants must demonstrate that appropriate mitigation will be provided to ensure that the new development is appropriate for its location and unacceptable risks are avoided.

Land contamination and instability

Development proposals on land known or suspected to be unstable or contaminated must demonstrate that they will not give rise to significant adverse impacts on health, controlled waters, ecological receptors, property and quality of life.

Development on previously developed sites, adjacent to suspected contaminated land or adjoining/adjacent to a landfill site may need to be supported by an appropriate contamination assessment that clearly demonstrates that the risk from contamination can be successfully mitigated and managed over the lifetime of the development.

In areas of potential land instability, an assessment should be made to ensure that the land is suitable for the proposed development and that development can be undertaken, occupied and used without risk to people and property resulting from underground conditions. Areas of potential land instability will include those of vulnerable topography or geology, with evidence of brine and salt extraction, past or potential future natural subsidence due to salt erosion and coal mining.

	Development must not result in an increased risk of subsidence or land instability on the site or in the surrounding area. Please refer to section MS 1 'Minerals supply' for further policy guidance relating to the supply of land-won aggregate and for guidance as to where mineral applications which may impact land contamination and stability will be supported. Hazardous installations – development and extensions Hazardous substances consent or development proposals in the vicinity of hazardous installations which creates new hazardous installations, extends existing hazardous installations will be supported providing that they do not result in a significant increase in the number of people being subjected to threshold levels of risk. Applications for underground hazardous waste storage will be supported providing it is demonstrated that it is the most sustainable option, that ground stability would not be affected and that mineral reserves would not be sterilised.	
OS 1: Open space, sport and recreation	The suggested approach is to retain Local Plan (Part One) policy SOC 6, and combine with elements of Local Plan (Part Two) policies DM 35, DM 36 and DM 37. The policy approach will continue to protect, manage and enhance existing open spaces, sport and recreation facilities to provide a network of diverse, multi-functional open spaces, ensuring that any policy wording will continue to: 1. Support proposals that improve the quality and quantity of accessible open space, sport and recreation. This should include the improvement of the network of existing open spaces and improving accessibility to green corridors, and enhancing biodiversity in line with the suggested policy approach in GI 1 'Green infrastructure, biodiversity and geodiversity' 2. Prevent development if it results in substantial harm to or total loss of an existing open space, sport and recreation facility. 3. Outline the circumstances where development involving the loss of existing open space, sport and recreation facilities will be supported. This should include where there is a better replacement, surplus, or compensatory facilities are provided. 4. Require that all major residential development makes provision for open space in accordance with the current open space quantity and accessibility standards and onsite thresholds as set out in current Local Plan (Part Two) policy DM 35 (including that all forms of residential development, including older person, student and extra-care schemes should make provision for open space). 5. Developer contributions will be required for playing pitches based on the additional demand generated by new residential development having regard to Sport England's planning tools and the latest Playing Pitch Strategy. 6. Open space provision in new developments should be sought in the following order: on site, off-site, a financial contribution. Recreational routeways The suggested approach is to retain and update where necessary the current approach in Local Plan (Part Two) policy DM 37 which protects the range of recreational routeways in Cheshire West from any harmful impacts arising from new development. Proposals that enhance public access and the recreation value of the recreational routeway network will be supported.	No likely significant effects This is a development management policy and does not allocate development.

	Strategic recreational routeways of particular importance within the borough, will be identified on the policies map.	
OS 2: Cultural and community facilities	The suggested approach is to retain and update, where necessary, Local Plan (Part Two) DM 39 ensuring that any policy wording will continue to: 1. Avoid the loss of community and cultural facilities 2. Support proposals for new or improved community facilities and cultural or local services that serve the local community 3. Provide an appropriate mechanism for schools (and other community facilities) to secure pay and play community access for sport and recreation through a community use agreement. 4. Outline and clarify the circumstances where development involving the loss of existing community facilities, cultural or local services will be supported. This should include: where there is a surplus; the facility is no longer capable for use; the facility forms part of a larger community scheme; and/or compensatory facilities are provided.	No likely significant effects This is a development management policy and does not allocate development.
FW1: Flood risk and water management	Flood risk • Where relevant all development must consider its vulnerability to flooding, taking account of all sources of flood risk and the impacts of climate change. • Apply a borough wide Sequential Test where required in line with the National Planning Policy Framework (NPPF) and the Planning Practice Guidance (PPG). Proposals for development must seek to utilise land at lowest risk of flooding from all sources. • In the application of the sequential test the search for alternative sites should be borough-wide and should not be restricted to sites only capable of accommodating the proposed scale of development. Opportunities to provide development on more than one, sequentially preferable site should be explored where suitable. More guidance on the application of the sequential test is anticipated in future updates to the Flood Risk and Coastal Change PPG. • Where development is necessary in areas of greater flood risk, the development should be made safe for its lifetime without increasing flood risk elsewhere. • Where required, the Exception Test will also be applicable in line with the NPPF and the PPG. Flood resilient construction should be utilised to manage any residual risk. • For development proposals where only part of the site is affected by flooding, including any future flood risk, a sequential approach should be applied to the layout of development avoiding vulnerable uses and site accesses being located in areas at higher risk. If this is achieved, a sequential test may not be necessary and will be subject to case by case assessment. • The assessment of flood risk in relation to any proposed development, should take into account the Cheshire West and Chester Strategic Flood Risk Assessment (SFRA) update (in preparation at the time of writing) and its mapping in addition to the updated mapping provided nationally through the national flood risk assessment (NaFRA2) (Environment Agency). Flood Risk Assessment • The policy will set out the requirements for a site-specific flood risk assessment in line with NPPF and PPG. Sustainable Drainage The policy will detail the standards and requirements to manage surface water drainage effectively and reduce the risk of flooding elsewhere including:	No likely significant effects This is a development management policy and does not allocate development.

- how surface water runoff should be appropriately managed (in accordance with the Cheshire West and Chester Sustainable Drainage Systems (SuDS) Guidance or any subsequent replacement standards;
- how development proposals should manage and discharge surface water through a sustainable drainage system (SuDS). The preference will be for new development to incorporate surface level SuDS with multi-functional benefits, as opposed to underground tanked storage systems, for the management of surface water;
- the requirement for approved development proposals to be supplemented by appropriate maintenance and management regimes for surface water drainage schemes;
- that development proposals should not result in the loss of open watercourse, and culverts should be opened wherever possible;
- the use of SuDS to enhance the site design and sense of place and where it is incorporated in open space, provide a safe naturalised system without the need for fencing or barriers in line with the Design Code.

Flood Storage

- The outputs from the SFRA update will be used to identify the need for additional flood storage areas in liaison with the LLFA and EA.

Natural flood management

The policy will detail the standards and requirements to deliver natural flood management solutions in accordance with the Local Nature Recovery Strategy (LNRS) including:

- the design and layout of the SuDS to prioritise nature-based solutions and be designed to incorporate surface water management features as green and blue infrastructure wherever possible; maximising multifunctional benefits for biodiversity, amenity, cooling and water quality;
- the requirement for natural flood management features such as SuDS to be incorporated into design of schemes providing amenity value and / or biodiversity improvements;
- the requirement for watercourses and riverside habitats to be conserved and enhanced, where necessary through management and mitigation measures.

Water quality, supply and treatment

- The current policy requirements to ensure that development proposals do not cause unacceptable deterioration to water quality or have an unacceptable impact on water quantity (including drinking water supplies, water for industry and managing drought) or wastewater infrastructure capacity will be retained.

LA 1: Landscape

The suggested approach is to retain Local Plan (Part One) policy ENV 2, and combine with elements of Local Plan (Part Two) policy GBC 3 ensuring that any policy wording will continue to:

1. Protect and, wherever possible, enhance landscape character and local distinctiveness;
2. Prevent development in previously identified key gaps, as currently defined in Local Plan (Part Two) policy GBC 3 between settlements outside the Green Belt, proposals should only be supported where it does not harm the settlement separation and identity functions of the gap. Development within key settlement gaps will only be supported where it would not lead to coalescence, increase the intervisibility between settlement edges, harm the undeveloped character or materially alter historic form of the settlements;
3. Support the designation of Local Green Space and protect the character of the borough's estuaries and undeveloped coast;

No likely significant effects

This is a development management policy and does not allocate development.

	4. Support proposals that take full account of the characteristics of the development site, its relationship with its surroundings and views into, over and out of the site; 5. Recognise, retain and incorporate features of landscape quality into the design of new developments, taking account of the Council's borough-wide Design Code. The identification of additional/ new key settlement gaps may be considered. Consider the best approach to any future National Landscape designation.	
LA 2: Areas of Special County Value	The suggested approach is to retain and update, where necessary, Local Plan (Part Two) GBC 2 ensuring that any policy wording will continue to: 1. Protect and, wherever possible, enhance existing Areas of Special County Value (ASCV) as currently defined in Local Plan (Part Two) policy GBC 2; 2. Ensure development in or affecting the setting of an Area of Special County Value integrates into the landscape character of the area, is designed to take account of guidance in the Landscape Strategy and improves the landscape character and appearance. ASCVs would continue to be identified on the policies map and are designated for their special landscape character and scenic value. Consider the best approach to any future National Landscape designation.	No likely significant effects This is a development management policy and does not allocate development.
GI 1: Green infrastructure, biodiversity and geodiversity	The suggested approach is to combine Local Plan (Part One) policies ENV 3 and ENV 4, with elements of Local Plan (Part Two) policies DM 44 and DM 45, to create a single new green infrastructure, biodiversity and nature policy. The new policy will continue to safeguard and enhance biodiversity, geodiversity, green infrastructure and protect designated sites. Any policy wording should ensure that proposals for new development must: 1. Not result in any net loss of natural assets and deliver a net gain, in line with national policy. 2. Continue to protect designations of international, national and local importance, irreplaceable habitats. 3. Continue to protect protected/priority species and geodiversity. 4. Be accompanied by sufficient information that complies with industry best practice and guidance. The new policy wording should also remove reference to the Borough's ecological network and set a focus for contributions to be led by the Local Nature Recovery Strategy (LNRS). Biodiversity The new policy should detail what is expected in terms of the protection and enhancement of protected sites, habitats and species, to be supported by sufficient information and following the mitigation hierarchy. A link to the LNRS will be included with the following outputs providing policy sections: 1. Local Nature Recovery Network - Ensure that proposals within or adjacent (within a 15 metre buffer) to either areas of opportunity or designated areas identified in the LNRS, developers will need to look at opportunities for nature recovery in line with the LNRS. The Opportunity Areas and Designated Areas will be included as part of the policies map. 2. Peat - Additional policy wording to include that peat should be protected from disturbance or loss from new development, to avoid the release of carbon into the atmosphere. Development proposals on areas of known or suspected peat will require ground investigation as part of the planning application process. Any peat near to the surface with the potential to be restored must be protected. In areas of deep peat, peatland must be protected from compaction and drying out.	No likely significant effects This is a development management policy and does not allocate development. P

	3. SUDs and Natural Flood management - The new policy will detail the standards and requirements to deliver natural flood management solutions in accordance with the LNRS in order to manage flood risk, enhance biodiversity, improve water quality and promote amenity spaces. This will link to policy approach FW 1 'Flood risk and water management'. 4. Tree cover - The suggested policy approach will retain parts of Local Plan (Part Two) policy DM 45 relating to the replacement tree ratio and add detail such as tree species and quantity. New policy wording will broaden the current policy approach and improve and maintain tree canopy cover within the borough on a strategic level. This would refer to a 'league table' of wards with low tree cover, where development in these wards will need to provide additional green space as would normally be required, with low performing wards prioritised for new tree planting. The aim is to get all wards to a minimum of 16% tree cover. 5. Hedgerows - The new policy will require that all external edges of all new development have hedgerows as part of a comprehensive landscape scheme, this would be secured with an agreement specifying type/species and nature of hedgerow. 6. Invasive species - The new policy will provide a list of invasive species that present a risk to local biodiversity, and would require developers to investigate and deal with invasive species where present on new development sites. 7. Agricultural land - The new Local Plan would seek to discourage the loss of higher grade agricultural land as a result of development. The policy should continue to protect the best and most versatile agricultural land.	
HE 1: Historic environment	The policies contained within the existing Local Plan (Part One and Part Two) continue to be suitable and relevant, reflecting national policy. Any local detail and actions from the Cheshire West and Chester Heritage Strategy can be included once this has been finalised. The policy wording will continue to: • Preserve and enhance the historic environment (including its setting) for its inherent value, and for the enjoyment of residents and visitors; • Support proposals that positively and proactively, conserve and enhance the historic environment. This includes safeguarding assets and supporting appropriate, viable and sustainable uses that conserve their significance; • Prevent development if it results in substantial harm to or total loss of the significance of a designated heritage asset, unless it is demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss; • Ensure that where development does take place, proposals will be high quality, sensitively designed and integrated with the historic context; • Pay particular attention to the conservation of those elements which contribute most to distinctive character and sense of place of the area. These include: a. Designated Heritage Assets b. Non-designated Heritage Assets c. Heritage at Risk d. Historic Townscapes and street scene (and any areas/projects identified in the Heritage Strategy and/or Design Code) e. Historic landscapes f. Registered Parks and Gardens and Battlefields In relation to archaeology, remove any repetition with National Planning Policy Framework. For development proposals within Chester, the Chester Archaeological Plan must be consulted.	No likely significant effects This is a development management policy and does not allocate development.

DS 1: High quality design

The new Local Plan will promote sustainable, high quality design and construction. Development should, where appropriate:

- Respect local character and achieve a sense of place through appropriate layout and design
- Provide high quality public realm
- Be sympathetic to heritage, environmental and landscape assets
- Ensure ease of movement and legibility, with priority for pedestrians and cyclists
- Promote safe, secure environments and access routes
- Reduce opportunities for crime and disorder and the fear of crime
- Make the best use of high quality materials
- Provide for the sustainable management of waste
- Promote diversity and a mix of uses
- Meet applicable nationally described standards for design and construction and any locally prepared Design Guides or Design Codes including those prepared by neighbourhood planning groups

Relevant and appropriate design standards and guidance should be used to help guide development across the borough including:

- National Design Guide
- National Model Design Code
- Manual for Streets
- Nationally Described Space Standards

The Area of Special Control of Advertisements, as shown on the policies map, places additional restrictions on applications for advertisement consent with the designated area.

No likely significant effects

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DS 2: Sustainable construction

The policy approach aims to encourage high sustainability standards in buildings and promote the application of the energy hierarchy with the aim of achieving carbon net zero in new residential and commercial developments. Development should be resilient to, and adapt to the future impacts of climate change through the inclusion of a range of appropriate measures. The reuse of buildings are expected to improve overall energy performance.

Energy hierarchy

The National Design Guide 2019 identifies the need for new developments to follow the energy hierarchy to:

1. Reduce the need for energy through passive measures, including form, orientation and fabric
2. Use energy efficient mechanical and electrical systems, including heat pumps, heat recovery and LED lights; and
3. Maximise renewable energy especially through decentralised sources, including on-site generation and community-led initiatives

New development

All new build developments will be required to demonstrate how they meet the requirements of the energy hierarchy by considering each of the following in turn:

1. Energy efficiency - The policy would seek more energy efficient buildings by setting a % target improvement of a building's Target Emission Rate (of CO2 emissions per sqm floorspace) in the Building Regulations Part L, and/or set a target for the Fabric Energy Efficiency of the building. An alternative approach could be to set an Energy Use Intensity (a measure of how much energy a building uses per sqm

No likely significant effects

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	floorspace) target and/or a target for space heat demand (i.e. how much heat energy is needed to keep a building at a desired temperature) for the building. 2. Efficient, fossil-free and renewable energy supply - The policy would set a target and require on-site renewable energy generation as part of new development. Where appropriate, development proposals should be designed and incorporate measures to enable connections to a district heat network to be made now or in the future 3. Carbon/energy offsetting - As a last resort, the policy could allow for a financial contribution to offset any remaining residual carbon or energy. 4. Embodied Carbon - This is carbon that was emitted during the production, transport and assembly of a building, infrastructure, vehicle or other product, before the product is in use. The policy could require carbon reporting and/or set a target that new buildings must meet. 5. Water efficiency - New dwellings will be required to meet the optional higher National Housing Standard for water consumption of 110 litres per person per day. All non-residential development must achieve at least the BREEAM excellent standard for the 'Wat 01' water category. Alternative compliance As an alternative to the sustainable construction requirements (1-5) set out above, positive weight will be given to development proposals that: • For residential development, will be certified PassivHaus standard • For non-residential development, achieve a BREEAM rating of 'Excellent' In these cases, a full sustainable design statement/ evidence demonstrating compliance with policy requirements (1-5), will not be required and it will be sufficient to submit the technical information required to demonstrate that the relevant standard can be achieved.	
DS 3: Climate adaptation	The policy approach will expect developments to include site and building-level measures to be resilient to future climate change impacts and provide for the comfort, health, and wellbeing of current and future occupiers and the surrounding environment over the lifetime of the development. These measures should be integral to the layout and design of new development and should take the vulnerability of the building occupants into account. Site-level adaptations Development should be designed, through its layout, form and massing and through the use of green/blue infrastructure, to: • Minimise the overheating of buildings; • Provide comfortable external spaces in hot weather; and • Conserve water supplies and minimise the risk and impact of flooding. The use of green/blue infrastructure should provide multifunctional benefits in relation to climate change adaptation. Where appropriate to its context, this should include the use of living roofs with a sufficient substrate depth to maximise cooling benefits. Building-level adaptations Building designs and building-integrated measures should: • Mitigate the risk of overheating, ensuring that cooling needs are met sustainably • Conserve water supplies; and	No likely significant effects This is a development management policy and does not allocate development.

	Avoid responses to climate impacts which lead to increases in energy use and carbon dioxide emissions. Adaptation strategy Proposals for development should demonstrate through an adaptation strategy how these issues will be addressed. This should include technical modelling and assessment of the risk of overheating in current and future climate change scenarios. In considering the likely impact of climate change over the lifetime of the development (particularly in relation to overheating), reference should be made to the most recent climate change projections.	
EN 1: Energy supplies and energy related developments	Proposals for developments providing new energy supplies or energy related development will be supported where they meet the following criteria: 1. Wherever possible, schemes should be located on previously developed land and/or in industrial areas and in areas close to existing users/demand or supplier of the energy, fuel and/or heat. 2. The proposals do not limit the range and choice of employment land in the area; 3. The proposals do not adversely impact on neighbouring land users, or on the commercial / operational requirements of surrounding businesses; 4. Where development is proposed on agricultural land, site investigations must be undertaken and the best and most versatile land must be avoided in favour of lesser quality land. Proposals must demonstrate how the site can be reinstated to its previous use and condition once the operational lifespan of the development has been reached; 5. The cumulative impacts of existing and proposed developments on the landscape, natural environment and surrounding users will be acceptable; 6. Wherever possible, the proposals use existing power lines, structures and infrastructure. Where it can be demonstrated that this is not possible and new power lines and pipelines are proposed, their impact on the landscape must be minimised; 7. Associated developments such as access roads, security fencing, lighting and any buildings must be designed to minimise visual impact, whilst ensuring that the development causes no risk to public safety; 8. Where biomass is proposed to be used for energy generation, it must be sustainably sourced. Applicants will be required to provide information about the type and source of material to be used in the biomass plant. Proposals for biomass installations will not be permitted within or adjacent to Air Quality Management Areas; and 9. Proposals include appropriate arrangements for decommissioning and reinstatement of the site when its operational lifespan has ended.	No likely significant effects This is a development management policy and does not allocate development.
EN 2: Wind energy	Proposals for wind energy will be supported where they meet the following criteria (in addition to relevant criteria in EN 1 'Energy supplies and energy related developments'): 1. Proposals take account of the Landscape Sensitivity Study and Guidance on Wind and Solar Photovoltaic Developments (2016). They should be directed to the least sensitive locations and avoid areas identified as highly sensitive to wind development (based on the proposed turbine height). They must have regard to the general design guidance principles set out in appendix B of the study; 2. Proposals avoid key settlement gaps and Areas of Special County Value and their settings; 3. An assessment is provided as part of the application of any potential shadow flicker or flashes of reflected light which might affect properties or nearby land uses, including playing fields. Where potential exists for these effects, appropriate measures to mitigate and reduce the impacts must be identified as part of the planning application; and 4. The application is supported by a landscape appraisal or, in the case of development requiring Environmental Impact Assessment, a Landscape and Visual Impact Assessment, the scope of which should	No likely significant effects This is a development management policy and does not allocate development. Any future proposals brought forward under this policy would be subject to the HRA process.

	be agreed at the outset with the Council. Any cumulative impacts of renewable energy schemes should be carefully considered as part of this assessment.	
EN 3: Solar energy	Proposals for ground mounted solar energy developments will be supported where they meet the following criteria (in addition to relevant criteria in EN 1 'Energy supplies and energy related developments'): 1. Proposals take account of the Landscape Sensitivity Study and Guidance on Wind and Solar Photovoltaic Developments (2016). They should be directed to the least sensitive locations and avoid areas identified as highly sensitive to the proposed scale of solar development. They must have regard to the general design principles set out in appendix B of the study; 2. Proposals minimise and adequately mitigate glint and glare effects; 3. Where development is proposed on greenfield land, the land around the structures should be used for livestock grazing, other agricultural use or another use beneficial to the environment or biodiversity. Use of agri-voltaics will be supported; 4. The application is supported by a landscape appraisal or, in the case of development requiring Environmental Impact Assessment, a Landscape and Visual Impact Assessment, the scope of which should be agreed at the outset with the Council. Any cumulative impacts of renewable energy schemes should be carefully considered as part of this assessment; 5. Hedgerows, trees, field patterns and strong boundary features are used where possible, to mitigate visual impacts. Proposals for building mounted solar energy developments will be supported where the solar equipment is designed and sited, so far as is practicable, to minimise the effect on the external appearance of the building and the amenity of the area.	No likely significant effects This is a development management policy and does not allocate development.
EN 4: Sustainable energy and heat	Proposals will be supported that: 1. provide zero carbon energy or net negative carbon energy; 2. make provision for electricity storage; 3. contribute to the provision of Smart Local Energy Systems or Local Area Energy Plans; 4. enable the establishment or expansion of district heat networks; 5. create supply or connect into a district heat network; and/or 6. involve community-led energy generation, storage or district heat network schemes; and/or 7. reduce the use of fossil fuels to provide energy or heat wherever possible. Any proposals involving heat generation should include an assessment of the potential for heat recovery and/or power generation. Where possible, excess heat or power should be used on site, or nearby, or in a district heat network. All major schemes and schemes involving significant generation or use of heat should explore opportunities for linking to district heat networks or other users/providers of heat. All major schemes should consider the potential to use ground source heat from private or public green spaces or water source heat solutions to contribute to heating requirements. All schemes requiring provision of heat should consider use of air source heat pumps or ground source heat pumps as an alternative to fossil fuel based heat sources.	No likely significant effects This is a development management policy and does not allocate development.
EN 5: Low carbon fuel and carbon capture	Proposals for developments relating to low-carbon fuels will be supported where they meet the following criteria: 1. Proposals involving production of hydrogen involve:	No likely significant effects

	• 'green hydrogen' (generated via electrolysis of water and the electrolysis process is powered by renewable energy or another form of low-carbon electricity); • 'blue hydrogen' (generated from natural gas and the carbon will be captured and used and / or stored) or other forms of hydrogen production that do not release significant amounts of carbon. • Proposals involving grey hydrogen (from methane or coal and where the carbon is not captured or stored) will not be supported; 2. Proposals involving the use of waste or waste products to generate fuels should ensure that the waste has followed the waste hierarchy and is being used for the most beneficial purpose; 3. Proposals for carbon capture and use or storage should wherever possible, enable opportunities to capture carbon from other existing and proposed developments to maximise opportunities to reduce the overall carbon emissions in the borough; 4. Carbon dioxide use is preferable to storage where possible, as long as it does not result in significant carbon emissions. Proposals involving carbon dioxide creation or capture and storage should link to potential users of carbon dioxide in the borough or elsewhere, if possible; 5. Any inputs and outputs of the fuel production process or carbon should maximise opportunities for sustainable modes of transport; 6. Any proposals involving creation of salt or brine caverns for storage purposes must ensure sustainable use of the extracted salt/brine; and 7. Any proposals should also meet relevant criteria set out in policies MS 4 'Oil and gas developments' and MS 5 'Restoration'.	This is a development management policy and does not allocate development.
MW 1: Managing waste	To achieve sustainable waste management: • Existing waste management facilities are safeguarded against redevelopment for non-waste uses that would sterilise the infrastructure or prejudice its waste use, throughput and/or capacity; • Plots/sites with consented capacity for waste management uses at Protos (Ellesmere Port) and Lostock Works (Northwich) are safeguarded against alternative development that would prejudice its waste use, throughput and/or capacity; • Existing waste management facilities and sites with planning permission for waste uses are safeguarded against the encroachment of incompatible uses. Proposed non-waste developments must not prejudice the current or future waste use of the waste management facility site in terms of capacity and/or throughput. Any potential impacts must be minimised and if, after applying the 'agent of change' principle, there is still some risk of constraint to the waste operation, the development will only be supported if the merits of the development clearly outweigh the effect on the safeguarded site; • Waste management plans are required for proposals that are expected to generate significant volumes or specific types of waste (e.g. equestrian development and dog parks); • The Council will encourage the use of sustainable construction techniques that promote the reuse and recycling of building materials, maximise opportunities for the recycling and composting of waste on all new development proposals (residential and non-residential) and reduce CO2 emissions; • Existing and planned port and rail infrastructure are safeguarded, in order to maximise opportunities for sustainable transport on the Manchester ship canal and rail network. Redevelopment of all or part of a safeguarded site to a non-waste use will only be supported if: • the waste management facility is no longer needed; or • the waste management capacity can be relocated or provided and delivered elsewhere in an appropriate and sustainable location.	No likely significant effects This is a development management policy and does not allocate development.

	All proposals for waste management facilities, or extensions/alterations to such facilities must: • Demonstrate that waste is being managed at the highest achievable level within the waste hierarchy; • Maximise opportunities to share infrastructure (e.g. sustainable transport options or pipelines) with other waste developments or other facilities; • Provide information on the type and source of the waste being managed, the distance travelled and proposed methods of transport for importation and exportation of material. When assessing proposals the Council will take into account the desirability to manage waste close to its source, reduce the need for waste to travel and to maximise opportunities for use of sustainable modes of transport; • Integrate into the existing network of waste management sites in the borough and maximise opportunities for co-location with other waste management operations, where this would not result in intensification of uses that would cause significant adverse harm to the environment or communities in the local area; • Demonstrate how they meet the locational criteria set out in the National Planning Policy for Waste (Appendix B) or any revisions to this document; and • Set out arrangements for the management and operation of the facility, including hours of operation. Energy recovery development should be used to divert residual waste from landfill and will only be permitted where: • Other waste treatment options further up the waste hierarchy are not feasible; • The development provides for uses of both heat and power; and • The development maximises the use of and provides sustainable management arrangements for waste treatment residues arising from the facility. Proposals for biomass plants and other facilities which use waste material to produce heat or combined heat and power should wherever possible be located close to existing or potential users of heat outputs. Farm scale anaerobic digestion plants will be supported, particularly where they allow for sharing of facilities between linked farms. Inputs of material should be derived primarily from farm wastes which arise from the farm unit. Energy and other outputs from the process should also primarily be used on the farm unit. Where additional inputs and outputs of material and energy are required to make the facility viable, they should come from, and be used within, the local area. The location of facilities on farms should avoid high quality agricultural land.	
MS 1: Minerals supply	Cheshire West and Chester will make provision for the adequate, steady and sustainable supply of sand, gravel, salt and brine, contributing to the sub-national guidelines for aggregate land-won sand and gravel, whilst ensuring the prudent use of our important natural finite resources. Sustainable minerals use and extraction In order to ensure sustainable use and extraction of minerals, the Council will: • support proposals which enable the use of secondary and recycled mineral resources, reducing the reliance on primary aggregate extraction where appropriate; • support the retention of and proposals for fixed construction, demolition and excavation waste recycling sites in appropriate locations across the borough; • support environmentally acceptable proposals which enable the use of locally sourced building stone for architectural and heritage purposes;	Potential likely significant effects. The policy discusses additional mineral supply need which will potentially result in identification of new sites. Dependent on where these are there is the potential that they

- ensure the sustainable and prudent use of all natural mineral resources.

Aggregate sand and gravel supply

The Council will maintain a steady and adequate supply of aggregate sand and gravel over the Plan period and will maintain a minimum seven-year landbank. Provision will be made for the extraction of at least 16 million tonnes over the plan period (0.8 million tonnes per annum). The requirement to provide a minimum seven-year supply beyond the plan period would result in an additional requirement of at least 5.6 million tonnes. This is a total requirement of at least 21.6 million tonnes.

This will be achieved by:

- A. the continued provision of sand and gravel from the permitted reserves at the following existing sites – Cheshire Sands, Oakmere and Forest Hill, Sandiway.
- B. the identification of a Preferred Area at Moss Farm and north of the railway forming an extension to Forest Hill, Sandiway.
- C. the identification of an Area of Search.

Any proposed minerals developments within the Preferred Area would need to consider potential impacts on the nearby Local Wildlife Site, SSSI, Ramsar Site and SAC, for example in terms of groundwater and provide mitigation measures, if necessary, to avoid any significant detrimental impacts on biodiversity.

Proposals for new sites within the Area of Search, as identified on the policies map, will only be supported where it has been demonstrated that permitted reserves, allocated site and/or Preferred Area cannot meet the required level of provision set out in this policy.

Proposals for any other sand and gravel sites outside the existing sites, allocated site, Preferred Area and Area of Search will only be supported where it has been demonstrated that the required level of provision set out in this policy cannot be met from within these areas.

Salt and brine supply

The Council will maintain a steady and adequate supply of salt and brine. To do this, salt and brine will continue to be provided from:

- A. the existing operations at Winsford Rock Salt Mine (South Bostock). The site is safeguarded for salt extraction as identified on the policies map.
- B. controlled brine pumping at the Holford Brinefields (existing permitted site). The site is safeguarded for brine extraction as identified on the policies map.

Any proven additional requirements for salt extraction during the plan period will, subject to planning permission, be met from within the Preferred Area for rock salt extraction at Winsford Rock Salt Mine, as identified on the policies map.

Any proven additional requirements for salt extraction in the form of brine, during the plan period will, subject to planning permission, be met from within the Preferred Areas for controlled brine extraction at Holford Brinefield A, B, C and D, as shown on the policies map.

Any proposals involving production or use of brine and salt must ensure sustainable use of this resource.

Salt or brine proposals within the Preferred Areas will be supported where it has been demonstrated that they accord with relevant development plan policies. Any proposals outside the permitted sites or preferred areas

could have linking
impact pathways.

There is minimal
information and likely
needs further detail to
be assessed fully at
the next stage.
Therefore, this policy
has been screened in.

	will only be supported where it has been demonstrated that the required level of provision cannot be met from within these areas. Silica sand supply A steady and adequate supply of silica sand will be maintained throughout the plan period. This will be achieved by: A. the continued provision of silica sand from the permitted reserves at Rudheath Lodge, New Platt Lane, Cranage. The existing Rudheath Lodge site, as identified on the policies map, will be safeguarded against non-mineral development that prejudices its ability to supply industrial sand. Proposals for silica sand extraction outside this site will be supported provided that: 1. there is a demonstrable need for silica sand of a specific quality and quantity that will be met by the proposal; and 2. the proposal will contribute to maintaining a stock of permitted reserves of at least 10 years for individual sites and 15 years for sites where significant new capital is required, to support the level of actual and proposed investment required for new or existing plant and equipment.	
MS 2: Proposals for minerals development	Proposals for minerals development (sand and gravel or silica sand) will be supported where: 1. They are designed to minimise impact on the landscape and do not have a significant long-term detrimental impact on the landscape. This should take account of the operational requirements of the mineral extraction process, as well as landscape character assessment and proposed restoration; 2. They are appropriately screened from public view, if required, and would not have an unacceptable impact on visual amenity. Natural landforms and landscape features should be used to help screen developments as far as practicable. Additional landscape screening in the form of tree or hedgerow planting and/or suitable screen mound formation may be required to reduce visual impacts of the proposal; 3. It can be ensured that any odour, dust or particle emissions are controlled, mitigated or removed at source and will not have a significant detrimental impact on residential amenity or human health; 4. It can be ensured that any unavoidable noise and/or vibration is controlled, mitigated or removed at source so that proposed noise and/or vibration levels are acceptable and will not have a significant detrimental impact on residential amenity or human health. Where there is potential for a proposal to result in noise or vibration impacts which affect residential properties, or other sensitive receptors, the applicant must undertake a noise / vibration impact assessment. Some noisy short-term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction. Proposals must, however, seek to minimise noise levels and apply best practice in noise reduction; 5. Illumination levels and siting and design of lighting are acceptable and do not cause a detrimental impact on residential amenity, wildlife or highway safety, whilst allowing safe operation of activities on site; 6. Environmentally preferable alternatives to road travel are considered and used, where appropriate, to transport materials to and from the site; 7. It will not result in an unacceptable adverse impact on tip- or quarry-slope stability; 8. The cumulative impact on local communities and the environment with existing or proposed development of a similar kind in the same or adjoining areas is considered acceptable; and 9. Any plant or building: i. is designed and located within the site to minimise visual intrusion and impact on landscape; ii. is appropriately finished and coloured to assimilate into their surroundings; iii. will be removed from the site as soon as practicable and within twelve months of the cessation of mineral extraction unless there are overriding advantages in retention in connection with a related extraction proposal and the primary use is directly associated with the mineral extraction	No likely significant effects This is a development management policy and does not allocate development.

	at the site. Planning permission to extend a site will normally be conditioned so that the extension area can only be worked once mineral working within the existing site has largely been completed, unless it has been demonstrated that there are operational reasons why this is not practicable.	
MS 3: Safeguarding	Minerals safeguarding areas (MSAs) will safeguard Cheshire West and Chester's extent of finite natural resources from incompatible development. The cover areas of sand and gravel and salt and brine. Within an MSA, as identified on the policies map, non-mineral development will only be supported if the applicant can demonstrate that: 1. mineral sterilisation will not occur; or 2. the mineral can be extracted satisfactorily prior to the incompatible development taking place and will be used on site or transported for processing or use off-site; or 3. the incompatible development is of a temporary nature and can be completed and the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed and does not permanently sterilise the mineral; or 4. the nature of the site (for example proximity to existing residential uses) means that prior extraction is not viable or would have unacceptable impacts on nearby occupiers; or 5. there is an overriding need for the incompatible development and the material planning benefits of the non-mineral development would outweigh the material planning benefits of the underlying or adjacent material; or 6. the development comprises one of the exempt types of development listed in the explanation. A Mineral Resource Assessment should be submitted alongside any major non-mineral developments within MSAs, to provide a thorough assessment of the opportunities for prior extraction and use of the sand and gravel from within the site. Sand and gravel should be extracted from the site and re-used as part of the development or transported for off-site processing and use wherever possible. This is to ensure that important mineral resources are not unnecessarily sterilised and are used wherever possible. A minerals management plan should be submitted as part of major planning applications within MSAs. The two existing sand and gravel sites (Cheshire Sands, Oakmere and Forest Hill, Sandiway, including their permitted extensions) are safeguarded against non-mineral development that prejudices their ability to supply sand and gravel. The existing silica sand site at Rudheath Lodge is safeguarded against non-mineral development that prejudices its ability to supply silica sand. Proposed non-minerals developments in close proximity to these quarries must avoid or minimise potential impacts on mineral extraction and if, after applying the 'agent of change principle, there is still some risk of constraint to mineral extraction, the development will only be supported if the merits of the development clearly outweigh the effect on the safeguarded site. Significant infrastructure that supports the supply of minerals in CWaC will also be safeguarded from incompatible development. Non-mineral development (excluding the development types identified in the policy explanation) with the potential to impact on a mineral infrastructure safeguarded site used for mineral processing, handling, and transportation will not be supported unless it can be demonstrated that: 1. the non-mineral development would not unduly restrict the use of the mineral infrastructure site; 2. the material planning benefits of the non-mineral development would outweigh the material planning benefits of the mineral infrastructure site; 3. the mineral infrastructure can be relocated; or 4. alternative capacity can be provided elsewhere.	No likely significant effects This is a development management policy and does not allocate development.

MS 4: Oil and gas developments

Proposals for all stages of oil and gas development (exploration, appraisal and production) will be supported where:

1. it can be ensured that any odour, dust or particle emissions are controlled, mitigated or removed at source and will not have a significant detrimental impact on residential amenity or human health;
2. gas emissions from exploration, appraisal or production operations and from associated transport methods are controlled and minimised using the best available technology. Gas emissions must not have a significant detrimental impact on air quality, residential amenity or the environment;
3. it can be ensured that any noise and/or vibration is controlled, mitigated or removed at source so that proposed noise and/or vibration levels are acceptable and will not have a significant detrimental impact on residential amenity or human health;
4. where there is potential for a proposal to result in noise or vibration impacts which affect residential properties, or other sensitive receptors, the applicant must undertake a noise/vibration impact assessment. Proposals must, seek to minimise noise levels and apply best practice in noise reduction;
5. illumination levels and siting and design of lighting are acceptable and do not cause a detrimental impact on residential amenity, wildlife or highway safety, whilst allowing safe operation of activities on site;
6. above ground structures and facilities are minimised as much as practicable, by using pipelines and/or existing facilities where feasible and economically viable. Above ground activity should be directed to the least sensitive location within the site and appropriately screened from public view if required. Above ground structures and facilities should be grouped where possible and are appropriately finished and coloured. This is in order to reduce impacts on local residents and the environment;
7. environmentally preferable alternatives to road travel (including pipelines) are considered and used, where appropriate, to transport materials to and from the site;
8. anticipated levels of traffic resulting from the proposal will not result in a significant detrimental impact on residential amenity;
9. the cumulative impact on local communities and the environment with existing or proposed development of a similar kind in the same or adjoining areas is considered acceptable;
10. well pads and associated plant, buildings and other structures are removed from the site within six months of the cessation of oil or gas extraction, unless required for ongoing safety or monitoring purposes.

No likely significant effects

This is a development management policy and does not allocate development.

MS 5: Restoration

Proposals for minerals development and oil and gas development will be supported where it can be demonstrated that the scheme includes an appropriate phased sequence of extraction, restoration and after use and aftercare which will enable long-term enhancement of the environment.

Proposals for restoration and aftercare of minerals and oil and gas sites, including proposals for review of restoration strategies and plans, will be supported where:

1. proposals for restoration and aftercare are sufficiently comprehensive, detailed, practicable and achievable within the proposed timescales;
2. the land affected at any one time by the minerals or oil or gas operation would be minimised by including phased working and by restoration at the earliest possible opportunity;
3. the amount of imported backfill would be the minimum necessary to achieve the satisfactory restoration of the site;
4. differential settlement of quarry backfill is avoided;
5. the restoration is appropriate to the location and is sympathetic to and informed by landscape character and the historic environment;
6. opportunities for restoration to improve or enhance habitats, biodiversity, landscape, agricultural land quality, historic environment or community use would be maximised; and
7. the aftercare provision would be sufficient to secure high quality and sustainable restoration of the site.

No likely significant effects

This is a development management policy and does not allocate development.

	Restoration proposals will be subject to a minimum five-year period of aftercare. Where proposals or elements of proposals, such as features of biodiversity interest, require a longer period of management the proposal will only be permitted if it includes details of the period of extended aftercare and how this will be achieved.	
MISC 1: Safeguarded areas around aerodromes	Set criteria for considering development proposals in safeguarded areas around aerodromes to ensure development does not adversely affect the operational integrity or safety of an airport or aircraft operations. Identify the safeguarded areas around Liverpool John Lennon, Manchester and Hawarden airports.	No likely significant effects This is a development management policy and does not allocate development.
MISC 2: Jodrell Bank	Support development proposals that would not impair the efficiency of the Jodrell Bank Radio Telescope. Identify the Jodrell Bank Radio Telescope Consultation Zone on the policies map.	No likely significant effects This is a development management policy and does not allocate development.
MISC 3: Waterways and mooring facilities	To support development proposals adjacent to waterways that can provide positive regeneration benefits in the urban areas of Chester, Ellesmere Port, Northwich and Winsford. To establish criteria and design principles for developments affecting the borough's waterways. To safeguard the structural and operational integrity of the waterways. To support public access and recreational use of the waterways, in line with the policy approach in HW 1 'Health and wellbeing'. To ensure development proposals make a positive contribution towards biodiversity and ecological networks. To set criteria for the development of new mooring facilities, including extensions to existing facilities, and to consider the cumulative impacts that may arise from further development.	No likely significant effects This is a development management policy and does not allocate development.

Table 5-3 Growth Options

Growth Option	Development Area	Option
Cheshire	CH01 (Mixed Use)	B, C
	CH02 (Housing)	B, C
	CH03 (Housing)	B, C
	CH04 (Housing)	B, C
Ellesmere Port	EP01 (Mixed housing /employment)	A, B, C
	EP02 (Housing)	B, C
	EP03 (Housing)	B, C
	EP04 (Mixed employment, waste or energy use)	B, C
Northwich	NOR01 (Housing)	B, C
	NOR02 (Housing)	B, C
	NOR03 (Employment)	B, C
	NOR04 (Employment)	A, B, C
	NOR05 (Employment)	A, B, C
	NOR06 (Housing)	A, B, C
	NOR07 (Housing)	A, B, C
	NOR08 (Housing)	A, B, C

	NOR09 (Housing)	B, C
	NOR10 (Housing)	B, C
	NOR11 (Housing)	B, C
	NOR12 (Housing)	B, C
Winsford	WIN01 (Employment)	A, B
	WIN02(A) (Employment)	A, B
	WIN02(B) (Employment)	A, B, C
	WIN03 (Housing)	A, B, C
	WIN04 (Housing)	A, B, C
	WIN05 (Housing)	A, C
	WIN06 (missed housing / employment use)	A, B
	WIN07 (Housing)	A, B, C
Cuddington and Sandiway	CUD01 (Housing)	B, C
	CUD02 (Housing)	A, B, C
	CUD03 (Mixed Use – housing, retail, commercial)	A, B, C
	CUD04 (Housing)	B, C
	CUD05 (Housing)	B, C
Farndon	FAR01 (Housing)	A, B, C

	FAR02 (Housing)	A, B, C
	FAR03 (Housing)	A, B, C
Frodsham	FRO01 (Housing)	B, C
	FRO02 (Housing)	B, C
	FRO03 (Housing)	B, C
Helsby	HEL01 (Housing)	B, C
	HEL03 (Housing)	B, C
	HEL03 (Housing)	B, C
Kelsall	KEL01	A, B, C
	KEL02	B, C
Malpas	MAL01 (Housing)	A, B, C
	MAL02 (Housing)	A, B, C
	MAL03 (Housing)	A, B, C
	MAL04 (Housing)	A, B, C
	MAL05 (Housing)	A, B, C
Neston and Parkgate	NEP01 (Housing)	B, C
	NEP02 (Mixed housing/ employment use)	B, C

	NEP03 (Housing)	B, C
	NEP04 (Housing)	B, C
	NEP05 (Housing)	B, C
	NEP06 (Housing)	B, C
Tarporeley	TARP01 (Housing)	A, B, C
	TARP02 (Housing)	A, B, C
	TARP03 (Housing)	A, B, C
	TARP04 (Housing)	A, B, C
	TARP05 (Housing)	A, B, C
Tarvin	TARV01 (Housing)	B, C
	TARV02 (Mixed housing / community use)	A, B, C
	TARV03 (Housing)	B, C
Tattenhall	TAT01 (Housing)	A, B, C
	TAT02 (Housing)	A, B, C
	TAT03 (Mixed housing / community use)	A, B, C
	TAT04 (Housing)	A, B, C
	TAT05 (Housing)	A, B, C
	TAT06 (Housing)	A, B, C

	TAT07 (Housing)	A, B, C
Action Bridge Station	ACB01 (Housing)	C
	ACB02 (Housing)	C
	ACB03 (Housing)	C
	ACB04 (Housing)	C
	ACB05 (Housing)	C
Capenhurst Station	CAP01 (Housing)	C
	CAP02 (Housing)	C
Delamere Station	DEL01 (Housing)	C
Elston Station	ELT01 (Employment)	C
	ELT02 (Housing)	C
	ELT03 (Housing)	C
	ELT04 (Housing)	C
Hooton Station	HOO01 (Housing)	C
	HOO02 (Housing)	C
	HOO03 (Mixed housing/ employment use)	C
	HOO04 (Housing)	C
Lostock Gralam Station	LOS01 (Housing)	C

	LOS01 (Housing)	C
	LOS01 (Housing)	C
	NOR03 (Employment)	N/A
Mouldsworth Station	MOU01 (Housing)	C
	MOU02 (Housing)	C
	MOU03 (Housing)	C

Strategic Environmental Assessment (SEA) for the Frodsham Neighbourhood Plan

Environmental Report

September 2023

Quality information

Prepared by

██████████
Graduate Consultant

Checked by

██████████
Associate Director

Verified by

██████████
Associate Director

Approved by

██████████
Associate Director

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Prepared for:

The Frodsham Neighbourhood Plan Steering Group

Prepared by:

AECOM Limited

aecom.com

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Non-technical summary

AECOM is commissioned to lead on Strategic Environmental Assessment (SEA) in support of the emerging Frodsham Neighbourhood Plan (FNP) 2021-2030. The FNP is currently being prepared as a Neighbourhood Development Plan under the Localism Act 2011 and the Neighbourhood Planning (General) Regulations 2012. The Neighbourhood Plan is being prepared in the context of the adopted Cheshire west and Chester Local Plan (Parts 1 and 2).

SEA is a mechanism for considering and communicating the likely effects of an emerging plan, and alternatives, with a view to avoiding and mitigating negative effects and maximising positive effects. Central to the SEA process is publication of an Environmental Report alongside the draft plan that presents certain required information. The aim is to inform the consultation and, in turn, plan finalisation.

Preparing the Environmental Report essentially involves answering three questions:

1) What has plan-making / SEA involved **up to this point?**

- including in relation to 'reasonable alternatives'.

2) What are the SEA findings **at this stage?**

- i.e. in relation to the draft plan.

3) What happens **next**

This Environmental Report NTS

This is the Non-Technical Summary (NTS) of the Environmental Report for the FNP, in which the three questions are answered in turn. Firstly, there is a need to set the scene further by answering: *What's the scope of the SEA?*

What is the scope of the SEA?

The scope of the SEA is reflected in a list of topics and objectives, which, taken together indicate the parameters of the SEA and provide a methodological ‘framework’ for assessment. The SEA framework is presented below:

Table A: The SEA Framework

SEA topic	SEA objective
Air quality	Improve air quality within and surrounding the Neighbourhood Plan area and minimise all sources of environmental pollution
Biodiversity	Protect, maintain and enhance biodiversity habitats and species; achieving a net environmental gain and stronger ecological networks.
Climate change (adaptation)	Avoid and manage flood risk and support the resilience of the Frodsham Neighbourhood Plan area to the potential effects of climate change.
Historic environment	Protect, enhance and manage the integrity, distinctive character and setting of heritage assets and the wider historic environment.
Landscape	Protect, enhance and manage the distinctive character and appearance of landscapes.
Population and housing	Provide everyone with the opportunity to live in good quality, affordable housing which meets the needs of occupants throughout their life.
Health and wellbeing	Improve the health and wellbeing of residents within the FNP area.
Transportation	Promote sustainable transport use and reduce the need to travel.

Plan making / SEA up to this point

An important element of the required SEA process involves assessing **reasonable alternatives** in time to inform development of the draft plan, and then publishing assessment findings in the Environmental Report.

As such, Part 1 of this report explains how work was undertaken to develop and assess a ‘reasonable’ range of alternative approaches to the allocation of land for housing, or **housing growth scenarios**.

The process of arriving at housing growth scenarios involved a process of considering the strategic context (‘top down’ factors), alongside understanding of the sites available and in contention for allocation (‘bottom up’ factors). The process is set out in Section 5, and summarised in a flow diagram.

Ultimately two housing growth scenarios were identified as reasonable and so warranting formal assessment under the SEA framework – see Table B.

Table B: The reasonable housing growth scenarios
N.B. figures are for the CWaC Local Plan period (2010-2030)

	Scenario 1	Scenario 2
Supply		
Frodsham residual housing requirement ¹	32	32
Main brownfield site; Land Behind Health Centre	65	65
Remaining sites assessed in the SOA as suitable for allocation plus the Brook works site	30	-
Total new supply to 2030	95	65
Housing competitions and commitments²	218	218
Total new supply + completions and commitments	313	283
% difference from CWaC HRF (250)	+25%	+13%

Table C presents the assessment. Presented subsequently is the Frodsham NP Steering Group's response to the assessment, i.e. reasons for supporting the preferred approach, which is **Scenario 1**.

Assessment methodology:

Within each row of Table C (i.e. for each of the topics that comprise the SEA framework) the columns to the right hand firstly rank the scenarios in order of preference and then, secondly, highlight instances of a predicted significant positive (**green**), minor positive (**light green**), minor negative (**amber**), moderate negative (**pink**) or significant negative (**red**) effect on the baseline. Also, '=' is used to denote instances where the alternatives perform on a par (i.e. it not possible to differentiate between them).

¹ The housing requirement figure of 250 dwellings minus completions and commitments.

² Data taken from the CWaC Annual Monitoring Report 2021

Table C: Housing growth scenarios assessment

Topic	Scenario 1		Scenario 2	
Air Quality	2		1	
Biodiversity	2	2	1	1
Climate change (adaptation)	=		=	
Health & Wellbeing	1		2	
Historic environment	1 [?]		2	
Landscape	=		=	
Population & housing	1		2	
Transportation	2		1	

Key: Within each row, for each of the topics. the columns to the right hand side seek to both **categorise** the performance of each scenario in terms of ‘significant effects’ on the baseline (using **red**, **amber** and **light green** and **dark green**)³ and also **rank** the alternatives in order of performance. Also, ‘=’ is used to denote instances where the alternatives perform on a par (i.e. it not possible to differentiate between them).

Summary discussion

The assessment shows a mixed picture, with both scenarios associated with pros and cons. Scenario 1 is results on the only significant positive, which relates to population and housing, whilst generating no major negatives. Scenario 2 also has no significant negatives but performs slightly less well in respect to population and housing. It does however perform marginally better with regards to air quality and transport given that a lower amount of housing would be planned in the urban areas. Conversely, scenario 1 performs better in terms of health and wellbeing and heritage.

It is for the decision-maker (also consultees), not this assessment, to assign weight to the various pros and cons and then arrive at a conclusion on which scenario is best-performing overall.

The plan-makers responded to the growth scenarios assessment as follows:

“The preferred approach is to take forward Scenario 1 as the basis for the FNP. This approach is considered to broadly align with the findings of the assessment, which finds Scenario 1 to perform well with respect to the majority of key sustainability issues, both in absolute terms and relative terms.”

Assessment findings at this stage

Part 2 of the Environmental Report presents an assessment of the FNP as a whole, as it stands at the current time (pre-submission plan).

³ Red indicates a significant negative effect; amber a negative effect that is of limited or uncertain significance; light green a positive effect that is of limited or uncertain significance; and dark green a significant positive effect. No colour is assigned where effects are considered to be neutral or uncertain.

Assessment findings are presented as a series of narratives under the SEA framework. The assessment reaches the following overall conclusions:

Overall, the Plan appraisal has served to highlight the potential for both positive and negative effects of varying degrees of significance.

Significant positive effects are anticipated in relation to the population and housing SEA theme as a result of the growth strategy, which will meet and exceed strategic growth targets set in Local Plan (CWaC LPP1); helping to improve choice and potentially affordability in the market. The additional growth also serves to provide a buffer to better secure housing delivery.

Mixed effects are predicted for biodiversity; minor negative effects are highlighted in relation to policy EDVE2 which has the potential to increase recreational pressures on the Frodsham Marshes and the Mersey Estuary biodiversity sites.

On the other hand, minor positive effects are predicted for biodiversity due to FNP policies seeking to protect and enhance open green spaces which should help reduce habitat fragmentation and provide stepping-stones for biodiversity. It would be beneficial to make explicit mention of the biodiversity value of green and open spaces.

Minor negative effects are considered likely for the transportation topic due to the cumulative effects of development on traffic and congestion. This is despite positive intentions to promote walking and cycling, and to manage parking.

Minor long term positive effects are recognised for climate change adaptation as the Plan allocates development in areas at low risk of flooding and includes policies that seek to protect and enhance open green space (with explicit mention of rainwater harvesting).

Minor long term positive effects are predicted with respect to health and wellbeing as the Plan promotes good quality design, a varied mix of housing, encourages active travel and protects green space including recreation and play areas.

With regards to heritage, minor positive effects are expected due to the mitigation provided through the FNP Design Code and policy H6. The allocations and site specific policies also have the potential for positive effects as they help ensure the continued use of heritage assets such as the Grade II listed Brook House (whilst retaining and enhancing important features).

The Plan is expected to have neutral effects on landscape and air quality as development is allocated in areas of low landscape sensitivity and the scale of growth proposed is not expected to significantly impact air quality including at the AQMA.

Next steps

This Environmental Report is published alongside submission version of the FNP.

The 'submission' version of the plan will be submitted to CWaC (alongside this updated Environmental Report). The plan and supporting evidence will be then published for further consultation, and then submitted for examination.

If the outcome of the Independent Examination is favourable, the FNP will then be subject to a referendum, and the plan will be 'made' if more than 50% of those who vote are in support. Once made, the FNP will become part of the Development Plan for Cheshire west and Chester.

1. Introduction

Background

- 1.1 AECOM is commissioned to lead on Strategic Environmental Assessment (SEA) in support of the emerging Frodsham Neighbourhood Plan ('FNP') 2021–2030.
- 1.2 The FNP is being prepared in the context of the adopted Cheshire West and Chester Local Plan Parts 1 and 2. Once 'made', the FNP will form part of the Cheshire West and Chester Development Plan.
- 1.3 The FNP will be used to guide and shape development within the Plan area.
- 1.4 SEA is a required process for considering and communicating the likely effects of an emerging plan, and alternatives, with a view to minimising negative effects and maximising positive effects.⁴

SEA explained

- 1.5 It is a requirement that the SEA process is undertaken in-line with the Environmental Assessment of Plans and Programmes Regulations 2004.
- 1.6 In-line with the Regulations, a report (known as the Environmental Report) must be published for consultation alongside the draft plan that "*identifies, describes and evaluates*" the likely significant effects of implementing "*the plan, and reasonable alternatives*".⁵ The report must then be taken into account, alongside consultation responses, when finalising the plan.
- 1.7 More specifically, the Report must answer the following three questions:
 1. What has plan-making / SEA involved up to this point?
 - including in relation to 'reasonable alternatives'.
 2. What are the SEA findings at this stage?
 - i.e. in relation to the draft plan.
 3. What happens next?

This Environmental Report

- 1.8 This report is the Environmental Report for the FNP. It is published alongside the 'submission' version of the Plan, under Regulation 16 of the Neighbourhood Planning Regulations (2012, as amended). It supersedes a previous version of the Environmental Report prepared in support of the Regulation 14 consultation.
- 1.9 This report answers questions 1, 2 and 3 in turn, to provide the required information.⁶ Each question is answered within a discrete 'part' of the report.
- 1.10 However, before answering Q1, two further introductory sections are presented to further set the scene.

⁴ Regulation 15 of the Neighbourhood Planning Regulations (2012, as amended) requires that each Neighbourhood Plan is submitted to the Local Authority alongside either: A) an environmental report; or, B) a statement of reasons why SEA is not required, prepared following a 'screening' process. The FNP was subject to screening, on the basis of which it was determined that there is a requirement for SEA (i.e. the plan was 'screened-in').

⁵ Regulation 12(2) of the Environmental Assessment of Plans and Programmes Regulations 2004.

⁶ See **Appendix A** for further explanation of the report structure including its regulatory basis.

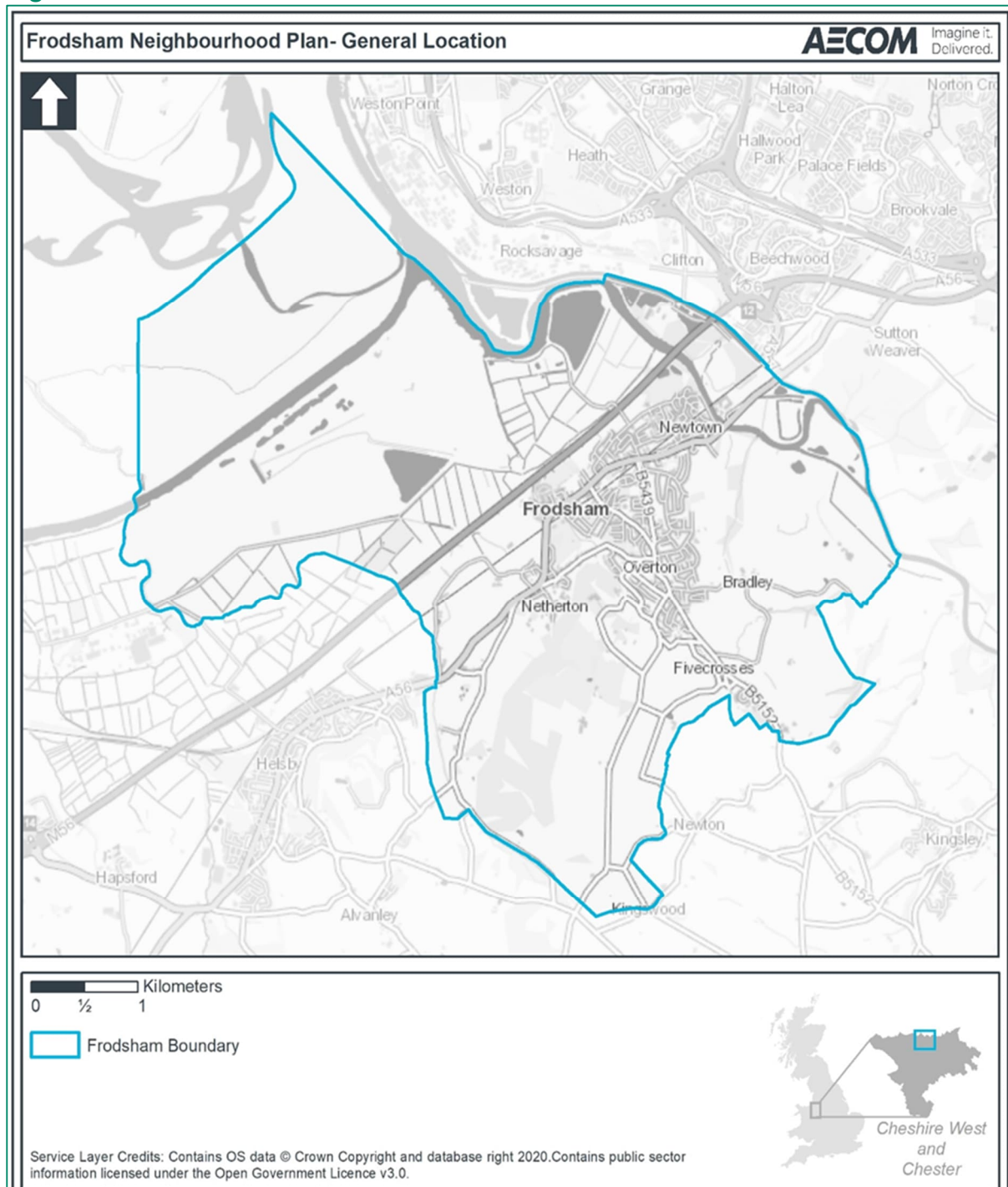
2. What is the plan seeking to achieve?

Introduction

2.1 This section considers the context provided by the applicable Local Plan, which is the adopted Cheshire West and Chester Local Plan Parts 1 and 2 (LPP1 and LPP2), before setting out the established FNP vision and objectives.

2.2 Figure 2.1 shows the plan area.

Figure 2.1: The FNP area



The LPP1/LPP2

- 2.3 The Local Plan identifies Frodsham as a 'Key Service Centre' and allocates growth of 250 dwellings in Frodsham (Policy STRAT8) over the period 2010 to 2030. Policy ECON2 seeks to maintain the important role of Frodsham's centre as a retail and service centre. Policies SOC3 and SOC5 (LPP1) support mixed, balanced, sustainable communities through the provision of market and affordable housing that meets identified future needs.
- 2.4 The LPP1 policy SOC1 seeks affordable housing (AH) provision in rural areas (including Frodsham) on all new residential development (subject to viability) of three or more dwellings or those with a plot area of 0.1 ha and more.
- 2.5 The FNP is being prepared by Frodsham Neighbourhood Plan Steering Group and will cover the period 2021 to 2030.
- 2.6 The following vision has been established for the FNP at the current stage.

"Frodsham will:

Be thriving and sustainable

Value its community and heritage

Encourage innovation, collaboration and social cohesion

Promote access to services"

- 2.7 The FNP also includes the following aims and objectives;

Table 2-1 Aims and objectives of the FNP

Aim	Objective
<i>Frodsham will Value its community and heritage</i>	<i>To ensure the built environment fits in with the local character of Frodsham in terms of materials, scale, accessibility and sustainability.</i>
	<i>To encourage development of Frodsham's tourism and visitor economy.</i>
	<i>To designate and therefore protect Local Green Spaces.</i>
	<i>To prioritise developments that retain, conserve, maintain, protect and provide additional or new green and open spaces for community and social use.</i>
	<i>To ensure new pathways and signage are in a style sympathetic with those existing and compatible with the Conservation Area.</i>

Aim	Objective
To be thriving and sustainable	<i>To provide a mix of dwellings, that meet the needs of Frodsham now and in the future and address the changing demographics and the towns sustainability.</i> <i>To promote opportunities for residents and visitors to Frodsham to maintain and enhance their health and well-being by providing the provision of sports, recreation, cultural, leisure and play facilities that enrich their quality of life.</i> <i>To prioritise sustainable transport and reduce congestion and vehicle emissions.</i>
Frodsham will be thriving and sustainable and encourage innovation	<i>To encourage the growth of current businesses and support new businesses in Frodsham</i>
Promote access to services	<i>To ensure connections within the town and to adjacent areas facilitate easy and safe access for pedestrians and cyclists and are designed for the needs of an ageing population.</i>

3. What is the scope of the SEA?

Introduction

- 3.1 The aim here is to introduce the reader to the scope of the SEA, i.e. the sustainability themes and objectives that should be a focus of the SEA. Supplementary information is presented in Appendix B.

Consultation

- 3.2 The SEA Regulations require that “*when deciding on the scope and level of detail of the information that must be included in the report, the responsible authority shall consult the consultation bodies*”. In England, the consultation bodies are the Environment Agency, Historic England, and Natural England. As such, these authorities were consulted over the period 3rd August to 7th September 2021, and the responses received are detailed in the Scoping Report (Table AB1 Post Consultation modifications).

The SEA framework

- 3.3 Table 3.1 presents a list of topics and objectives that together form the back-bone of the SEA scope. Together they comprise a ‘framework’ under which to undertake assessment; derived from an understanding of policy context and baseline conditions.

Table 3-1 The SEA framework

SEA topic	SEA objective
Air quality	Improve air quality within and surrounding the Neighbourhood Plan area and minimise all sources of environmental pollution
Biodiversity	Protect, maintain and enhance biodiversity habitats and species; achieving a net environmental gain and stronger ecological networks.
Climate change (adaptation)	Avoid and manage flood risk and support the resilience of the Frodsham Neighbourhood Plan area to the potential effects of climate change.
Health and wellbeing	Improve the health and wellbeing of residents within the FNP area.
Historic environment	Protect, enhance and manage the integrity, distinctive character and setting of heritage assets and the wider historic environment.
Landscape	Protect, enhance and manage the distinctive character and appearance of landscapes.
Population and housing	Provide everyone with the opportunity to live in good quality, affordable housing which meets the needs of occupants throughout their life.
Transportation	Promote sustainable transport use and reduce the need to travel.

Part 1: What has plan-making/ SEA involved to this point?

4. Introduction (to Part 1)

Overview

- 4.1 Work on the FNP has been underway for some while, with several consultation events having been held including a Frodsham wide Consultation in 2014 and Resident's Survey in 2017. The results of the consultations are available on the Frodsham Neighbourhood Plan [website](#).
- 4.2 This is important context; however, the aim here is not to provide a comprehensive explanation of work to date. Rather, the aim is to explain work undertaken to develop and appraise **reasonable alternatives**.
- 4.3 More specifically, this part of the report presents information on the consideration given to reasonable alternative approaches to addressing a particular issue that is of central importance to the plan, namely the allocation of land for housing, or **housing growth scenarios**.

Why focus on housing growth scenarios?

- 4.4 The decision was taken to develop and assess reasonable alternatives ('scenarios') in relation to the matter of housing growth in light of the Plan objectives (see para 2.7), and because there is the likelihood of being able to differentiate between the merits of alternatives/scenarios in respect of 'significant effects'. National Planning Practice Guidance is clear that SEA should focus on matters likely to give rise to significant effects.

Who's responsibility?

- 4.5 It is important to be clear that:
- **Defining scenarios** - is ultimately the responsibility of the plan-maker, although the SEA consultant (AECOM) is well placed to advise.
 - **Assessing scenarios** - is the responsibility of the SEA consultant.
 - **Selecting a preferred scenario** - is the responsibility of the plan-maker.

Structure of this part of the report

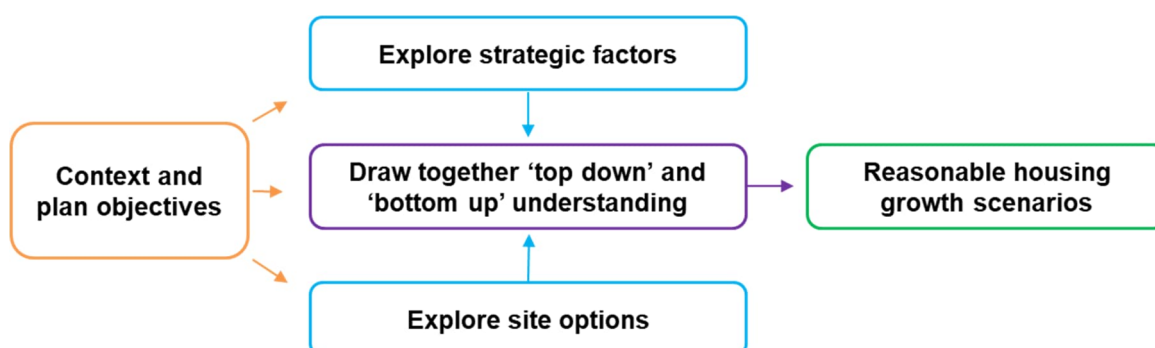
- 4.6 This part of the report is structured as follows:
- **Chapter 5** - explains the process of defining scenarios;
 - **Chapter 6** - presents the outcomes of assessing scenarios;
 - **Chapter 7** - explains reasons for supporting the preferred approach.

5. Defining scenarios

Introduction

- 5.1 The aim here is to explain a process that led to the definition of a reasonable range of housing growth scenarios for assessment, and thereby present “an outline of the reasons for selecting the alternatives dealt with”.⁷
- 5.2 Specifically, there is a need to: **1)** explain strategic factors with a bearing on defining scenarios; **2)** discuss work completed to examine site options (i.e. sites potentially in contention for allocation); and then **3)** explain how the ‘top down’ and ‘bottom up’ understanding generated through steps (1) and (2) were married together in order to arrive at reasonable housing growth scenarios.

Figure 5.1: Defining scenarios



Strategic factors

- 5.3 The aim of this section is to explore the strategic factors with a bearing on the establishment of reasonable housing growth scenarios. Specifically, this section of the report explores:
- Quantum – how many new homes must the FNP provide for?
 - Broad distribution – broadly where is more/less suited to allocation?

Quantum

- 5.4 The LPP1 identifies Frodsham as a key service centre within the Rural Area allocating ‘at least’ 250 new dwellings there, over the 20-year period between 2010 and 2030. Paragraph 5.75 explains that Frodsham is inset within the Green Belt and paragraph 5.66 adds ‘where a key service centre is constrained by Green Belt the level of development reflects the ability of the settlement to accommodate new development without Green Belt release’. However, there have been 2,655 housing completions and commitments in key service centres, 4,175 in total for the rural area since April 2014 (LPP1 Table 5.1). The LPP1 states, ‘there is only a very limited amount of additional housing to be provided’ (Paragraph 5.69).

⁷ Schedule 2(8) of the SEA Regulations.

- 5.5 It is good practice to provide for a 'supply buffer' on top of the requirement. For example, the plan might aim for a 10-20% buffer over-and-above LPP1's 250 housing requirement figure, which would suggest a need to identify a total supply of around 275-300 homes for Frodsham.

Broad distribution

- 5.6 There are several broad spatial considerations influencing housing growth scenarios in the NP area. The town is physically constrained by the North Cheshire Green Belt which surrounds it, covering most of the NP area. The LLP1 states that a *'key focus of the Plan's strategy is to channel the majority of new development towards the main urban areas. In order to meet future development needs to 2030 and to promote sustainable patterns of development, it has been identified that only in the case of Chester are there exceptional circumstances to amend the Green Belt boundary.'* Therefore, there is no provision for Green Belt release at strategic level.
- 5.7 There are heritage designations including a conservation area in the town centre, extends linearly along Main street/ High Street between the M56 and the railway line. Properties survive from the medieval period. Timber-framed and thatched cottages sit next to red brick and slate dwellings and more substantial and formal Georgian, Victorian and Edwardian structures. There are numerous listed and locally important buildings, including some unique structures listed buildings, a Scheduled Monument and a Registered Park and Garden.
- 5.8 A number of important biodiversity designations exist within Frodsham and the surrounding area including; the Mersey Estuary Ramsar (also SSSI and SPA site), the Frodsham Railway and Road Cuttings SSSI, Beechmill Wood and Pasture SSSI and the Dunsdale Hollow SSSI. The Impact Risk Zones (IRZ) associated with these SSSIs covers the entirety of the NP area.
- 5.9 Parts of the wider area surrounding the settlement are also identified as being at risk of flooding with areas of flood risk zone 3 extending along the length of the M56 running through the NP area. Further Flood Zone 3 areas are found along the coast and the course of the River Weaver.

Site options

- 5.10 Having discussed strategic, 'top-down' factors with a bearing on establishing housing growth scenarios, the next step is to consider the site options that are in contention for allocation.
- 5.11 A key starting point is the Site Options Assessment (SOA, 2018), which examines sites, classifying the suitability of each for development on a three-point (red-amber-green) scale. The assessment considers all the sites in the Cheshire West and Chester Housing and Economic Land Availability Assessment (HELAA) 2017 assessed as being suitable, viable and achievable for development. The SOA also assessed sites produced by FNP Call for Sites (CfS).
- 5.12 The assessment covered 24 sites; the 11 sites produced by the CfS and 13 additional sites from the HELAA⁸. A 'traffic light' rating of all sites was used, based on whether the site is an appropriate candidate to be considered for allocation in the Neighbourhood Plan.

⁸ The HELAA considered 20 sites in total within Frodsham, 4 of these were duplicated and considered within the CfS sites, 2 were discounted due to being in the Green Belt and 1 discounted due to availability issues.

5.13 The site assessment covered a range of factors that correspond to the SEA Framework objectives. As such, it was deemed unnecessary to undertake a separate appraisal of individual site options through the SEA process.

SEA Topic	Related SOA assessment criteria
Air quality	- No explicit criteria
Biodiversity	- Proximity to designated habitats - Ecological value - Tree Preservation Areas
Climate change (adaptation)	- Proximity to flood zones
Health and wellbeing	- Access to local amenities - Community value of site
Historic environment	- Proximity to heritage assets
Landscape	- Landscape sensitivity - Character
Population and housing	- Availability
Transportation	- Site connectivity - Public rights of way - Access to local amenities

5.14 The SOA uses the site information to categorise the sites not one of three categories. The traffic light rating indicates 'green' for sites that show no constraints and are appropriate as site allocations, 'amber' for sites which are potentially suitable if issues can be resolved and 'red' for sites which are not currently suitable. The judgement on each site is based on the three 'tests' of whether a site is appropriate for allocation – i.e. that it is **suitable, available and achievable**.

5.15 The SOA concluded that 9 sites would be appropriate for allocation in the FNP. However, since the SOA, the site at 3-15 Bridge La. is no longer available, the site at 29 Main St. (the Cheshire Cheese site) has been developed and the Ship Street Playing Field (FRO/060A) site is being proposed as an amenity green space. As a result of consultation on the Reg14 version on the neighbourhood plan it was identified that site FRO/005 was unavailable for development. All four of these sites are therefore omitted from the table below.

5.16 Three further sites were assessed as potentially suitable for development, but their availability could not be confirmed at the time. One of these, the Brook Works site, is now potentially available and therefore included in the list of potential sites below (Table 5.1).

Table 5-1 SOA sites assessed suitable for allocation in the FNP

SOA or CfS Reference	Location	RAG Rating
1	Land Behind Health Centre	
FRO/0004	Land at Penkmans Lane	
FRO/0038	Land off Greenfield Lane	
FRO/0039	Land to rear of 15-23 St Hilda's Drive	
FRO/0010	64 Main Street	
7	Brook Works ⁹ (previously unavailable)	

5.17 The remaining 12 sites in the SOA were judged unsuitable for allocation (9 in the Green Belt, 2 were under construction and 1 deemed to be not in conformity with national planning policy on playing fields).

⁹ This site was rated red as it was unavailable at the time – The FNP Steering Group have now confirmed that the site may be available and wish to include it in the FNP.

Figure 5-2 Map of Sites assessed in the SOA



The reasonable scenarios

5.18 To recap, the housing requirement figure for Frodsham is 250 dwellings (up to 2030). At 1 April 2022, 191 dwellings have been completed in the Frodsham spatial area (the settlement boundary for Frodsham as shown on the Local Plan policies map), and a further 27 dwellings have extant planning permission. Taking completions and commitments into account, this leaves a residual housing requirement of 32 dwellings.

5.19 The potential dwelling capacity of the available sites (as assessed in the SOA and currently available) is shown in in Table 5-2 below.

Table 5-2 List of available development sites

Site (FNP policy ref)	Area (ha)	Capacity ¹⁰
Land Behind Health Centre (S/01A)	0.84	65
Land at Penkmans Lane (S/10A)	0.1	2
Land off Greenfield Lane (FRO/0038A)	0.36	10
Land to rear of 15-23 St Hilda's Drive (FRO/0039A)	0.11	5
64 Main Street (FRO/0010A)	0.1	1
Brook Works (S/07)	0.32	12

5.20 In conclusion, on the basis of the discussion above (i.e. all of Section 5, read as a whole), these are the potential housing growth scenarios for assessment:

- Not to allocate any further development in Frodsham as the NP has fulfilled over 80% of the development requirement (and could therefore rely on windfall development). Given the locally assessed housing need this is considered an unsustainable option and therefore does not constitute a reasonable alternative.
- Allocate the largest brownfield site, Land Behind Health Centre, as this would be sufficient to deliver the residual housing requirement including a supply buffer (when completions and commitments are taken into account).
- Pursue a higher growth scenario developing all the available sites in Table 5.2, maximising growth to help meet identified housing need¹¹.

¹⁰ Based on the capacities proposed in the FNP

¹¹ Following Regulation 14 Consultation it was determined that one of the sites involved under Scenario 1 was no longer suitable/ available for development. Therefore, this site is not included in the updated scenario assessments.

6. Scenarios assessment

Introduction

- 6.1 The aim of this section is to present assessment findings in relation to the two reasonable housing growth scenarios introduced above and set out in Table 6.1.

Table 6-1 The reasonable housing growth scenarios

	Scenario 1	Scenario 2
Supply		
Frodsham residual housing requirement ¹²	32	32
Main brownfield site; Land Behind Health Centre	65	65
Remaining sites assessed in the SOA as suitable for allocation plus the Brook works site	30	-
Total new supply to 2030	95	65
Housing completions and commitments	218	218
Total new supply + completions and commitments	313	283
% difference from CWaC HRF (250)	+25%	+13%

Assessment findings

- 6.2 Table 6.1 presents assessment findings in relation to the two scenarios.
- 6.3 With regards to methodology: Within each row (i.e. for each of the topics that comprise the SEA framework) the columns to the right hand side seek to both **categorise** the performance of each scenario in terms of 'significant effects' on the baseline (using **red**, **amber** and **light green** and **dark green**)¹³ and also **rank** the alternatives in order of performance. Also, ' = ' is used to denote instances where the alternatives perform on a par (i.e. it not possible to differentiate between them).
- 6.4 The appraisal matrix is followed by a discussion, setting out reasons for the appraisal conclusions reached, with reference to available evidence.
- 6.5 Both alternatives have been appraised on a consistent basis, taking account of the potential for mitigation and enhancement offered by existing Local Plan and proposed NP policies (or yet unidentified mitigation / enhancement measures).

¹² The housing requirement figure of 250 dwellings minus completions and commitments.

¹³ Red indicates a significant negative effect; amber a negative effect that is of limited or uncertain significance; light green a positive effect that is of limited or uncertain significance; and dark green a significant positive effect. No colour is assigned where effects are considered to be neutral or uncertain.

- 6.6 It is considered useful to take a policy-on approach to assessment at this stage given that development will take place in the context of adopted Local Plan documents and a range of proposed policies in the draft FNP.

Table 6-1: Housing growth scenarios assessment / Draft Plan alternatives

Topic	Scenario 1		Scenario 2	
Air Quality	=		=	
Biodiversity	2	2	1	1
Climate change (adaptation)	=		=	
Health & Wellbeing	1		2	
Historic environment	1 [?]		2	
Landscape	=		=	
Population & housing	1		2	
Transportation	2		1	

Discussion

6.7 The assessment shows a mixed picture, with each of the scenarios associated with pros and cons. Scenario 1 is best-performing in respect of the most topics (four versus two); however, it does not automatically follow that Scenario 1 is best-performing overall, as the topics are not assumed to be of equal importance. It is for the decision-maker (also consultees), not this assessment, to assign weight to the various pros and cons and then arrive at a conclusion on which scenario is best-performing overall. The following paragraphs explore the growth scenarios under the SEA framework.

6.8 **Air quality** – There is an AQMA in Frodsham at Fluin Lane. Successive CWaC air quality annual status reports have shown no exceedance in the NO₂ emissions at the AQMA and the AQMA is likely to be reviewed according to the latest report. Both scenarios perform well, in terms of minimising the need to travel and supporting modal shift away from the private car (by virtue of the sites being within the urban area with good access to services). Overall, the level of growth proposed, even when considered in combination with the Local Plan allocations, is unlikely to give rise to significant adverse effects on air quality. The increase in traffic associated with new development is counteracted by well-located development sites with good access to services and facilities. The provision of EV charging infrastructure and promotion of enhanced pedestrian and cycle links should encourage more sustainable modes of travel. There is little difference between the two scenarios in terms of growth proposed (Scenario 2 produces 30 fewer units than Scenario 1) therefore both scenarios perform comparably with **broadly neutral effects** expected overall.

- 6.9 **Biodiversity** – mixed effects are considered likely (reflected by the split scoring in table 6-1); the proposed housing site allocations are not expected to give rise to adverse effects on biodiversity but Policy EDVE2 has the potential for **minor negative effects** as it is likely to increase recreational pressures on the Frodsham Marshes and the Mersey Estuary biodiversity sites (though the magnitude of effects is limited).
- 6.10 **Minor positive effects** are predicted for policies GSRL1,3 and 4 as these will result in the protection and enhancement of open greenspaces within the Parish which would help reduce habitat fragmentation and provide stepping stones for biodiversity. Since both scenarios share the above mentioned policies there is relatively little difference in how the two scenarios perform with respect to biodiversity. Scenario 2 may be marginally preferable due to the lower growth proposed (lesser associated recreational pressure from residents). However, if the FNP incorporates the recommendations suggested herein and in the HRA, both scenarios are likely to produce minor positive effects overall.
- 6.11 **Climate change** (adaptation) – a key consideration is flood risk. The FNP places development in areas of low flood risk and none of the sites in question are subject to significant constraint. There are several policies seeking to protect and provide green open space. These are likely to produce favourable effects on adaptation as such spaces help reduce flood risk and act as carbon sequesters contributing directly to a reduction in atmospheric CO2 concentration. Two of the proposed sites (FRO/0038 and S/07) do overlap with areas of surface water flood risk, but the risk is 'low' and the need to implement sustainable urban drainage and flood mitigation measures in new development should ensure that significant effects are avoidable. In this respect, scenario 1 performs less well compared to scenario 2, which would not involve the same sites. Conversely, new development on previously developed land offers the potential to improve surface water run-off, which would be a greater opportunity under Scenario 1. In conclusion, the scenarios are judged to perform broadly on par having **minor long-term positive effects** on climate change adaptation.
- 6.12 **Health and wellbeing** – The main considerations are the provision of high quality public realm, the provision of open green and recreational space and encouraging active travel. In this context the Frodsham Design Code and FNP policies H2 and H5 are important as they seek to promote high quality development design. Other policies seek to protect and enhance open green space including recreational and play areas (GSRL1-4). Active travel is also promoted through FNP policies which facilitate active travel by placing residential development in well located sites, close to services and facilities, whilst other policies (e.g. H5, CA1) require new development to provide safe pedestrian access and footway connections to nearest walking/ cycling routes (H5, CA1) and seek to make Frodsham a cycle friendly town. As both scenarios share the above policies it is difficult to confidently differentiate the scenarios in these respects. Clearly, housing conditions can influence physical and mental health and having a suitable, well designed, affordable home is important to health and wellbeing. In this respect Scenario 1 is marginally preferable as it provides more housing growth than Scenario 2. In conclusion both scenarios are predicted to have **minor long term positive effects** on health and wellbeing.

6.13 Historic environment – Two of the housing sites allocated in scenario 1 (at 64 Main Street and at Brook Works) were assessed in the SOA as potentially impacting the historic environment. However, the mitigation provided through the FNP Design Code, policy H6 and the policies allocating the sites in the FNP should ensure appropriate developments that do not adversely impact the historic environment and the setting of the Frodsham Conservation Area. The policies have the potential for positive effects as they will help ensure the continued use of heritage assets such as the Grade II listed Brook House. Scenario 2 does not include these two sites and therefore no significant effects are anticipated (positive or negative). In conclusion, although Scenario 1 has minor constraints with respect to the historic environment, the mitigation provided through the Design Code and FNP policies should ensure no significant adverse effects are produced.

6.14 Minor positive effects are expected through FNP policies which seek to retain the Brook Works site and ensure its continued use into the future. Scenario 1 is therefore judged to be preferable to Scenario 2 in this respect.

However, it will be important to ensure that new development sites are appropriately designed, especially when higher densities are being proposed than in the HELAA.

6.15 Landscape – The spatial strategy allocates housing growth within the existing urban built-up areas of the town. The SOA concluded that all the sites allocated for development are in areas of relatively low landscape sensitivity. The FNP Design Code and FNP policies such as GSRL1-GSRL4 and H2 are predicted to have beneficial impacts on the landscape and townscape character of Frodsham, serving to protect key aspects of the landscape such as open green spaces and important view and vistas. Both scenarios perform comparably with both predicted to have **neutral effects** on Landscape. Despite more sites being allocated in scenario 1, the sites are of a low sensitivity, and therefore effects are no greater than for scenario 2.

6.16 Population and housing - the primary consideration is meeting housing needs in Frodsham. On this basis, there is a clear preference for Scenario 1, which would meet and exceed (by 25%) the housing requirement set by the CWaC Local Plan. Whilst Scenario 2 would also meet the Local Plan HRF (13% more than the HRF), there would be fewer homes in total. The FNP steering committee's housing survey highlighted the need for affordable tenures such as Starter Homes, social, rented and shared ownership tenures which are seen as a priority to enable younger residents to remain in the area. Therefore Scenario 1's larger growth is likely to deliver greater choice of tenures in the market to meet the needs of residents. In conclusion, Scenario 1 leads to a prediction of **significant positive effects**. Scenario 2 performs less well, but still gives rise to **minor positive effects**.

6.17 Transportation – key issues around minimising the need to travel, supporting modal shift away from the private car and supporting safe walking/cycling are discussed above.

- 6.18 Both scenarios benefit from FNP policies locating development sites in well-connected locations with good access to local services and policies requiring development proposals to provide safe pedestrian access and footway connections to nearest walking/ cycling routes which should encourage active travel and reduce car journeys.
- 6.19 At the scale of growth involved for either scenario, it is considered unlikely that major infrastructure improvements would be achieved associated with housing growth. In conclusion, the scenarios perform comparably with **minor negative effects predicted** due to the increase in traffic associated with housing growth. Scenario 2 is marginally preferable in this respect due to the lower growth and avoiding sites that could contribute further to congestion.

7. The preferred approach

Introduction

- 7.1 The aim of this section is to present the plan-makers reasons for supporting the preferred approach, in light of the scenarios assessment presented above.

Reasons for supporting the preferred approach

- 7.2 The preferred approach is to take forward Scenario 1 as the basis for the FNP. This approach is considered to broadly align with the findings of the assessment, which finds Scenario 1 to perform well in terms of the majority of key sustainability issues, both in absolute terms and relative terms.
- 7.3 With regards to Scenario 2, the assessment highlights that it does not perform quite as well in terms of health and wellbeing, heritage and housing delivery. Conversely, this option performs marginally better in terms of biodiversity, transport and air quality.
- 7.4 The process of defining and assessing growth scenarios serves to highlight that there are only minor factors to differentiate the scenarios in respect of planning for growth at Frodsham. Nonetheless, there is a need to make a choice, and Scenario 1 is considered to be most appropriate on balance in terms of sustainable development. Importantly, the preferred approach will deliver benefits to the Neighbourhood Area and meet the requirements set out in the Local Plan relating to housing provision.

Part 2: What are the SEA findings at this stage?

8. Introduction (to Part 2)

8.1 The aim of this section is to present a proportionate assessment of the current 'version of the FNP; which includes a range of policies to guide development in the Neighbourhood Plan area. These policies are set out in Table 8.1 below for reference. Given the iterative nature of SEA, the appraisal here builds upon and feeds into the consideration of the growth scenario effects; as discussed in Section 6.

Table 8-1 FNP policies

Policy no.	Title
H1	Location of housing development
FRO/0010A	64 Main Street
FRO/0010B	Design Principles/ requirements
FRO/0038A	Land off Greenfield Lane
FRO/0038B	Design Principles/ requirements
FRO/0039A	Land to the rear of St Hilda's Drive
FRO/0039B	Design Principles/ requirements
S/01A	Land at Frodsham Health Centre
S/01B	Design Principles/ requirements
S/07A	Brook Works Main Street
S/07B	Design Principles/ requirements
S/10A	Land at Penkman's Lane
S/10B	Design Principles/ requirements
H2	Housing Layout and Design
H3	Housing Mix and Type
H4	Affordable Housing – The Local Connection Test
H5	Design and Character
H6	Heritage assets
EDVE1	Business and Employment
EDVE2	Tourism and the Visitor Economy
EDVE3	Retail and Services
GSRL1	To designate Local Green Space
GSRL2	Protecting and Enhancing Green and Open Space
GSRL3	Maintaining our Green and Open Spaces
GSRL4	Creating New Green / Open Spaces
GSRL5	Enhancing Health and Wellbeing in the Community
CA1	Footpaths and Cycle paths
CA2	Electric Vehicles
CA3	Parking
CA4	Application of Community Infrastructure Levy (CIL) and Section 106 Agreements

Methodology

- 8.2 The assessment identifies and evaluates 'likely significant effects' on the baseline, drawing on the sustainability objectives identified through scoping (see Table 3.1) as a methodological framework.
- 8.3 All of the policies within the plan are considered in the assessment (including the potential for mitigation and enhancement), but rather than providing commentary on the effects of each policy individually, a conclusion is drawn on the effects of the Plan when read 'as a whole' (i.e., the cumulative effect of all the policies considered in combination). This is important because plan policies do not act in isolation and can also help to mitigate effects arising as a result of development and / or other plan policies.
- 8.4 Every effort is made to predict effects accurately; however, this is inherently challenging given the strategic nature of the policies under consideration and understanding of the baseline (now and in the future under a 'no plan' scenario) that is inevitably limited. Given uncertainties there is a need to make assumptions, e.g. in relation to plan implementation and aspects of the baseline that might be impacted. Assumptions are made cautiously and explained within the text (with the aim of striking a balance between comprehensiveness and conciseness). In many instances, given reasonable assumptions, it is not possible to predict 'significant effects', but it is possible to comment on merits (or otherwise) of the draft plan in more general terms.
- 8.5 Finally, it is important to note that effects are predicted taking account of the criteria presented within Schedule 1 of the SEA Regulations. For example, account is taken of the probability, duration, frequency and reversibility of effects as far as possible. Cumulative effects are also considered, i.e. the potential for the FNP to impact an aspect of the baseline when implemented alongside other plans, programmes and projects. These effect 'characteristics' are described within the assessment as appropriate.

9. Assessment of the FNP

Introduction

- 9.1 The assessment is presented below under eight topic headings, reflecting the established assessment framework (see Section 3). A final section (Chapter 10) then presents overall conclusions. Throughout the assessment consideration is given as to whether measures can be implemented to mitigate negative effects and maximise positive effects.

Air quality

- 9.2 Air quality is an important issue in Frodsham, given the AQMA at the junction of Fluin Lane and Bridge Lane. The AQMA was designated in 2015 due to exceedance of the annual mean NO₂ objective, mainly due to road traffic emissions. The latest data from CWaC's monitoring network indicates that the NO₂ objective was not exceeded at residential properties in Frodsham and no exceedance of the PM₁₀ national objectives has been recorded in the AQMA. Similarly, PM_{2.5} monitoring shows that background levels were well below EU limits¹⁴.
- 9.3 CWaC's Air Quality Annual Status Report (2020/2021) states that; *'there is a discernible downwards trend in NO₂ and PM₁₀ concentrations over time'*. The report also states that CWaC has installed numerous EV charging points and plans to expand the charging network significantly over the next few years.
- 9.4 Other measures being pursued by CWaC to encourage the switch to electric vehicles include the use of planning conditions on new developments, revised parking standards and the trialling of an e-scooter scheme. Whilst some of the recent decline in emissions may be associated with Covid-19 and working from home, earlier, pre-pandemic, air quality reports show similar trends for the Frodsham AQMA.
- 9.5 In terms of housing allocations, the sites allocated in the FNP are within existing urban areas and centrally located with good access to services and facilities. The largest site allocated; Land behind the Health Centre, is around 700m (as the crow flies) from the AQMA. However, this brownfield site is well located with good access to public transport (including the railway station), health, leisure, retail facilities and employment opportunities, all of which should significantly reduce the number and frequency of car journeys. Some of the policies within the FNP such as H1 (Location of housing development) are potentially positive as they support active travel by locating development in accessible locations including brownfield sites within the settlement boundary. There is also a preference for any additional development to be located within 800m of the junction of Church St and Main St, which ought to encourage car free travel for local trips in new developments.
- 9.6 The accompanying policy for Site FRO/0038 states that consideration should be given to a one-way system and/or solutions to narrow lanes.

¹⁴ [CWAAC 2020/2021 Air Quality Annual Status Report \(Sept. 2021\)](#)

- 9.7 This is positive in relation to reducing congestion and improving traffic flow (with secondary effects in terms of air quality), but it is uncertain what this solution would be and whether it could be funded.
- 9.8 Pooling funding from all the site allocations in the Plan could be a way to secure the necessary enhancements to the road network, but this would require the use of Community Infrastructure Levy.
- 9.9 Policies H5 (Design and Character) and CA1(Footpaths and Cycle Paths) are also positive with respect to air quality as they require development proposals to provide safe pedestrian access and footway connections to nearest walking / cycling routes; which is likely to facilitate active travel, potentially reducing car journeys.
- 9.10 Policy CA2 encourages the provision of EV charging points in all new developments. Policy CA1 (Footpaths and Cycle Paths) is likely to encourage walking and cycling journeys as it seeks to make Frodsham a cycle friendly town by supporting proposals that implement the recommendations set out in a Cycle Strategy for Frodsham. The latter suggests improvements to make *'Frodsham a sustainably connected and cycle friendly town in order to satisfy the needs of those cycling to places of education, employment and leisure'*¹⁵. The strategy includes a safe cycle route linking the Town Centre and Overton to Helsby High School with connections further afield linking Chester, through Frodsham to Runcorn and Warrington via a single scheme. Connection to Runcorn and Warrington (important for commuters) are also proposed. Recreation and leisure routes are also proposed through the Weaver Valley and at Lady Heyes, Kingsley Village and Delamere Forest. These would potentially enable access to services and facilities within Frodsham and Kingsley.
- 9.11 Overall, the level of growth proposed, even when considered in combination with the Local Plan allocations, is unlikely to give rise to significant adverse effects on air quality. The increase in traffic associated with new development is counteracted to an extent by well-located development sites with good access to services and facilities. Furthermore, the provision of EV charging infrastructure and promotion of enhanced pedestrian and cycle links should encourage more sustainable modes of travel. As a result, no significant deviations from the baseline are anticipated, and **broadly neutral effects** are concluded overall.

¹⁵ [Cycle North Cheshire report "A Cycle Strategy for Frodsham"](#)

Biodiversity

- 9.12 There are several international, European and national, protected biodiversity sites within the Neighbourhood Plan area. These include Mersey Estuary SSSI, SPA and Ramsar site, Beechmill Wood and Pasture SSSI, Frodsham Railway and Road Cuttings SSSI and Dunsdale Hollow SSSI. Additionally, there are several Local wildlife Sites (LWS) such as at Frodsham and Overton Wood, East Clifton Top, Sutton Bridge Lagoon, Frodsham Marshes and Hob Hey Wood. The Mersey Estuary also overlaps part of the North West Marine Plan area. These and other significant habitats in Frodsham are given protection at strategic level through policies in the Cheshire West and Chester Local Plan Parts 1 and 2.
- 9.13 In terms of housing sites, all of Frodsham parish is within the Impact Risk Zone of up to three SSSIs, namely Beechmill Wood and Pasture, Dunsdale Hollow, and Frodsham Rail and Road Cuttings. However, the site check (GIS data in Magic Map) indicates that developments of 50 or more residential units outside of the existing settlements / urban areas would require consultation with Natural England on likely risks. The only site in the FNP that is larger than 50 units is at Land behind the Health Centre which is allocated for up to 65 dwellings but the site is within the existing settlement/ urban area of Frodsham and therefore does not fall within the categories requiring consultation with NE. Nevertheless, the site (despite being brownfield) contains trees and other vegetation and is likely to have value to biodiversity. Development at the scale proposed is likely to lead to disturbance to species and a loss of habitat. It is also considered that it could be difficult to achieve biodiversity net gain on site given the number of dwellings being proposed. The accompanying site policy states that mature trees should be retained wherever possible, but it is likely that there is biodiversity value beyond only mature trees. It could be more beneficial to state that a landscape / biodiversity buffer zone should be retained around the site, which coincides with much of the existing vegetation. This would help to reduce the loss of vegetation, and also aid in screening the new development.
- 9.14 Cumulatively, new residential developments in Frodsham should consider recreational disturbance impacts on the coastal designated sites (Mersey Estuary). This issue was considered in the Habitats regulations assessment (HRA) of the FNP¹⁶.
- 9.15 The HRA considered the impacts of the FNP on European sites in the FNP area. This included several possible impact pathways including air pollution, water pollution and recreational pressures. At the screening stage, one site; the Mersey Estuary Ramsar SPA was identified as being potentially susceptible to recreational pressure. The HRA identified (screened-in) two FNP policies; H1 (Location of housing development) and EDVE2 (Tourism and visitor economy) as likely to have significant effects and assessed further to ascertain their likely effects on Mersey Estuary Ramsar SPA. The remaining policies were screened out as they are not likely to produce significant effects. The proposed housing sites allocated by the FNP are within 4.5km of the Mersey Estuary Ramsar and SPA. The closest site to the SPA boundary is FRO/0039 (Land to rear of 15-23 St Hilda's Drive), which is 2.3km away.

¹⁶ AECOM report (Oct. 2021) "Habitats Regulations Assessment: Frodsham Neighbourhood Plan"

- 9.16 Residential development within the FNP area may lead to increased visitors to the Mersey Estuary Ramsar/SPA when considered in-combination with growth across the district (including the amount of housing allocated for Frodsham in the Local Plan) and in surrounding districts. However, Frodsham is relatively isolated from the SPA/Ramsar due to the M56, Frodsham Marsh and the Manchester Ship Canal. The most accessible parts of the SPA/Ramsar are on the opposite side of the River Mersey. Consequently, growth in Frodsham would probably make a very minor contribution to recreational pressure in the SPA/Ramsar site.
- 9.17 Policy EDVE2 (Tourism and the visitor economy) seeks to enhance visitor attractions in Frodsham and promote the future use of the Weaver navigation and the adjoining riverside and the Sandstone Ridge. The policy is likely to result in increased visitor numbers to these areas with an associated increase recreational pressures on the sensitive receptors such as the Frodsham Marshes. The latter also serves a valuable role in providing supporting habitat for the Mersey Estuary/ Ramsar site. The HRA identified recreational pressures as an impact pathway on the Mersey Estuary therefore there could be some potential adverse effects in terms of biodiversity. However, the policy does acknowledge these issues and states that development will need to demonstrate that environmental impacts have been addressed, and that no adverse effects upon the function or ecological value of Frodsham Marshes occurs.
- 9.18 There are several policies within the FNP seeking to protect and enhance green and recreational space provision in the Parish. Policies GSRL1 (To designate local greenspace) and GSRL2 (Protecting and enhancing green and open spaces) and GSRL3 (Maintaining our green and open spaces) support the designation and protection of Frodsham's local green spaces affording priority to developments that retain, protect and provide new green space for communal use. The accompanying text to GSRL1 includes an extensive list of potential sites for designation as Local Green Space.
- 9.19 Some of the spaces identified in these policies serve an important function as biodiversity habitats and maintaining them can help reduce fragmentation resulting from development. Therefore, this set of policies is likely to produce **positive effects** on biodiversity. Enhancements could be achieved through a more proactive approach to biodiversity protection and enhancement. For example, the emphasis in the green / open space policies appears to be on recreation, community and cultural activities. They would benefit from more explicit reference of the need to protect and enhance the biodiversity value of open space.
- 9.20 Overall, mixed effects are considered likely; the proposed housing site allocations are not expected to give rise to significant adverse effects on biodiversity, but there could be minor negatives in relation to the loss of trees and vegetation.
- 9.21 Policy EDVE2 has the potential for **minor negative effects** as it could increase recreational pressures on the Frodsham Marshes and the Mersey Estuary biodiversity sites. However, the HRA confirms that the effects would not be significant.
- 9.22 **Minor positive effects** are predicted for policies GSRL1,2, 3 and 4 as these will result in the protection and enhancement of open greenspaces within the Parish which could help reduce habitat fragmentation and provide stepping-stones for biodiversity.

- 9.23 However, the policies could be improved with a more explicit focus on the value of green and open spaces for biodiversity and by seeking to enhance biodiversity value as well as community and recreational value.

Climate change (adaptation)

- 9.24 In terms of climate change adaptation, the NP area falls predominantly within Flood Zone 1, although there are stretches of Flood Zone 2 and 3 running along the Mersey Estuary, the River Weaver and a band along the M56. There is potential for surface water flooding to occur across the FNP area, although areas susceptible to this are scattered amongst areas with lower risk of fluvial flooding.
- 9.25 In terms of housing site allocations, all of the sites allocated in the FNP are in areas at low risk of flooding from rivers (Flood Zone 1). In this respect, neutral effects are anticipated.
- 9.26 In terms of surface water flood risk throughout the Plan area, the larger three sites (Brook Works, Land at Greenfield Lane and Land at the Health Centre) are previously developed and therefore changes to rates of run-off are unlikely to be significantly worse as a result of development. In fact, on these sites it is possible that an improvement could be achieved through the provision of gardens and / or community green space. There will also be opportunities to implement sustainable urban drainage measures into new developments to help better manage surface water run-off and flood risk (the Local Plan Part 2 also seeks an improvement from previously developed sites in terms of surface water run off).
- 9.27 In terms of surface water flood risk to new developments, the Brooks Work site and Greenfield Lane site both contain areas that are at 'low risk' of flooding (i.e. this area has a chance of flooding of between 0.1% and 1% each year). This risk would need to be managed through mitigation measures. It is considered that the existing policy framework is sufficient to ensure that significant effects do not arise (i.e., there is a requirement in the Local Plan DM Policy 40 for flood risk assessments to be undertaken to demonstrate that flood risk is managed and acceptable). The NP also requires the consideration of SUDs, which complements DM41 in the Part 2 Local Plan.
- 9.28 Well planned green infrastructure can help an area adapt to and manage the risks of climate change (including flood risk). Green open spaces can provide several flood mitigation features; by providing space for flood water, reducing permeability of built-up areas and attenuating surface water flow. Enabling and providing for green infrastructure within Frodsham is therefore a key means to promoting climate change adaptation measures within the FNP.
- 9.29 In this context, policies GSRL1 (To Designate Local Green Spaces) and GSRL2 (Protecting and Enhancing Green and Open Spaces) and GSRL3 (Maintaining Our Green and Open Spaces) which support the designation and protection of Frodsham's local green spaces are likely to have beneficial effects.
- 9.30 Areas of green, open space also offer climate change mitigation services through carbon sequestration and a reduction in urban heat island effects. Policy GSRL3 in particular mentions that support will be given to rainwater harvesting within green and open spaces. Therefore, this set of policies is expected to have positive effects on climate change adaptation.

- 9.31 Overall, most of the new development will be located within areas of minimal flood risk (both fluvial and pluvial). A proportion of new development will be located in areas of some greater surface water flood risk, but this would still be low risk. There will be a need to manage these risks and seek to improve existing run-off rate, but there are suitable policies in place to ensure that significant effects are avoidable. Therefore, the residual effects are expected to be **neutral**.
- 9.32 Wider measures in the Plan seek to protect enhance and provide green and open space which should help to ensure the area is broadly more resilient to climate change. This could lead to **minor long-term positive effects** with regards to climate change adaptation.

Health and wellbeing

- 9.33 The health and wellbeing of residents will be supported by FNP policies which support a high-quality public realm (through the FNP Design Code which is a supporting document to the FNP), local distinctiveness and landscape / townscape character. This is discussed to some extent under the 'Landscape' and 'Historic Environment' SEA themes below.
- 9.34 Policy H5 (design and character) requires new development to demonstrate adherence to the design principles and guidance in the Frodsham Design Codes and the Frodsham Town Design Statement.
- 9.35 Policy H2 (Housing layout and design) requires all developments to respect views and vistas in Frodsham and include appropriate planting schemes wherever possible.
- 9.36 A high-quality living environment will also be supported through GSRL set of policies (GSRL1 to 4), which seek to protect (including through Local Green Space designations) and enhance the Plan area's most valued open and green spaces. Community engagement highlighted that parks, gardens, recreation facilities and green spaces, are all highly valued and appreciated by residents and visitors. This set of policies supports developments that retain, protect and provide new green space for communal use. The accompanying text to GSRL1 includes an extensive list of potential sites for designation as Local Green Space including play areas and formal and informal recreation areas. The health benefits of such spaces is highlighted in GSRL2 which promotes developments that enhance foot and cycle paths and embed physical activity e.g. through the provision of public exercise equipment in parks in green spaces.
- 9.37 Several policies support increased use of open space for events and recreation, which is positive for health. However, it is possible that this could lead to amenity issues if it attracts littering. In this respect, Policy GSRL3 is beneficial as it mentions the need for open spaces to be well served by recycling facilities.
- 9.38 An important policy in the FNP is GSRL5 (Enhancing Health and Well-Being in the Community) which seeks to encourage exercise and recreation through the use of public open space.
- 9.39 Residents' health and wellbeing is further supported by policies (H1) which facilitate active travel (walking and cycling) by locating development in accessible locations including centrally located brownfield sites within the settlement boundary.

- 9.40 Similarly, the FNP requires developments to provide safe pedestrian access and footway connections to nearest walking/ cycling routes (H5, CA1) and aims to make Frodsham a cycle friendly town.
- 9.41 It is considered that the FNP will support health indicators relating to housing by providing high-quality new homes that meet identified local housing needs. The FNP allocates around 97 new homes to enable the delivery of sustainable housing tailored to meet the needs of the parish. This will enable the FNP to meet and exceed CWaC's housing requirement for the NP area thus ensuring flexibility in the type, size and affordability of new homes in the parish.
- 9.42 Overall, the proposed spatial strategy and policy provisions seek to protect resident health and wellbeing, deliver improved public realm, open green and recreational spaces and promote active travel opportunities. The housing allocations seek to meet specific community needs, and support downsizing and the provision of affordable housing. As a result, **potential moderate long-term positive effects** on health and wellbeing are anticipated.

Historic environment

- 9.43 There are numerous historic environment assets which contribute to the attractiveness and character of Frodsham. Future growth in the Plan area has potential to affect the setting and significance of assets.
- 9.44 In terms of housing site allocations, two of the allocated sites (at 64 Main Street and Brook Works) were assessed in the SOA as potentially impacting the historic environment. The 64 Main St. site (FRO/0010) is within the Frodsham conservation Area (CA) and is adjacent to a Grade 2 listed entrance / gates associated with the Army Premises next door. The site, currently a restaurant, is allocated for 1 dwelling in Policy FRO/0010A/B. The policy requires that the building is retained or converted in keeping with the current scale and respecting the character of the CA setting. It also requires that any work carried out should minimise the effect on the adjacent Grade II listed structure. Materials and architectural style should respect the existing character and the CA setting. Given the existing commercial premises in this location and with appropriate mitigation (as provided through the policy) it should be possible to develop this site without adversely impacting the adjacent listed building and the character and setting of the CA. It should be noted that an application has already been submitted to the Council for reuse of the building as 3 residential units.
- 9.45 The Brook Works site is allocated for up to 12 residential units as well as business use in policy S/07A. The site comprises Brook House, a Grade II listed building which is currently used for residential and business use (small workshops). The policy stipulates that the Grade II listed building should be retained and the heights, and materials used in any development should respect the existing setting and the CA. The policy is potentially positive as it would help ensure this heritage asset remains in use into the future. The policy provisions should help ensure a development that is appropriate to the character and setting of the CA. This is likely to be positive given that the building could otherwise fall into disrepair. A recommended enhancement would be to require that features within the Listed Buildings are restored and enhanced (rather than only requiring that the buildings must be 'retained').

- 9.46 Policy H6 (Heritage assets) states that development should protect or enhance both designated and non-designated heritage assets and their settings. The policy stipulates that the special interest and character and appearance of the CA must be retained and seeks to preserve special features and traditional materials. The policy also promotes the sensitive re-use of redundant heritage assets.
- 9.47 A primary plan aim is for Frodsham to ‘value its community and heritage’ with the associated objective to ‘ensure the built environment fits in with the local character of Frodsham in terms of materials, scale, accessibility and sustainability’. The cumulative effects of growth on the historic environment could also have negative implications, particularly as a result of increased traffic and congestion. The Plan seeks to combat this through well located (for facilities and services) and well connected developments that integrate pedestrian and cycle paths within developments and linking to surrounding streets, spaces and access to sustainable transport.
- 9.48 Overall, the potential for **minor positive effects** is recognised, namely through the policies seeking to preserve the character and settings of the historic environment including the CA and policies seeking to ensure the continued appropriate use of heritage assets and re-use of under-used heritage assets.

Landscape

- 9.49 The spatial strategy in the FNP allocates housing growth within the existing urban built-up areas of the town. The SOA concluded that all the sites allocated for development are in areas of relatively low landscape sensitivity.
- 9.50 The adopted Local Plan (CWaC LPP2) policy ENV2 (Landscape) seeks to protect and enhance landscape character and local distinctiveness by identifying key gaps with the objective of protecting these by maintaining their character, supporting designation of Local Green Space and protecting the borough’s estuaries and undeveloped coast. Policy GBC2 includes Frodsham Hill in a list of Areas of Special County Value (ASCV) highlighting their special landscape character and scenic value. The policy states that such areas ‘must be protected from development that would unacceptably harm their landscape character, appearance or setting’. However, depending on the scale of development, a lack of overall vision and framework could result in the delivery of less sympathetic development styles, layouts and material choice.
- 9.51 In this context the FNP’s Design Code (FDC) is central as it seeks to ensure the preservation of the character of Frodsham’s landscapes. This includes requirement that ‘development should be planned to respond to existing view corridors...’ and ‘key vistas should be protected by controlling development densities and building heights, particularly when in the sight lines of local landmarks.’ The FDC also advocates ‘high quality designs which use local materials, forms, massing and detailing to reflect the existing built fabric of Frodsham’. Frodsham’s heritage assets and townscape character are also offered protection in the FDC which states that ‘developments will be required to respect and respond positively to these assets, and must ‘protect or enhance both designated and non-designated heritage assets, and the character and setting of areas of acknowledged significance’.

- 9.52 Development would be required to 'respect the existing character area and conservation area setting, including minimising any work that may affect the heritage assets located near to any development'.
- 9.53 Other policies within the FNP such as GSRL1 – GRSL3 (relating to green and open spaces) and H2 (Housing layout and design) will also have beneficial impacts on the landscape character of Frodsham, serving to protect key aspects of the landscape and townscape such as open green spaces and important view and vistas.
- 9.54 Overall, given that the proposed development sites are in areas of low landscape sensitivity with policy mitigation provided at strategic and neighbourhood levels (as well as through the FNP Design Code), then **neutral effects** are predicted on landscape.

Population and housing

9.55 Local Plan policies STRAT 2 to STRAT 8 (LPP1) seek to ensure that new development in Cheshire west and Chester is brought forward in line with identified needs. The Plan also makes provision for a specific level of development to be brought forward in Frodsham, identified as one of ten Key Service Centres. The Plan allocates 250 dwellings in Frodsham (Policy STRAT8). Policy ECON2 seeks to maintain the important role of Frodsham's town centre as a retail and service centre.

9.56 Policies SOC3 and SOC5 (LPP1) support mixed, balanced, sustainable communities through the provision of market and affordable housing that meets identified future needs.

9.57 The FNP policies (FRO/005/0010/0038/0039 and S/01/07/10) seek to deliver around 97 new homes across 6 sites, within the existing urban settlement of Frodsham. The sites in order of size are listed below:

- The largest site is at Land behind Frodsham Health Centre (policy S/01A); a large (0.84ha) brownfield site (former school) within 200m of the retail and service centres at Church St and Main St. The site is allocated for a high density development of up to 65 dwellings. The scheme is envisaged to help provide smaller homes for older residents looking to downsize as well as starter homes for young families.
- Land off Greenfield Lane (policy FRO/0038) is allocated for up to 10 dwellings and on the northern edge of Frodsham High street (currently Frodsham Sea Scouts HQ).
- The Brook Works site is located for up to 12 units and comprises a Grade II listed building (currently in mixed residential and business use) located in the Frodsham Conservation area.
- Land to rear of St Hilda's Drive (policy FRO/0039) comprises a 0.11ha plot within an existing residential area, surrounded by the rear gardens of properties on St Hilda's Drive and a 2-storey block of flats.
- Two small sites at: Penkmans Lane (2 units allocated in policy S/10A), and 64 Main street (1 unit in policy FRO/0010A).

9.58 The sites combined will provide up to 97 new homes. When completions (191) and commitments (27) are taken into account, a total of 315 new dwellings would be delivered over the Local Plan period (2010-2030). This represents a 25% uplift to the housing requirement figure for Frodsham thus meeting and exceeding the housing identified in the Local Plan. This additional provision serves to provide an element of flexibility in the housing choice (types, size and affordability). Therefore, significant long-term positive effects are anticipated in this respect.

9.59 The FNP seeks to complement Local Plan Policy SOC3 (Housing mix and type) which supports mixed, balanced, sustainable communities, providing a mix of housing types, tenures and sizes. The FNP policy H3 (Housing mix and type) requires proposals for new housing to provide a mix of house types, tenures and sizes that takes local needs into account. Policy H4 (Affordable housing – the local connection test) requires development sites of 3 or more dwellings or greater than 0.1ha to include 30% affordable housing (AH).

- 9.60 This is to be provided in perpetuity and offered to those with local connection to Frodsham. These policies are predicted to have positive effects as they help offer a mix of types, sizes and tenure increasing choice in the market as well as providing AH.
- 9.61 Policy H4 should also help create sustainable communities by providing affordable options to younger residents and young families to remain in the area by offering them more affordable housing options. The FNP steering group conducted a housing needs survey that identified a need for downsizing to release larger properties that are currently under occupied.
- 9.62 This would be particularly beneficial to growing families in need of larger properties and would also benefit some of the older residents who may wish to live in smaller more manageable and / or suitably adapted properties. The site at Frodsham Health Centre (allocated in policy S/01A) is favoured by the community for such a development.
- 9.63 One of the aims of the FNP is to 'be...thriving and sustainable' with the accompanying objective to 'provide a mix of dwellings, that meet the needs of Frodsham now and in the future, and address the changing demographics and the towns sustainability'. This was echoed in the housing survey which highlighted the need for affordable tenures such as Starter Homes, social, rented and shared ownership tenures which are seen as a priority to enable younger residents to remain in the area.
- 9.64 Overall, **significant long-term positive effects** are anticipated as a result of the growth strategy, which will meet and exceed Frodsham's housing requirement figure thus providing a buffer to better secure housing delivery and potentially deliver more choice and flexibility in the local housing market. The housing policies are also likely to help younger residents to remain in the area ensuring the long-term sustainability of Frodsham's community.

Transportation

- 9.65 The NP area is connected to the strategic road network by the M56 which passes through the centre of the Plan area and connects Frodsham to Manchester, Warrington, Runcorn to the east and Ellesmere Port in the west. The A56 also connects Frodsham to Chester to the south and to Warrington in the north. There are several smaller B roads (B5393 and B5152) which provide access to the more rural parts of Frodsham to the south beyond the main settlement.
- 9.66 The Frodsham residents' survey highlighted concerns regarding traffic and congestion in the area. Traffic and congestion on the A56 have increased noticeably with the expansion of the Frodsham settlement boundaries, especially during busy periods. In residential areas, roads tend to have lower levels of traffic, but on-street parking contributes to congestion in some locations, particularly near schools and businesses at peak times. There are also some small lanes and streets that contribute to congestion and access problems.
- 9.67 The FNP seeks to address the traffic implications of additional development by locating development sites in well-connected locations with very good access to local services, retail, health and leisure facilities.

- 9.68 Policies such as CA1 and CA3 are also likely to have beneficial effects as they require development proposals to provide safe pedestrian access and footway connections to the nearest walking / cycling routes which should encourage active travel and reduce car journeys.
- 9.69 Policy CA2 is likely to encourage cycle journeys as it seeks to make Frodsham a cycle friendly town by supporting proposals that implement the recommendations set out in a Cycle Strategy for Frodsham. The latter proposes several cycle routes linking the Town Centre to schools and employment centres in neighbouring towns.
- 9.70 Several policies address the issue of on-street parking by requiring new development to include adequate off-street parking and parking to be provided either on a drive or courtyard for specific housing allocations (S10, FRO/005B, FRO/0038, FRO/0039).
- 9.71 This set of policies is potentially helpful in alleviating some of the on-street parking issues and associated congestion on residential roads described above.
- 9.72 Nearly half of residents rely on a private car to travel to work,¹⁷ though the proportion of residents who work from home is higher in Frodsham than in the wider Borough. Working from home is likely to have increased substantially since the start of the Covid-19 pandemic. This positive trend in relation to transport is considered likely to prevail in the short term, further supporting reduced congestion at peak times, and subsequently contributing towards meeting climate commitments.
- 9.73 The FNP's policy GSRL2 is supportive of digital connectivity as it promotes the provision of high-quality broadband / internet access throughout the town, including in parks and green spaces. This is potentially beneficial as it would enable more residents to work from their homes, local parks, public spaces, cafes or neighbourhood centres, instead of having to travel to an office. Similarly, policy EDVE1 identifies locations (such as Brook House) where offices, flexible light industrial units and 'working from home' business hubs are promoted. Having such facilities in centrally located premises would enable more residents to work locally without the need to travel further afield and /or commute to traditional places of work.
- 9.74 Overall, whilst measures are implemented to bolster sustainable transport connections, including active travel connections, **minor long-term negative effects** are anticipated as a result of a likely residual increase in vehicular traffic in the area. Coupled with narrow lanes and congestion issues in parts of Frodsham, an increase in car traffic would likely be negative.

¹⁷ 2011 Census

10. Conclusions and recommendations

- 10.1 This chapter summarises the appraisal findings in relation to each of the SEA themes. Where appropriate, recommendations have been made with regards to mitigation and enhancement measures at this stage¹⁸.
- 10.2 Overall, the Plan appraisal has served to highlight the potential for mostly positive effects. Significant **long-term positive effects** are anticipated in relation to the population and housing SEA theme as a result of the growth strategy which will meet and exceed strategic growth targets set in Local Plan; helping to improve choice and potentially affordability. The additional growth also serves to provide a buffer to better secure housing delivery. The provision of smaller dwellings (at the land behind Frodsham Health Centre) will help to facilitate downsizing for older residents who may wish to move to smaller more manageable homes and also enable young adults to get a foothold on the property ladder through affordable tenures (such as affordable rents and First Homes).
- 10.3 **Neutral effects** are predicted for the Air Quality SEA Theme as the small increase in traffic associated with new development is counteracted by well-located development sites with good access to services and facilities. Furthermore, the provision of EV charging infrastructure and promotion of enhanced pedestrian and cycle links should encourage more sustainable modes of travel.
- 10.4 Mixed effects are predicted with respect to biodiversity; whilst neutral effects are predicted in relation to the spatial growth strategy, potentially **minor negative effects** are predicted through Policy EDVE2 as it may lead to increased recreational pressures on the Frodsham Marshes and the Mersey Estuary biodiversity sites.
- 10.5 **Minor positive effects** are anticipated on the historic environment through policies seeking to preserve the character and settings of the historic environment including the Frodsham Conservation Area and policies seeking to ensure the continued use of heritage assets and re-use of 'redundant' ones. Further enhancements could be made to policy through explicit mention of the need to restore and enhance heritage features, rather than only 'retention'.
- 10.6 **Minor positive effects** are expected in relation to health and wellbeing, predominantly reflecting the potential for; improved public realm, connected and resilient development, and the allocation of Local Green Space, walkways and cycle routes.
- 10.7 **Minor negative effects** on transportation are considered likely due to increased traffic and congestion within the Plan area.
- 10.8 **Neutral effects** are predicted on landscape as the proposed development sites are in areas of low landscape sensitivity with policy mitigation provided at strategic and neighbourhood levels as well as through the FNP Design Code.

¹⁸ It should be noted that the SEA process is iterative, and therefore mitigation and enhancement measures proposed at previous stages of appraisal may already have been taken into account in the revised versions of the Plan. As such, the focus on this stage is on any remaining recommendations.

Part 3: What are the next steps?

11. Plan finalisation

- 11.1 This Environmental Report accompanies the submission version of the FNP.
- 11.2 The 'submission' version of the plan will be submitted to CWaC (alongside an Environmental Report Update, if necessary). The plan and supporting evidence will be then published for further consultation, and then submitted for examination.
- 11.3 If the outcome of the Independent Examination is favourable, the FNP will then be subject to a referendum, and the plan will be 'made' if more than 50% of those who vote are in support. Once made, the FNP will become part of the Development Plan for Cheshire West and Chester.

12. Monitoring

- 12.1 The SEA regulations require 'measures envisaged concerning monitoring' to be outlined in this report.
- 12.2 It is anticipated that monitoring of significant effects of the Neighbourhood Plan (identified through this SEA) will be undertaken by CWaC as part of the process of preparing its Annual Monitoring Report (AMR).
- 12.3 The SEA has not identified any potential for significant negative effects that would require closer monitoring.
- 12.4 A significant positive effect is predicted for the population and housing theme. It is suggested that the following monitoring measures be included in the AMR in relation to housing delivery in Frodsham:
- Annual net housing completions.
 - Affordable housing delivery.

Appendices

Appendix I: Meeting the Regulations

As discussed in Chapter 1 above, Schedule 2 of the Environmental Assessment of Plans Regulations 2004 (the Regulations) explains the information that must be contained in the Environmental Report; however, interpretation of Schedule 2 is not straightforward. Table AI.1 links the structure of this report to an interpretation of Schedule 2 requirements, whilst Table AI.2 explains this interpretation. Table AI.3 identifies how and where within this report the requirements have been met.

Table AI.1: Questions answered by this report, in-line with an interpretation of regulatory requirements

	Questions answered		As per regulations, the report must include...
Introduction	What's the plan seeking to achieve?		▪ An outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes
	What's the SEA scope?	What's the sustainability 'context'?	▪ Relevant environmental protection objectives, established at international or national level ▪ Any existing environmental problems which are relevant to the plan including those relating to any areas of a particular environmental importance
		What's the sustainability 'baseline'?	▪ Relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan ▪ The environmental characteristics of areas likely to be affected ▪ Any existing environmental problems which are relevant to the plan including those relating to any areas of a particular environmental importance
		What are the key issues and objectives that should be a focus?	▪ Key environmental problems / issues and objectives that should be a focus of (i.e. provide a 'framework' for) assessment
Part 1	What has plan-making / SEA involved up to this point?		▪ Outline reasons for selecting the alternatives dealt with (and thus an explanation of the 'reasonableness' of the approach) ▪ The likely significant effects associated with alternatives ▪ Outline reasons for selecting the preferred approach in-light of alternatives assessment / a description of how environmental objectives and considerations are reflected in the draft plan
Part 2	What are the SEA findings at this current stage?		▪ The likely significant effects associated with the draft plan ▪ The measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the draft plan
Part 3	What happens next?		▪ A description of the monitoring measures envisaged

Table AI.2: Interpretation of the regulations

Schedule 2	Interpretation of Schedule 2		
The report must include...	The report must include...		
(a) an outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes;	An outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes	i.e. answer - <i>What's the plan seeking to achieve?</i>	i.e. answer - <i>What's the scope of the SA?</i>
(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan	Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance	i.e. answer - <i>What's the 'context'?</i>	
(c) the environmental characteristics of areas likely to be significantly affected;	The relevant environmental protection objectives, established at international or national level	i.e. answer - <i>What's the 'baseline'?</i>	
(d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan'		
(e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation;	The environmental characteristics of areas likely to be significantly affected		
(f) the likely significant effects on the environment including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance	i.e. answer - <i>What are the key issues & objectives?</i>	
(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan;	Key environmental problems / issues and objectives that should be a focus of appraisal		
(h) an outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information	An outline of the reasons for selecting the alternatives dealt with (i.e. an explanation of the 'reasonableness of the approach')	i.e. answer - <i>What has Plan-making / SA involved up to this point?</i> [Part 1 of the Report]	
(i) a description of the measures envisaged concerning monitoring.	The likely significant effects associated with alternatives, including on issues such as... ... and an outline of the reasons for selecting the preferred approach in light of the alternatives considered / a description of how environmental objectives and considerations are reflected in the draft plan.		
	The likely significant effects associated with the draft plan	i.e. answer - <i>What are the assessment findings at this current stage?</i> [Part 2 of the Report]	
	The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects of implementing the draft plan		
	A description of the measures envisaged concerning monitoring	i.e. answer - <i>What happens next?</i> [Part 3 of the Report]	

Table AI.3: 'Checklist' of how (throughout the SEA process) and where (within this report) regulatory requirements are met

Regulatory requirement	Discussion of how requirement is met
A) The Environmental Report must present certain information	
1. An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes;	Chapter 2 ('What is the plan seeking to achieve') presents this information.
2. The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	These matters have been considered in detail through scoping work, which has involved dedicated consultation on a Scoping Report.
3. The environmental characteristics of areas likely to be significantly affected;	The 'SEA framework' – the outcome of scoping – is presented within Chapter 3 ('What is the scope of the SEA?').
4. Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.;	More detailed messages, established through a context and baseline review are also presented in Appendix II.
5. The environmental protection, objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation;	The SEA framework is presented within Chapter 3 ('What is the scope of the SEA'). Also, Appendix II presents key messages from the context review. With regards to explaining " <i>how...considerations have been taken into account</i> ", Chapter 7 explains 'reasons for supporting the preferred approach', i.e. explains how/ why the preferred approach is justified in light of alternatives assessment.
6. The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects);	Chapter 6 presents alternatives assessment findings (in relation to housing growth, which is a 'stand-out' plan policy area). Chapter 9 presents an assessment of the draft plan. With regards to assessment methodology, Chapter 8 explains the role of the SEA framework/scope, and the need to consider the potential for various effect characteristics/ dimensions.
7. The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	The assessment highlights certain tensions between competing objectives, which might potentially be actioned when finalising the plan, and specific recommendations are made in Section 9 and 10.

Regulatory requirement	Discussion of how requirement is met
8. An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Chapters 4 and 5 deal with 'Reasons for selecting the alternatives dealt with', in that there is an explanation of the reasons for focusing on particular issues and options. Also, Chapter 7 sets out reasons for selecting the preferred option (in-light of alternatives assessment).
9. Description of measures envisaged concerning monitoring in accordance with Art. 10;	Chapter 12 presents measures envisaged concerning monitoring.
10. A non-technical summary of the information provided under the above headings	The NTS is provided at the beginning of this Environmental Report.
B) The Report must be published for consultation alongside the draft plan	
Authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the Draft Plan or programme and the accompanying environmental report before the adoption of the plan or programme (Art. 6.1, 6.2)	At the current time, this Environmental Report is published alongside the 'pre-submission' version of the Neighbourhood Plan, with a view to informing Regulation 14 consultation.
C) The report must be taken into account, alongside consultation responses, when finalising the plan	
The environmental report prepared pursuant to Article 5, the opinions expressed pursuant to Article 6 and the results of any transboundary consultations entered into pursuant to Article 7 shall be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure.	This Environmental Report, and consultation responses received, will be taken into account when finalising the plan.

Appendix II: SEA Scoping Report

Frodsham Neighbourhood Plan

Strategic Environmental Assessment
Scoping Report

December 2021

Quality information

Prepared by

[REDACTED]

Graduate Consultant

[REDACTED]

Graduate Consultant

Checked by

[REDACTED]

Associate Director

Approved by

[REDACTED]

Associate Director

Revision History

Revision	Revision date	Authorized	Position
V1 Consultation draft	July 2021	[REDACTED]	Associate Director
V2 Revised post consultation revision	December 2021	[REDACTED]	Associate Director

Prepared for:

The Frodsham Neighbourhood Plan Steering Group

Prepared by:

AECOM Ltd.
1 New York St,
Manchester M1 4HD
United Kingdom

T: +44 (161) 601 1700
aecom.com

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Cover photograph:



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Acronyms

AQMA	Air Quality Management Area
ASR	Air Status Report
DEFRA	Department of Environment, Food and Rural Affairs
DPD	Development Plan Document
EA	Environment Agency
FNPP	The draft Frodsham Neighbourhood Plan
FTC	Frodsham Town Council
IMD	Index of Multiple Deprivation
LEP	Local Economic Partnership
LNR	Local Nature Reserves
LPP1	Cheshire West & Chester Local Plan Part 1 (adopted 2015)
LPP2	Cheshire West & Chester Local Plan Part 2 (adopted 2019)
LTP	Local Transport Plan
MHCLG	Ministry for Housing, Communities and Local Government
NDP	Neighbourhood Development Plan
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
NWMP	North West Marine Plan
ONS	Office for National Statistics
SEA	Strategic Environmental Assessment

1. Introduction

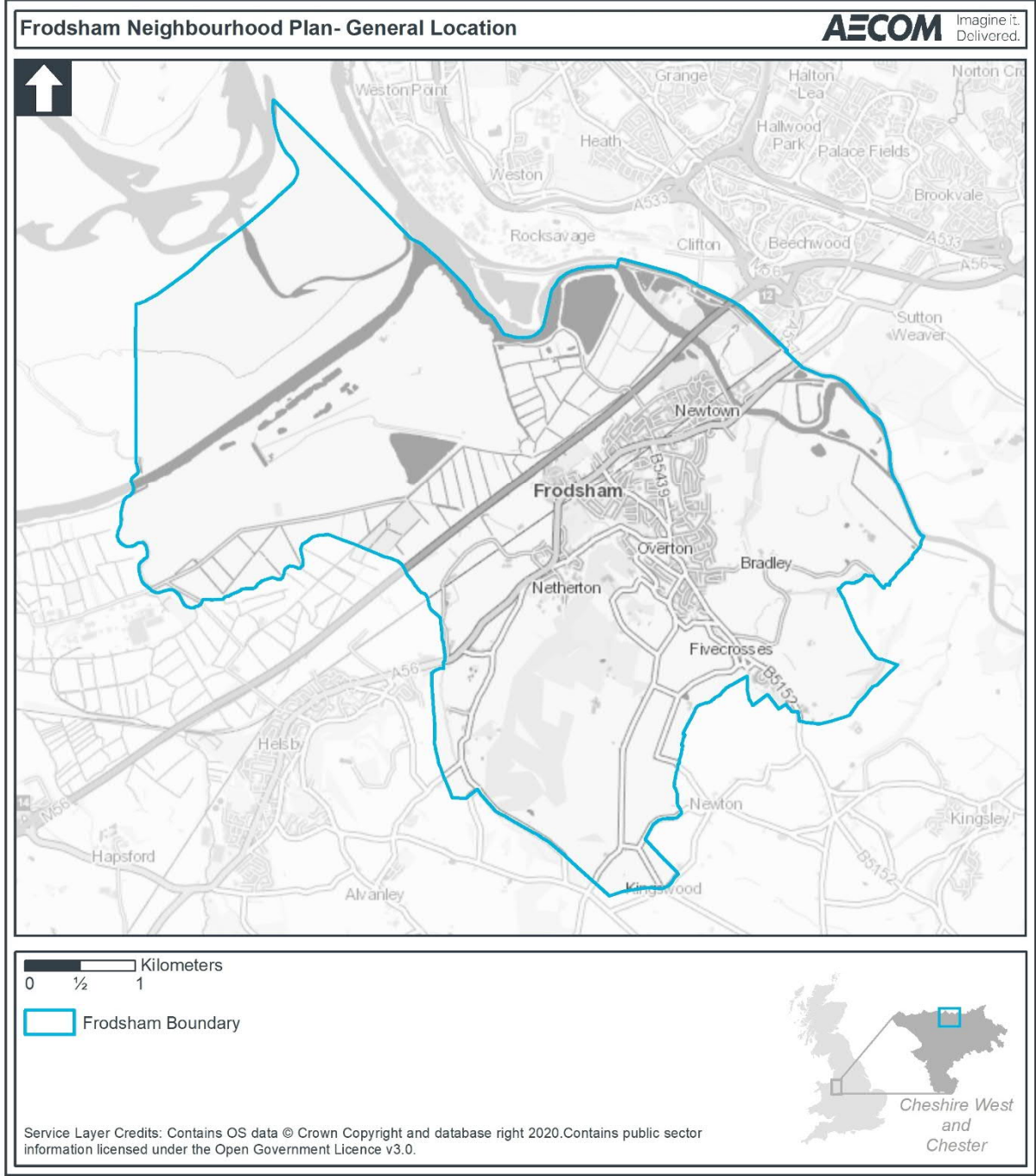
Background

- 1.1 Frodsham Neighbourhood Plan Steering Group, on behalf of Frodsham Town Council is in the process of preparing a Neighbourhood Development Plan (NDP) for the sustainable future growth of the Town. AECOM has been commissioned to undertake a Strategic Environmental Assessment (SEA) in support of Frodsham NDP on behalf of the Town Council.
- 1.2 The NDP is being prepared in the context of the adopted Cheshire West and Chester Local Plan Part 1 and Part 2 (LPP1 and LPP2, respectively). The NDP will form part of the development plan for Frodsham, alongside the Local Plan (parts 1 and 2).
- 1.3 NDPs are required to be in general conformity with the strategic policies of the adopted Local Plan and can develop policies and proposals to address local place-based issues. In this way it is intended for the Local Plan to provide a clear overall strategic direction for development in Cheshire West and Chester, whilst enabling finer detail to be determined through the Neighbourhood Planning process where appropriate.
- 1.4 The Key information relating to the Frodsham, NDP is presented in the table below (Table 1-1).

Table 1-1. Key facts relating to the NDP for Frodsham

Name of Responsible Authority	Frodsham Town Council
Title of Plan	Frodsham Neighbourhood Plan
Subject	Neighbourhood Planning
Purpose	The Frodsham Neighbourhood Plan is being prepared as a Neighbourhood Development Plan under the Localism Act 2011 and Neighbourhood Planning (General) Regulations 2012. The plan will be in general conformity with the Cheshire West and Chester Local Plan Parts 1 and 2. Once 'made' the Frodsham NDP will be used to guide and shape development within the Frodsham Neighbourhood Plan area.
Timescale	To 2030
Area covered by the plan	The Neighbourhood Plan area comprises the Civil Parish of Frodsham. It is located approximately 3 miles south of Runcorn, 16 miles (26 km) south of Liverpool, and 28 miles (45 km) southwest of Manchester. The River Weaver runs to its northeast and on the west it overlooks the estuary of the River Mersey. The A56 road and the Chester–Manchester railway line pass through the town, and the M56 motorway passes to the northwest. Frodsham is an electrical ward in the Cheshire West and Chester unitary authority (LPA).
Summary of content	The Frodsham Neighbourhood Plan will set out a vision, strategy and a range of policies including allocation of sites for housing development within the Neighbourhood Plan area
Plan contact point	Gill Hesketh; frodshamplan@gmail.com

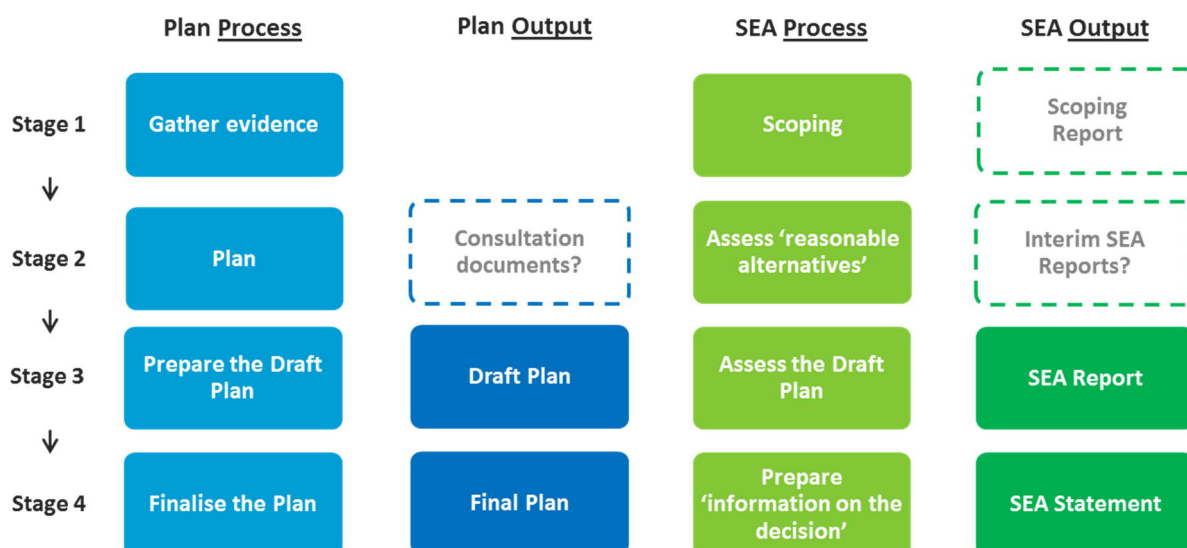
Figure 1-1 Frodsham NP Area Location



SEA explained

- 1.5 SEA is a mechanism for considering and communicating the likely significant effects of an emerging plan, and reasonable alternatives in terms of key environmental issues. The aim of SEA is to inform and influence the plan-making process with a view to avoiding or mitigating negative environmental effects and maximising positive effects.
- 1.6 The Environmental Assessment of Plans and Programmes Regulations 2004 (otherwise known as the SEA Regulations) require an environmental assessment to be carried out on certain plans and programmes that are likely to have a significant effect upon the environment. This plan has been determined to require a Strategic Environmental Assessment by Cheshire West and Cheshire Council. To meet this requirement, the plan is undergoing a SEA process which incorporates satisfies the requirements of the SEA Regulations.
- 1.7 SEA can be viewed as a four-stage process that produces a number of statutory and non-statutory outputs. As illustrated in Figure 1.2 below, 'Scoping' is a mandatory process under the SEA Regulations, but the publication of a scoping report is a voluntary (but useful) output. This is the stage of SEA that is covered in the Scoping Report.

Figure 1-2: SEA as a four step process



Introduction to scoping

- 1.8 One of the first stages in the SEA process is to establish the key issues that the appraisal should focus on and to set out appraisal methods. This is called 'scoping', and involves a review of relevant policies, plans and programmes (a 'contextual review') and information about the current and future state of the environment, economy and social factors (the 'baseline'). This information is then used to set out a framework for undertaking strategic environmental assessments as the plan is developed.
- 1.9 The Regulations¹ require that certain statutory bodies are consulted on the scope of a SEA. This can be done in a number of ways, but most often a Scoping Report is produced that presents the key information and a methodology for how future appraisals will be undertaken. Statutory Consultees have 5 weeks to comment on the scope of the appraisal. In England, the statutory consultees are Natural England, The Environment Agency and Historic England.
- 1.10 Developing the draft scope for the SEA as presented in this report has involved the following steps:
- Defining the broader context for the Frodsham NDP and associated SEA (i.e. EU, UK Government and local policy and commitments), to summarise the regulatory and legislative landscape;
 - Establishing the baseline for the SEA, (i.e. the current and future situation in the area in the absence of the Frodsham NDP) to help identify the plan's likely significant effects;
 - Identifying particular problems or opportunities ('issues') that should be a focus of the SEA; and
 - Developing a SEA Framework comprising objectives and appraisal questions based on these issues, which can then be used to appraise the draft plan.

¹ The Environmental Assessment of Plans and Programmes Regulations 2004

Scoping outcomes

- 1.11 The SEA Regulations and guidance document (the NPPG for example) encourage proportionate assessment and therefore it is important to scope out issues where it is apparent that the Plan could not affect the topic area in a significant way. In order to do this, an initial scoping sifting exercise has been undertaken.
- 1.12 As a result, a number of SEA topic areas have been scoped-out early without the need to establish a more detailed baseline position. For other topics, further detail was gathered through the scoping process, which led to additional topics being SCOPED OUT.
- 1.13 **Air Quality, Biodiversity, Climatic Factors (adaptation), Historic Environment, Landscape, Population and Housing and Transportation** have been identified for further assessment at the next stages of the SEA process.
- 1.14 The relevant SEA topic areas and the reasons for the scoping decisions are set out in Table 1-2 below.

Table 1-2: Scoping outcomes

SEA topic area	Scoping Outcomes
Air Quality	Considered in greater detail through the scoping process, and subsequently SCOPED IN . There is an AQMA in the NP area and the FNP can potentially have effects (positive or negative) on air quality
Biodiversity	Considered in greater detail through the scoping process and subsequently SCOPED IN . There are numerous sites of biodiversity importance within the NP area and the NP can potentially impact these.
Climatic factors	Considered in greater detail through the scoping process and subsequently climate change mitigation SCOPED OUT as the FNP is limited in its scope to influence mitigation. Climate change adaptation has been SCOPED IN as the Plan can impact resilience and adaptation (e.g. flood risk)
Historic Environment	Considered in greater detail through the scoping process and subsequently SCOPED IN . There are numerous heritage assets and a conservation area which can be impacted by the FNP.
Landscape	Considered in greater detail through the scoping process and subsequently SCOPED IN . There are sensitive landscapes in the FNP area and the FNP can potentially have effects (positive or negative) on these.
Waste	The Plan is unable to influence this to a significant extent and therefore this topic area can be SCOPED OUT . Key issues relating to waste will be to ensure adequate access for waste collection, and storage that does not affect the street scene.
Minerals	The plan does not pose any sterilisation risk to mineral resources. Therefore, this topic area can be SCOPED OUT .
Land, Soil and Water Resources	Considered in greater detail through the scoping process, but subsequently SCOPED OUT
Population and Housing	Considered in greater detail through the scoping process and subsequently SCOPED IN .
Health and Wellbeing	Considered in greater detail through the scoping process and subsequently SCOPED IN as the FNP can potentially contribute to increased Health and Wellbeing.
Transportation	Considered in greater detail through the scoping process and subsequently SCOPED IN . FNP policies have the potential to engender effects (positive or negative) on this topic.

Structure of this Scoping Report

1.15 The outcomes of the scoping exercise for the topic areas further considered in the scoping process (following the initial sift) have been presented as follows:

- Chapter 2: Air Quality;
- Chapter 3: Biodiversity;
- Chapter 4: Climatic factors (Flood Risk and Climate Change);
- Chapter 5: Historic Environment;
- Chapter 6: Landscape;
- Chapter 7: Land, Soil and Water Resources;
- Chapter 8: Population and Housing;
- Chapter 9: Health and Wellbeing; and
- Chapter 10: Transportation.

1.16 In accordance with the SEA Directive, the final chapters of the report summarise the overarching sustainability issues, set out the SEA Framework and outline the next stages in the process. To demonstrate a clear trail of how the SEA objectives have been identified, each topic Chapter (which is scoped into the SEA) concludes with suggested objectives and supporting criteria for inclusion in the SEA Framework. A site assessment framework is included is set out in Appendix A. This will be used to appraise the development sites allocated in the FNP.

2. Air Quality

2.1 This theme focuses on air pollution, in particular; air quality hotspots and areas known to exceed objectives for air quality.

Policy context

2.2 Table 2-1 presents the most relevant documents identified in the policy review for the purposes of the FNP SEA.

Table 2-1 Plans, policies and strategies reviewed in relation to air quality

Document Title	Year of publication	Weblink
National Planning Policy Framework (NPPF)	2019	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf
The Clean Air Strategy	2019	https://www.gov.uk/government/publications/clean-air-strategy-2019
UK plan for tackling roadside nitrogen dioxide concentrations	2017	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/633269/air-quality-plan-overview.pdf
A Green Future: Our 25 Year Plan to Improve the Environment	2018	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf
The North West Marine Plan	2021	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004490/FINAL_North_West_Marine_Plan_1_.pdf
The Cheshire West and Chester Low Emission Strategy (2018 – 2021)	2018	https://www.cheshirewestandchester.gov.uk/documents/pests-pollution-food-safety/pollution-and-air-quality/low-emission-strategy-180219.pdf
Cheshire West and Chester Council's Local Transport Plan (LTP)	2011	https://inside.cheshirewestandchester.gov.uk/policies_plans_and_strategies/local_transport_plan_20112026#:~:text=Cheshire%20West%20and%20Chester%20Council%27s%20Local%20Transport%20Plan,the%20local%20area%20in%20the%20years%20to%20come.
The CWCC Local Plan Part 1	2015	http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adopted?tab=files
The CWCC Local Plan Part 1	2019	https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/cw_lp_part_two/

2.3 The key messages emerging from the review are summarised below:

- The FNP will be required to be in general conformity with the NPPF, which seeks early planning to reduce/ mitigate air quality impacts in development and to take advantage of opportunities to improve air quality. Measures to improve air quality include traffic and travel management and green

infrastructure provision. Strategic development is expected to be focused in locations that have or will be provided with high levels of accessibility; supporting both a reduced need to travel and offering a genuine choice of transport modes. Smaller-scale development should consider the potential for cumulative effects in relation to air quality.

- Marine planning ensures that the right activities happen in the right place, at the right time and in the right way in marine areas. Marine plans provide guidance on things to promote or avoid in certain marine locations. The Marine Plan relevant to The FNP is the North West Marine Plan (NWMP). It is a legal requirement for marine plans to be considered in all decisions that affect England's marine area, now and into the future. Section 58(3) of the Marine and Coastal Access Act requires that public authorities must have regard to marine plans when taking any decisions which relate to the exercise of any function capable of affecting the UK marine area. This can include decision making relating to Neighbourhood Plans. The policies set out in marine plans apply only in their area (i.e. up to the mean high- water springs mark – which includes the tidal extent of any rivers), but if a proposed activity is likely to affect the plan area, this should be acknowledged and considered. The FNP includes the intertidal area forming part of the Mersey Estuary and therefore also covers part of the North West Marine Plan area. The FNP falls within the North West Marine Plan area and is therefore required to comply with its policies. Of particular relevance here is Policy NW-Air-1 which stipulates that proposals must assess their impacts on local air quality and greenhouse gas emissions. Proposals likely to increase air pollution and/or emissions must demonstrate that they will; in order of preference: avoid, minimise, mitigate air pollution and/ or greenhouse gas emissions in line with current national and local air quality objectives and legal requirements. Proposals that cannot avoid, minimise or mitigate air pollution and or greenhouse gas must not be supported.
- The FNP will also be required to be in general conformity with the Local Plans covering the FNP area. The CWCC LPP1 policy SOC5 (Health and well-being) and CWCC LPP2 policy DM31 (Air quality) seek to protect residents from the effects of air pollution by disallowing development that gives rise to significant adverse impacts on health and quality of life due to air pollution for example (SOC5). DM31 requires that development near AQMAs be designed to mitigate the impact of poor air quality. It also requires an air quality assessment for developments likely to significantly impact air quality. Where such an assessment identifies unacceptable impacts, appropriate mitigation must be submitted ensuring that new development is appropriate or the location and unacceptable risks are avoided.
- Local Planning Authorities (LPAs) are required to publish annual Air Quality Annual Status Reports (ASRs) to discharge their monitoring obligations under Part IV of the Environment Act (1995). LPAs are required to review air quality in their area and designate Air Quality Management Areas (AQMAs) if improvements are necessary. Where an AQMA is designated, an Air Quality Action Plan (AQAP) must then be put in place. Frodsham has one AQMA, designated in 2015 due to exceedance of the annual mean NO2 objective which is related to road traffic in this location.
- To improve air quality across the UK, national strategies have in the last few decades focused on regulatory frameworks, investment by industry in cleaner processes and a shift in the fuel mix towards cleaner forms of

energy (largely at point sources). Whilst there are dedicated strategies to reducing roadside emissions (as a significant source of nitrogen dioxide emissions), recent objectives outlined in the Clean Air Strategy seek to recognise wider sources (including smaller contributors and diffuse sources) that contribute to poor air quality. This includes; power generation, heating our homes, producing food, manufacturing consumer goods and powering transport.

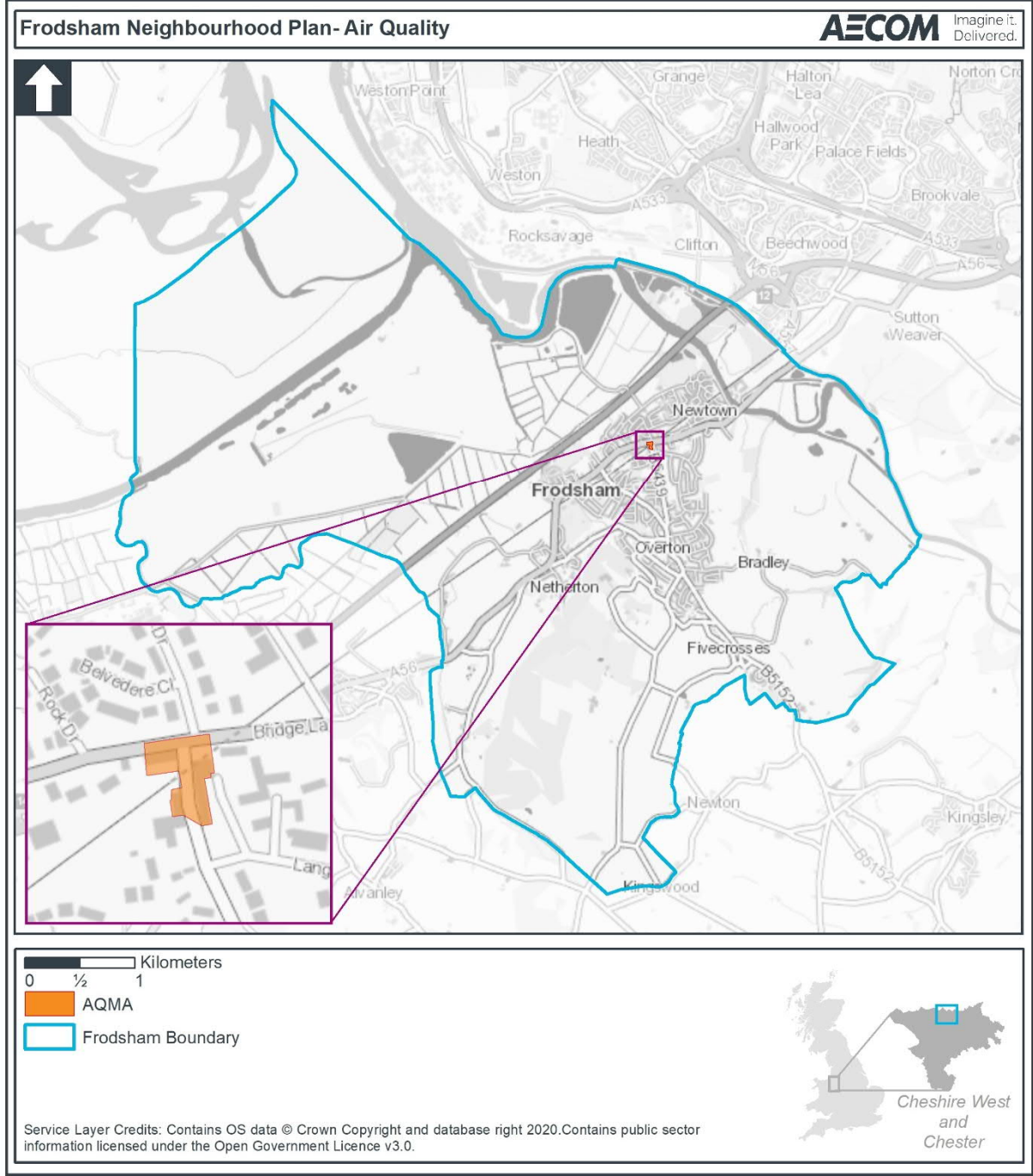
- The Cheshire West and Chester Low Emission Strategy (2018 – 2021) (LES) and the CWCC Local Transport Plan seek to address health impacts of air pollutants such as NO₂ and Particulates (PM₁₀ and PM_{2.5}) and indirectly tailpipe hydrocarbon emissions. This is to be achieved through various means including; modal shift to public transport, cycling, and walking, reducing kilometres driven and adoption of low emission vehicles (LEVs).

Baseline Summary

- 2.4 CWCC's Air Quality Annual Status Report (ASR)² states that there is currently one Air Quality Management Area (AQMA) in Frodsham. The designated area (See Figure 2-1) incorporates Fluin Lane (Nos 2, 4, 6 and 8), High Street (Nos 70, 70a, 72, 72a, 74, 76 and 78), Manor Farm, Bridge Lane and Manor Farm Court (Nos 7, 8, 9 10, 11 and 12).
- 2.5 The AQMA was designated in 2015 due to exceedance of the annual mean NO₂ objective which is related to road traffic in this location. However, data from 2018 indicated that the NO₂ objective was not exceeded at residential properties in Frodsham.
- 2.6 No exceedance of the PM₁₀ (particulates less than 10 micrometres in diameter) national objectives has been recorded in the AQMA. Similarly, 2.5 micron particulate (PM_{2.5}) monitoring shows that background levels well below EU limit levels. The report states that; *'there is a discernible downwards trend in NO₂ and PM₁₀ concentrations over time'*.
- 2.7 CWCC is pursuing a number of measures to deliver improvements in air quality through its Low Emissions Strategy (LES). These include a focus on modal shift to encourage low emissions/ sustainable transport, improving the provision of electric vehicle (EV) charging infrastructure and reducing emissions from public transport/ licences vehicles. The Council anticipates that the LES will deliver significant improvements in local air quality over time. The Council is also continuing with the introduction of 20mph speed zones (started in 2016) which can help reduce NO_x and PM₁₀ emissions.

² Cheshire West and Chester Council 2019 Air Quality Annual Status Report (June 2019); <https://www.cheshirewestandchester.gov.uk/documents/pests-pollution-food-safety/pollution-and-air-quality/air-quality-review-and-assessment/reports/air-quality-annual-status-report-2019.pdf>

Figure 2-1 Location of Frodsham AQMA



Summary of future baseline

- 2.8 Exceedance of national NO₂ levels was observed at the AQMA in Frodsham in 2015. However, no exceedance has been recorded since 2015 and the latest ASR states that emissions are on a downward trend.
- 2.9 New employment and / or housing provision within the NDP area can potentially have adverse effects on air quality through increased traffic flows and associated vehicular pollutants such as NO₂. In the absence of the NDP, the amount of growth anticipated is not expected to lead to significant changes to the baseline position.
- 2.10 CWCC's LES initiative along with improvements and growth in low emissions vehicles and EVs is likely to lead to a reduction in transport related emissions in the long term and could offset increases associated with traffic from new development.
- 2.11 The implementation of the CWCC Local Transport Plan (LTP) 2011-2026, which aims to reduce transport related emissions and encourage sustainable transport, is likely to lead to a reduction in transport related emissions.

Key issues

- 2.12 The key issues are as follows:
- There is one Air Quality Management Area within the NP. No exceedance of national emissions limits has been observed in this AQMA since 2015 and the emissions recorded are on a downward trend.
 - Traffic and congestion have the potential to increase vehicular emissions and reduce air quality in the area though low emissions vehicles could offset this to an extent.

Scoping outcome

- 2.13 New development proposed within the FNP is likely to lead to increased vehicular traffic. Whilst no exceedance of monitored pollutants has been observed at the AQMA since 2015 and the levels are declining, the additional traffic generated by new development could adversely impact the air quality at the AQMA. The Plan can potentially contribute to air quality improvements. This is evident from the Plan aims and objectives seeking to achieve environmental improvements. Therefore, air quality has been **SCOPED IN** of the SEA.

What are the SEA objectives and appraisal questions for the Biodiversity SEA theme?

- 2.14 Considering the key issues discussed above it is proposed that the Sea should include the following objective:

Table 2-2 SEA Framework of objectives and assessment questions: Air quality

SEA Objective	Supporting Questions
Improve air quality within and surrounding the Neighbourhood Plan area and minimise all sources of environmental pollution	Will the option/proposal help to: • Promote and encourage more sustainable transport options? • Enable sustainable transport infrastructure enhancements? • Encourage development which reduces the need to travel outside of the Neighbourhood Plan area? • Locate and design development so that current and future residents will not regularly be exposed to poor air quality? • Implement measures (such as appropriate planting and provision of green infrastructure) which will help support good air quality in an around the Neighbourhood Plan area? • Ensure development connects to the existing road network, promoting ease of access and suitably mitigating any potential increases in local congestion?

3. Biodiversity

3.1 This theme focuses on nature conservation designations, habitats and species within and surrounding the FNP area.

Policy Context

3.2 Table 3-1 presents the most relevant documents identified in the policy review for the purposes of the FNP SEA.

Table 3-1 Plans, policies and strategies reviewed in relation to biodiversity

Document Title	Year of publication	Weblink
National Planning Policy Framework (NPPF)	2019	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf
The 25 Year Environment Plan The Environment Bill	2018	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf
The Cheshire region Biodiversity Action Plan (BAP)	2007	https://www.cheshirewildlifetrust.org.uk/sites/default/files/2018-06/BAP%20list%20-%20updated%20April%202011.pdf
North West Marine Plan	2021	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004490/FINAL_North_West_Marine_Plan_1_.pdf
The Mersey Forest Plan	2014	https://www.merseyforest.org.uk/The_Mersey_Forest_Plan_web_version_single_new.pdf
The CWCC Local Plan Part 1	2015	http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adopted?tab=files
The CWCC Local Plan Part 2	2019	https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/cw_lp_part_two/

3.3 The key messages emerging from the review are summarised below:

- The FNP will be required to be in general conformity with NPPF, which places significant emphasis on improving biodiversity and securing measurable net gains in development, alongside protection and conservation of designated
- sites and important species and habitats. This includes utilising a strategic approach to maintaining and enhancing networks of habitats and green infrastructure at the wider catchment or landscape scale. Support is given to establishing coherent ecological networks that are more resilient to current and future pressures, particularly in consideration of climate change.
- Over the past decade, policy (e.g. The Natural Environment White Paper and Biodiversity 2020) has demonstrated a move away from the traditional approach of protecting biodiversity, to a wider landscape approach to enhancing biodiversity, as part of the overall aims to halt biodiversity loss. The 25 Year Environment Plan places emphasis on improvements to the natural environment; identifying the need to “replenish depleted soil, plant

trees, support wetlands and peatlands, rid seas and rivers of rubbish, reduce greenhouse gas emissions, cleanse the air of pollutants, develop cleaner, sustainable energy and protect threatened species and habitats.” Working at a landscape scale transformation is expected to connect habitats into larger corridors for wildlife.

- The emerging Environment Bill will provide further provisions in relation to biodiversity when granted royal assent. The Bill will set parameters for biodiversity gain as a condition of planning permission, as well as biodiversity gain site registers and biodiversity credits. The Bill identifies a general duty to conserve and enhance biodiversity, including through biodiversity reports and local nature recovery strategies. Local nature recovery strategies will identify biodiversity priorities for the strategy area as well as a local habitat map. Furthermore, habitat maps are expected to include recovery and enhancement areas which are or could become of importance for biodiversity.
- The Cheshire region Biodiversity Action Plan (BAP) offers a series of specific plans for each of the threatened species and/or habitats within the area with the intention to protect their levels within the Cheshire region.
- The FNP is required to be in conformity with the North West Marine Plan (NWMP). Of particular relevance are policies NW-BIO-1, NW-BIO-2. These support proposals that enhance the distribution of priority habitats and species and require potential adverse effects be avoided, minimised or mitigated. Proposals that cannot avoid, minimise and mitigate or, as a last resort compensate for, significant adverse impacts will not be supported. Policy NW-BIO-3 seeks to support proposals that conserve, restore or enhance coastal habitats requiring proposals to take account of the space needed for coastal habitats. Proposals are required to demonstrate that they will (in order of preference) avoid, minimise, mitigate or compensate for net habitat loss.
- The Mersey Forest covers more than 500 square miles in Merseyside and North Cheshire and was chosen as one of 12 areas of England to be the focus of a long-term tree planting programme to improve the local environment for the benefit of people, wildlife and the economy. Over nine million trees have been planted thus far (which absorbed over half a million tonnes of carbon dioxide) and created over 3,000 hectares of woodland. The Mersey Forest Plan is a long term strategic guide to the work of The Mersey Forest team and partners. It is accompanied by a Delivery Plan which sets out monitoring and shorter-term activities, covers a five year period and is reviewed annually.
- The FNP is required to be in general conformity with the Local Plan Parts 1 and 2. With respect to biodiversity; the CWCC LPP1 policy ENV4 (Biodiversity and geodiversity) and CWCC LPP2 policy DM44 (protecting and enhancing the natural environment) seek to safeguard and enhance biodiversity through identification and protection of sites of international, national, and local importance. The policies stipulate that development should not result in any net loss of natural assets and should seek to provide net gains. Where loss/damage to habitats is unavoidable because of exceptional overriding circumstances, mitigation and compensation would be required to ensure there is no net loss of environmental value. Development likely to have an impact on protected sites must be

accompanied by an Ecological Assessment that meets a set of criteria set out in the policy. CWCC LPP2 policy DM45 supports development that conserves, manages and enhances (where possible) existing trees, woodlands, orchards and hedgerows. Where this is demonstrated as being not possible proposals must include replacement trees, woodlands and hedgerows within the site or offsite (if not practicable) at a ratio of at least two new trees for each tree lost. Development affecting existing and new woodlands should support the aims and policies of the Mersey Forest Plan where relevant.

Baseline Summary

Summary of current baseline

- 3.4 Cheshire has a range of wildlife species and habitats³. A number of these are protected sites; the designation of which helps to preserve the biodiversity and the character of the areas. Nature designations within Frodsham are presented in the following table (Table 3-2) and illustrated in Figure 3-1.

Table 3-2 Nature Designations within Frodsham

Special Protection Areas (SPA)	Mersey Estuary SPA
Ramsar Sites	Mersey Estuary Ramsar
Sites of Special Scientific Interest (SSSI)	Mersey Estuary
	Beechmill Wood & Pasture
	Frodsham Railway and Road Cuttings
	Dunsdale Hollow
Local Wildlife Sites	Frodsham and Overton Wood
	East Clifton Tip
	Sutton Bridge lagoon
	Frodsham Marshes
	Hob Hey Wood
Community Forest	Mersey Forest

International

- 3.5 A major aim of the Birds Directive is to conserve the habitats of qualifying wild birds in order to ensure their survival and reproduction. The Special Areas of Protection Designation is a key mechanism in achieving this. The Mersey Estuary SPA provides important habitats such as intertidal mud and sandflats, areas of rocky shore and areas of saltmarsh. These habitats support

³ These are considered in greater detail in the Habitats Regulations Assessment for the FNP (AECOM report Oct. 2021).

internationally important populations of Black-tailed godwit, Dunlin, Golden Plover, Pintail, Redshank, Shelduck, Teal and waterbird assemblage. The SPA overlaps the Mersey Estuary Ramsar and SSSI discussed below.

- 3.6 In addition to the SEA, the FNP has undergone a Habitats Regulations Assessment (HRA). Its objective is to identify if any particular site allocation proposed in the FNP has the potential to cause an adverse effect on the integrity of European designated sites (Special Areas of Conservation, SACs, Special Protection Areas, SPAs, and Ramsar sites designated under the Ramsar convention), either in isolation or in combination with other plans and projects, and to determine whether site-specific or policy mitigation measures are required. The HRA is a separate process from the SEA.
- 3.7 Ramsar sites are wetlands of international importance designated under the Ramsar Convention on Wetlands. It aims to protect and conserve rare wetland habitats for their importance in conserving biological diversity. The Mersey Estuary Ramsar, also a SSSI a SPA, is an internationally important site for wildfowl and consists of large areas of intertidal sand and mudflats. The site also includes an area of reclaimed marshland, salt-marshes, brackish marshes and boulder clay cliffs with freshwater seepages. The area includes important roosting sites for wildfowl and waders at high tide. Throughout the winter the estuary supports large numbers of wildfowl and waders. The birds feed on the rich invertebrate fauna of the intertidal sediments as well as plants and seeds from the salt-marsh and adjacent agricultural land. The estuary is also a valuable staging post for migrating birds in spring and autumn.⁴ Good water quality and sediment quality are particularly important for this SSSI. The birds using the area as roosting and feeding grounds are vulnerable to disturbance from human activities such as bait digging, dog walking and wildfowling. Natural England's views about management (VAM) state that It is important to create space to enable landward roll-back to take place in response to sea-level rise, and to allow the system to be dynamic and retain the flexibility to respond to associated changes such as the movement of physical features within the system, e.g. migrating subtidal sandbanks. The habitats within this site are highly sensitive to inorganic fertilisers and pesticides.

National

- 3.8 There are over 4,100 Sites of Specific Scientific Importance (SSSI) in England, which cover around 8% of the country's land area. SSSIs are recognised as amongst the country's very best wildlife and geological sites. There are several, overlapping, SSSI designated sites within the NP area (Figures 3.1 and 3.2) including; the Mersey Estuary (discussed above), Beechmill Wood and Pasture, Frodsham Railway and Road Cuttings SSSI and Dunsdale Hollow SSSI.

⁴ Natural England Designated Sites View available at <https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1001398&SiteName=mersey&countyCode=&responsiblePerson=&unitId=&SeaArea=&IFCAArea=>

- 3.9 The Beechmill Wood and Pasture SSSI covers an area of 6.2 ha at the eastern boundary of the NP area. Beechmill Wood is a small clough (steep valleys) woodland on the south side of the River Weaver. The mix of soil types and variation in drainage result in increased diversity adding to the wildlife value of the woodland. The main habitats are broadleaved, mixed and Yew woodland (lowland) and neutral grassland (lowland). Much of the woodland is dominated by ash and wych elm forming a nationally rare woodland type. The side valley running north-south is dominated by pedunculate oak and because ash is not present it is an uncommon woodland type in Cheshire cloughs⁵. The site also includes an unimproved field which is very rich with plant species and grasses. Natural England (NE) states that deer management and protection from rabbits and livestock is important here. Careful management of surface drainage is also essential to prevent adverse changes in plant species composition. All the habitats here are highly sensitive to inorganic fertilisers and pesticides. Access to site and recreational activities may also need to be controlled.
- 3.10 Frodsham Railway and Road Cuttings SSSI is a natural inland geological site comprising a sequence of sandstone exposures representing part of the Triassic Helsby Sandstone Formation. Sedimentary structures have been formed in large dome-shaped and transverse desert dunes. At Pinmill Brow the desert dunes are overlain by the Tarporley Siltstone Formation which had a very different origin, being laid down by either marine intertidal or fluvial deposition⁶. The VAM for this SSSI states that it is important to maintain the rock exposures free of vegetation. Threats include collection of geological specimens which needs to be carefully managed to ensure geological resource is conserved. Developments and tree planting that obscure rock exposures are considered main threats to such sites.
- 3.11 Dunsdale Hollow SSSI is on a steep north-west facing escarpment of Upper Mottled and Keuper Sandstone. It is an acidic lowland birch and sessile oak woodland⁷. This type of woodland is often found in the uplands but its occurrence in a lowland landscape is very unusual and it is found on only one other site in Cheshire on the Peckforton Hills. The ground flora which is composed of wavy hair-grass, broad buckler-fern, bluebell and bramble. On the steep banks of the sandstone outcrops there are good stands of great wood-rush, an uncommon plant in Cheshire. An open glade leading to the bottom of the slope is dominated by bracken. Threats to the status of the SSSI include unmanaged deer, rabbits and livestock, and invasive species.

⁵ Natural England Designated Sites View at <https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1001736&SiteName=beechmill&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=>

⁶ Natural England Designated Sites View at <https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002577&SiteName=frodsham%20rail&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=>

⁷ Natural England Designated Sites View at [occurs on a steep north-west facing escarpment of Upper Mottled and](#)

- 3.12 Natural England collects data on the condition of SSSIs and Table 3-3 below sets out the condition of the local SSSIs;

Table 3-3 SSSI Conditions⁸

SSSI Site	% area Favourable	% area Unfavourable Recovering	% area Unfavourable No change
Mersey Estuary	29.3%	26.4%	44.3%
Beechmill Wood and Pasture	69.2%	30.8%	0.0%
Frodsham Railway and Road Cuttings	100%	0.0%	0.0%
Dunsdale	100%	0.0%	0.0%

- 3.13 SSSI Impact Risk Zones, map zones around each SSSI according to the particular sensitivities of the features for which it is designated. They specify the types of development that have the potential to have adverse impacts at a given location. Natural England is a statutory consultee on development proposals that might impact on SSSIs. The majority of the NP area falls within SSSI Impact Risk Zones for the Mersey Estuary SSSI and the Beechmill Wood and Pasture SSSI (figure 3.1). Activities such as residential development (depending on scale and proximity to SSSI), infrastructure, commercial and industrial development and associated externalities such as waste and air pollution can potentially have detrimental impact on SSSIs.

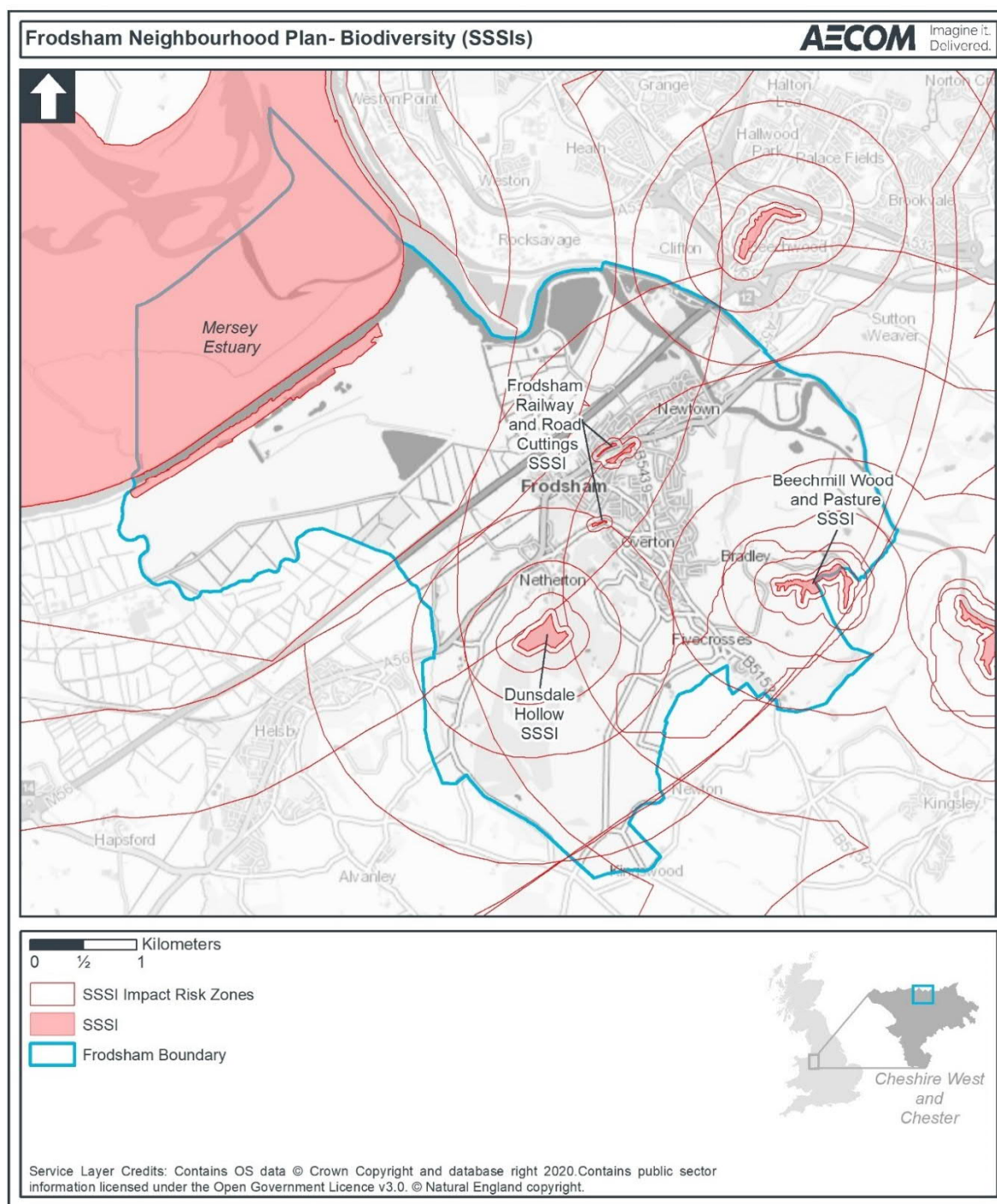
Local

- 3.14 Local Wildlife Sites (LWS) are areas of land that are especially important for their wildlife. They provide corridors for wildlife, forming key components of ecological networks. The Wildlife Trusts work with local authorities, statutory agencies, landowners and other local partners to establish effective systems for identifying, managing and monitoring Local Wildlife Sites. Local Wildlife Sites are identified and selected locally using scientifically-determined criteria and ecological surveys. The CWCC website lists numerous local wildlife sites including five in the NDP area such as Frodsham and Overton Woods and Frodsham Marshes (table 3-1).

⁸ Natural England (2021)

- 3.15 The Mersey Forest area overlaps the majority of the NDP area. In urban areas the Mersey Forest Plan aims to plant individual trees, groups of trees and small woodlands on appropriate and available urban areas, settlements and employment sites, such as school playing fields, open spaces, streets, highway verges, in the grounds of large institutions, derelict land, and development sites. The plan targets planting to meet identified green infrastructure needs.
- 3.16 Within Frodsham urban areas the indicative woodland cover target is 10% which compares to just 2% in 2012. In the west and north west of the NDP area; namely the areas comprising, drained marshes, mudflats and saltmarshes of Frodsham Marsh, no change in net woodland cover is required (2% in 2012) as woodland planting is deemed inappropriate here. It is important to maintain the open nature of these designated areas.
- 3.17 A target of 30% woodland cover is assigned to Frodsham Ancient Woodlands Forest Park (from 10% in 2012). The plan involves establishing a woodland framework around Frodsham and Helsby, linking to the Sandstone Ridge and long distance trail, and into the Weaver Valley (excluding the sandstone escarpment ridge line). A woodland buffer will be created on suitable land between the settlements and the motorway⁹.
- 3.18 The FNP includes the intertidal area forming part of the Mersey Estuary which overlaps part of the North West Marine Plan area. The NWMP¹⁰ sets out priorities and directions for future development within the plan area, informs sustainable use of marine resources and helps marine users understand the best locations for their activities, including where new developments may be appropriate. The plan also provides guidance on things to promote or avoid for some locations. The north west inshore marine plan area stretches from the Solway Firth border with Scotland and the River Dee border with Wales, taking in a total of approximately 4,900 square kilometres of sea. It includes: any area submerged at mean high water spring tide and the waters of any estuary, river or channel, so far as the tide flows at mean high water spring tide. The Plan areas are very busy, with a large variety of existing activities competing for limited space. There are low-lying coastlines and diverse marine environments that share the space with the numerous activities. The coastal area is home to a range of communities, with urban centres found in the southern part of the inshore marine plan area and predominantly rural communities to the north. The north west marine plan areas are of particular importance to several bird species, reflected in the number of statutory and non-statutory designated sites. Coastal areas are characterised by estuaries in the north and south with Morecambe Bay, the largest area of continuous intertidal mudflats and sandflats in the United Kingdom. The offshore marine plan area is characterised by muds, sands and gravels, which support a variety of benthic species and provide important spawning, nursery and feeding grounds for fish species. Marine plan areas are sensitive to recreational pressures and disturbance as well as water pollution from surface water runoff and wastewater.

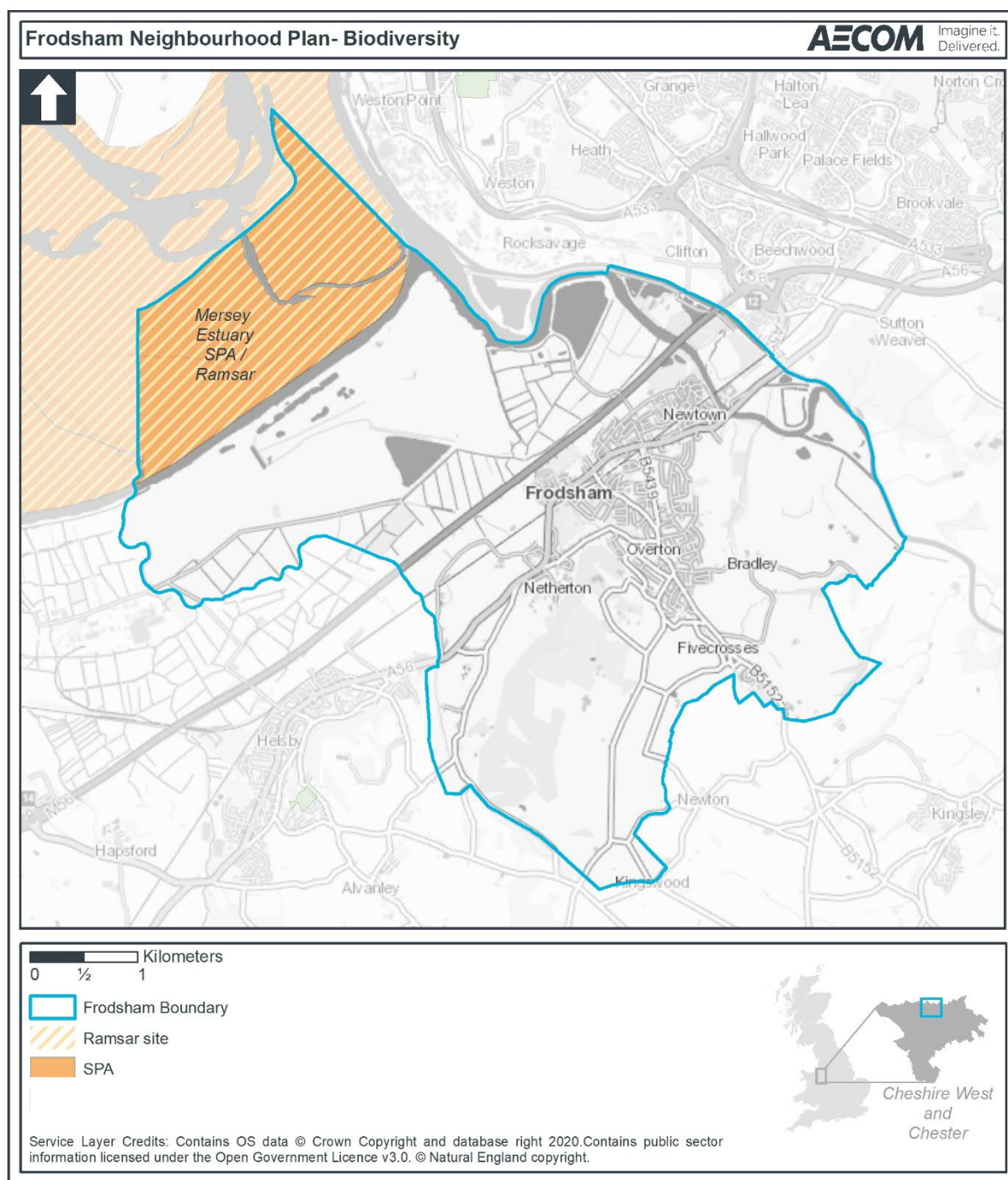
Figure 3-1 Biodiversity Designations & IRZs in Frodsham



⁹ Source: The Mersey Forest Plan at <https://www.merseyforest.org.uk/about/plan/#policy>

¹⁰ Marin Management Organisation (Jan 2020) North West Inshore and North West Offshore Marine Plan Draft for consultation at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/857301/DRAFT_NW_Marine_Plan.pdf

Figure 3-2 Mersey Estuary SPA/ Ramsar



Future Baseline

- 3.19 A number of factors threaten protected and priority species and habitats within Frodsham. Notably recreational pressures, climate change, unsuitable land management and invasive species.
- 3.20 Development within the NDP area could encroach on certain habitats, threaten local species, and impact biodiversity networks in the absence of effective mitigation measures.
- 3.21 Increased development in the NDP area will place increased pressure on areas of biodiversity value and on marine plan areas due to land take for development and an increase in population. An increase in population is likely to lead to an increase in leisure and recreational pressure and increased demand for natural resources such as water. New development may lead to an increase in disturbance through human activity, loss of habitat, increased predation (e.g. from domestic pets), atmospheric, light, land and water pollution.
- 3.22 Habitats and species are likely to continue to be afforded protection through higher level planning policy (including LPP1 and LPP2) and whilst these areas face increasing pressures from future development, planning policy should safeguard the most valued areas and protect ecological networks.

Key headline issues

- 3.23 There are several sites of high biodiversity importance within the NDP area. These include the Mersey Estuary SPA/Ramsar/SSSI, the Beechmill wood and pasture, Frodsham Railway and Road Cuttings and Dunsdale Hollow SSSIs. The risk impact zones associated with these SSSIs extend and overlap with all of the NP area.
- 3.24 The Mersey Forest plan area covers the majority of the NDP area and aims to significantly increase woodland cover in the area.
- 3.25 The FNP overlaps part of the North West Marine Plan area. Development in the NDP area could place increased pressures on areas of biodiversity value due disturbance and polluted water runoff (or wastewater discharge)

Scoping outcome

- 3.26 The SEA topic 'Biodiversity' has been **SCOPED IN** to the SEA. There is potential for localised effects at sites that could be identified for development, as well as increased recreational pressure.
- 3.27 It will also be important to ensure that there are no significant adverse effects upon the North West Marine Plan areas and the numerous important biodiversity designated sites in the NDP area such as, the Mersey Estuary SPA/Ramsar/SSSI, the Beechmill wood and pasture, Frodsham Railway and Road Cuttings and Dunsdale Hollow SSSIs.
- 3.28 There may also be opportunities to enhance ecological networks and achieve net biodiversity gains through targeted local policies

What are the SEA objectives and appraisal questions for the Biodiversity SEA theme?

- 3.29 The SEA topic 'Biodiversity' has been scoped in to the SEA. Table 3-4 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

Table 3-4 SEA Framework of objectives and assessment questions: Biodiversity

SEA Objective	Supporting Questions
Protect, maintain and enhance biodiversity habitats and species; achieving a net environmental gain and stronger ecological networks.	Will the option/proposal help to: • Support connections between habitats in the Plan area? • Avoid significant impacts on designated sites within the NP area including; the Mersey Estuary SPA/Ramsar/SSSI, Beechmill wood and pasture, Frodsham Railway and Road Cuttings and Dunsdale Hollow SSSIs? • Avoid significant impacts from air pollution, urban water drainage and surface water runoff, on the designated biodiversity sites and areas forming part of the North West Marine Plan. • Support continued improvements to the designated sites in the Neighbourhood Plan area? • Achieve a net gain in biodiversity? • Support access to, interpretation and understanding of biodiversity? • Increase the resilience of biodiversity in the Neighbourhood Plan area to the effects of climate change?

4. Climatic Factors (flood risk and climate change)

4.1 This theme focuses on activities contributing to climate change, climate change mitigation and adaptation to the effects of climate change including flood risk.

Policy Context

4.2 Table 4.1 presents the most relevant documents identified in the policy review for the purposes of the FNP SEA.

Table 4-1 Plans, policies and strategies reviewed in relation to climate change

Document Title	Year of publication	Weblink
National Planning Policy Framework (NPPF)	2019	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf
Clean Air Strategy	2019	https://www.gov.uk/government/publications/clean-air-strategy-2019
Clean Growth Strategy	2017	https://www.gov.uk/government/publications/clean-growth-strategy
The 25 Year Environment Plan	2018	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf
Decarbonising Transport: Setting the Challenge	2020	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/932122/decarbonising-transport-setting-the-challenge.pdf
UK (second) National Adaptation Programme 2018 to 2023	2018	https://www.gov.uk/government/publications/climate-change-second-national-adaptation-programme-2018-to-2023
Draft Flood Risk Management Plans	2021	https://consult.environment-agency.gov.uk/fcrm/flood-risk-management-plans-information-page/
North West Marine Plan	2021	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004490/FINAL_North_West_Marine_Plan_1_.pdf
CWCC 'climate emergency' declaration	2019	The Climate Emergency (cheshirewestandchester.gov.uk)
The CWCC Local Plan Part 1	2015	http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adopted?tab=files
The CWCC Local Plan Part 2	2019	https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/cw_lp_part_two/

4.3 The key messages emerging from the review are summarised below:

- The FNP is required to be in general conformity with the NPPF, which seeks proactive planning approach to both mitigate and adapt to climate change. Planning policies are expected to improve the resilience of communities and infrastructure to climate change impacts, avoid inappropriate development in the flood plain, and support the move to a low carbon economy. The NPPF recognises the potential for planning to shape places in ways that contribute to radical reductions in greenhouse gas emissions, and deliver long-term resilience; including through reuse, regeneration and conversion.
- The Clean Growth Strategy, Clean Air Strategy and the 25-year Environment Plan are a suite of documents which seek to progress the government's commitment under the UK Climate Change Act to becoming net zero by 2050. The documents set out detailed proposals on how the government will tackle all sources of air pollution, whilst maintaining an affordable energy supply and increasing economic growth. This parallels with the 25-year Environment Plan, which further seeks to manage land resources sustainably, recover and reinstate nature, protect soils and habitats, increase resource efficiency, improve water quality, and connect people with the environment. The documents also interlink with the government's commitment to decarbonising transport, a recognised challenge that needs more work in a timely manner if government are to achieve net zero targets. Furthermore, the decarbonisation plan recognises the twinned need to undertake action to adapt the transport sector and increase resilience to climate change risks; and this challenge is more directly addressed through the UK's National Adaptation Programme.
- The draft flood risk management plans (FRMPs) for England cover the period from 2021 – 2027. They include measures for the flood risk areas identified in 2017 for surface water flooding and in 2018 for main river and sea flooding. The EA worked with Lead Local Flood Authorities (LLFAs) and risk management authorities (RMAs) to produce the FRMPs which are undergoing public consultation at time of writing). These strategic plans focus on areas at nationally significant area of flood risk or FRAs. The FRMP will also contribute to the delivery of the National Flood and Coastal Erosion Risk Management Strategy for England (FCERM). The latter sets out a long term approach to resilience and adaptation.
- The FNP is required to comply with the requirements of the NWMP. Of particular relevance are policies NW-CC-1, NW-CC-2 and NW-CC-3. Policy NW-CC-1 supports proposals that conserve, restore or enhance habitats that provide flood defences or carbon capture. Proposals likely to have significant adverse impacts on such habitats must demonstrate that they will follow the mitigation hierarchy, otherwise they will not be supported. Policy NW-CC-2 requires proposals to demonstrate, for the lifetime of the projects, that they are resilient to the impacts of climate change. Policy NW-CC-3 stipulates that proposals likely to have significant adverse impacts on coastal change or on climate change adaptation, inside or outside of proposed project areas, should only be supported if they demonstrate that they will follow the mitigation hierarchy.

- CWCC declared a 'climate emergency' in May 2019 and has been engaging with a range of partners, climate experts, community groups to understand the challenges and opportunities the Climate Emergency presents for Borough. Two plans have been produced setting out these challenges and the actions that will be taken to achieve carbon neutrality in the borough. The first is the Climate Emergency Response Plan which focuses on the borough wide response to the climate crisis. The second is the Carbon Management Plan which sets out the actions the Council needs to take to be carbon neutral by 2030. The plan provides an overview of the Council's current position in relation to carbon emissions and outlines the targets to reduce emissions throughout Council services over the next ten years.
- The LLP1, policy ENV1, the LPP2 policies DM40 and DM41 address flood risk and water management. They seek to reduce flood risk by requiring 'all development must follow the sequential approach to determining the suitability of land for development, directing new development to areas at the lowest risk of flooding and where necessary apply the exception test'. Developers will be required to demonstrate, provide a Flood Risk Assessment (FRA) at the planning application stage (where necessary). Development proposals are required not to increase flood risk on site or elsewhere. New development will be required to include or contribute to flood mitigation, compensation and/or protection measures, where necessary, to manage flood risk associated with or caused by the development. Sustainable Drainage Systems (SuDS) implementation would be required for new development (where feasible). The LPP1 policy ENV 3 'Green Infrastructure' (GI) supports the creation, enhancement, protection and management of a network of high quality multi-functional Green Infrastructure. This will be achieved by incorporating new and/ or enhanced GI into development or contributing to its provision. The policy also supports Increased planting of trees and woodlands, particularly in urban areas and the urban fringe.

Baseline Summary

Summary of current baseline

Greenhouse gas emissions

- 4.4 The total per capita emissions figures for Cheshire West and Chester Borough (table 4.2) are double the corresponding figures for the North West region and England as a whole. The commercial and Industrial sector is the biggest contributor, making up nearly 60% of per capita emissions in the borough. This is largely due to emissions arising from the borough's industrial corridor situated to the north of Chester. This includes the Stanlow Oil Refinery (Ellesmere Port) which is the largest individual emitter.
- 4.5 The overall trend shows declining emissions with levels in 2018 around 40% down on 2005 levels. This is similar to the levels of reductions observed for the wider region and nationally.
- 4.6 The transport sector is the second largest contributor to per capita emissions in the borough, with levels around 47% higher than those observed for the North West region and England. Again, this is likely to be associated with the substantial industrial sector in the borough.

Table 4.2: Per capita local CO₂ emission estimates; industry, domestic and transport sectors (kt CO₂)¹¹

	2005	2007	2009	2011	2013	2015	2017	2018
Cheshire West & Chester								
Industrial & Commercial	12.0	11.9	10.8	9.1	9.2	7.1	7.7	6.3
Domestic	2.6	2.5	2.3	2.1	2.2	1.7	1.6	1.6
Transport	3.1	3.1	2.9	2.9	2.8	2.9	2.8	2.8
Total per capita	17.8	17.5	16.0	14.0	14.1	11.7	12.1	10.6
North West								
Industrial & Commercial	3.9	3.7	3.1	2.9	2.9	2.3	2.0	1.9
Domestic	2.6	2.4	2.2	2.0	2.1	1.7	1.5	1.5
Transport	2.2	2.2	2.0	2.0	1.9	1.9	1.9	1.9
Total per capita	8.7	8.3	7.3	6.8	6.9	5.9	5.4	5.3
England								
Industrial & Commercial	3.79	3.61	2.96	2.73	2.80	2.27	1.85	1.80
Domestic	2.49	2.37	2.13	1.96	2.03	1.63	1.43	1.42
Transport	2.27	2.23	2.03	1.95	1.88	1.92	1.93	1.88
Total per capita	8.49	8.14	7.04	6.55	6.62	5.72	5.12	5.00

¹¹ National Statistics UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2018 <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2018>

Effects of climate change and adaptation

- 4.7 Climate change projections for the United Kingdom published as part of the UKCP18¹² programme provide detailed probabilistic projections of climate change. Although there is uncertainty in climate change predictions; the projected general trend is a move towards warmer, wetter winters and hotter, drier summers. However, natural variations mean that some cold winters, some dry winters, some cool summers and some wet summers will still occur. The following changes are likely to have taken place by 2070s. The changes mentioned below relate to an area in central England based on the 10-90th percentile range (low to high emissions) of emission scenario¹³:
- In UKCP18, the probabilistic projections provide local low, central and high changes across the UK, corresponding to 10%, 50% and 90% probability levels. These local values can be averaged over the UK to give a range of average warming between the 10% and 90% probability levels. By 2070, in the high emission scenario, this range amounts to 0.7°C to 4.2°C in winter, and 0.9°C to 5.4°C, in summer. For precipitation, corresponding ranges of UK average changes are -1% to +35% for winter, and -47% to +2% for summer, where positive values indicate more precipitation and negative values indicate reduced precipitation (drier summers).
 - Hot summers are predicted to become more common, with the probability of a hot summer rising from the current 20-25% to up to 50% by the middle of the century.
- 4.8 Based on the above; in the future Frodsham is likely to experience, a warmer climate, with drier summers and potentially wetter winters, which means that extreme events such as floods and droughts are likely to become less predictable and possibly more frequent.

Flood risk

- 4.9 A level 1 strategic flood assessment¹⁴ was completed in 2016 for Cheshire West and Chester and looked at areas that would be at risk of pluvial flooding (surface water flooding), rivers/sea (fluvial/tidal), groundwater flooding, sewers and artificial sources such as such as reservoirs and canals. This helped to identify areas at particular risk of flooding in the borough.

¹² Further information on the UKCP18 programme is available from:

<https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/index>

¹³ Projections from UKCP18 Climate Change Over Land, which correspond to two emissions scenarios (Low and High). The medium emissions scenario - describes a world that has rapid economic growth, quick spreading of new and efficient technologies, and a global population that reaches 9 billion mid-century and then gradually declines. It also relies on a balance between different energy sources. The high emissions Scenario is characterised by similar economic and population trends as the medium emission scenario but with more reliance on power generation from fossil fuels. The low emissions scenario represents a more integrated ecologically friendly world, characterised by clean and resource efficient technologies, and lower global greenhouse gas emissions.

¹⁴ Cheshire West & Chester Strategic Flood Risk Assessment (SFRA) available at http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/cw_lp_part_two/ev_base/sfra2016

- 4.10 The assessment included potential development sites within the borough and made recommendations pertaining to their suitability. The assessment makes two broad sets of recommendations A,B,C and D.
- 4.11 Recommendation A 'Consider withdrawal of site' lists potential development sites with 10% or greater proportion of their area in Flood Zone 3b. Flood Zone 3b refers to areas of functional floodplain (excluding developed sites protected by flood defences) these are at greater risk of flooding with a flood risk frequency of 1 in 20 or 1 in 25 years. No Frodsham sites are included in the Recommendation A list.
- 4.12 Recommendation B 'Exception Test'; applies to sites where the exception test would be required¹⁵. Such sites would need a more in-depth assessment (level 2 SFRA). Developers (and LPA) are advised to try and avoid the risk areas where possible. Recommendation B applies to sites where 10% or more of the site is within flood Zone 3a. The following Recommendation B sites are within the NDP area;

Table 4-3 Recommendation B 'Exception Test' sites in the NDP area¹⁶

SFRA Level 1 Site Reference	Site description-Location
JBA1427	Chapelfields, Frodsham
JBA2097	Land to north of Sutton Causeway, south-west of Weaver Navigation, Frodsham
JBA2098	Land south-east of Sutton Causeway, north of Frodsham Bridge, Frodsham

¹⁵ NPPF Para. 158/160; refers to a method used to demonstrate that flood risk to development will be managed satisfactorily allowing necessary development to proceed in situations where suitable sites at lower risk of flooding are not available.

¹⁶ Source: Cheshire West and Chester Level 1 Strategic Flood Risk Assessment Final Report March 2016 available at http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/cw_lp_part_two/ev_base/sfra2016?tab=files

- 4.13 The SFRA also categorises some sites as Recommendation C 'Consider site layout and design'; it recommends that these should undergo a review of site layout and / or design at the development planning stage in order for development to proceed. A Level 2 SFRA or site-specific FRA would also be required. These sites contain less than 10% within flood Zone 3 (3a or 3b). This list includes one site within the NDP area namely, the Land east of Weaver Lane, Ship Street, Frodsham (SFRA reference JBA1570). The remaining sites that are within Flood Zone 2 or Flood Zone 1, are listed under Recommendation D 'Development permitted subject to FRA'. These are considered to be at lower risk of flooding and development could be permitted, provided a site-specific FRA shows they can be safe and the sites can be shown to be sequentially preferable.
- 4.14 Figure 4.1 indicates the location of flood risk zones 2 and 3 in Frodsham. There is a band of Flood Zone 3 along the length of the M56 running through the NDP area. There is also a Flood Zone 3 area along the coastal area north west of the NDP area and the River Weaver.

Climate change adaptation

- 4.15 There is no baseline information or data relating specifically to climate change adaptation. However, there is a range of green infrastructure that will benefit communities in terms of flood risk, hotter summers and wetter winters. The borough includes international and national, natural environmental designated sites, marshes and forests. The Cheshire green belt covers 42% of the borough's land area. The borough also benefits from blue infrastructure, such as rivers, other water bodies and the sea.
- 4.16 CWCC's open space study (2016-2030) assessed the existing provision of open space within the borough. The assessment states that Frodsham has a total provision of around 122 ha of open space which includes; allotments, amenity green space, parks, recreation grounds, play space, natural green space, education, churchyards and cemeteries (Table 4.3). The assessment developed an open space standard against which it assessed provision in Frodsham. The study concluded that there is an undersupply of all types of open space in Frodsham with the exception of parks and recreation grounds. The total shortfall for each types of open space is reproduced in Table 4.4 below.

Table 4-4 Open space provision in Frodsham¹⁷

Type	Existing Provision
Allotments	1.23
Amenity Green Space	3.44
Park and Recreation Ground	12.44
Play Space (children)	0.39
Play Space (youth)	0.14
Natural Green Space	98.83

Table 4-5 Open space shortfall in Frodsham

Type	Shortfall (Ha)
Allotments	-0.13
Amenity Green Space	-2.01
Play Space (children)	-0.06
Play Space (youth)	-0.13
Total shortfall	-2.33 Ha

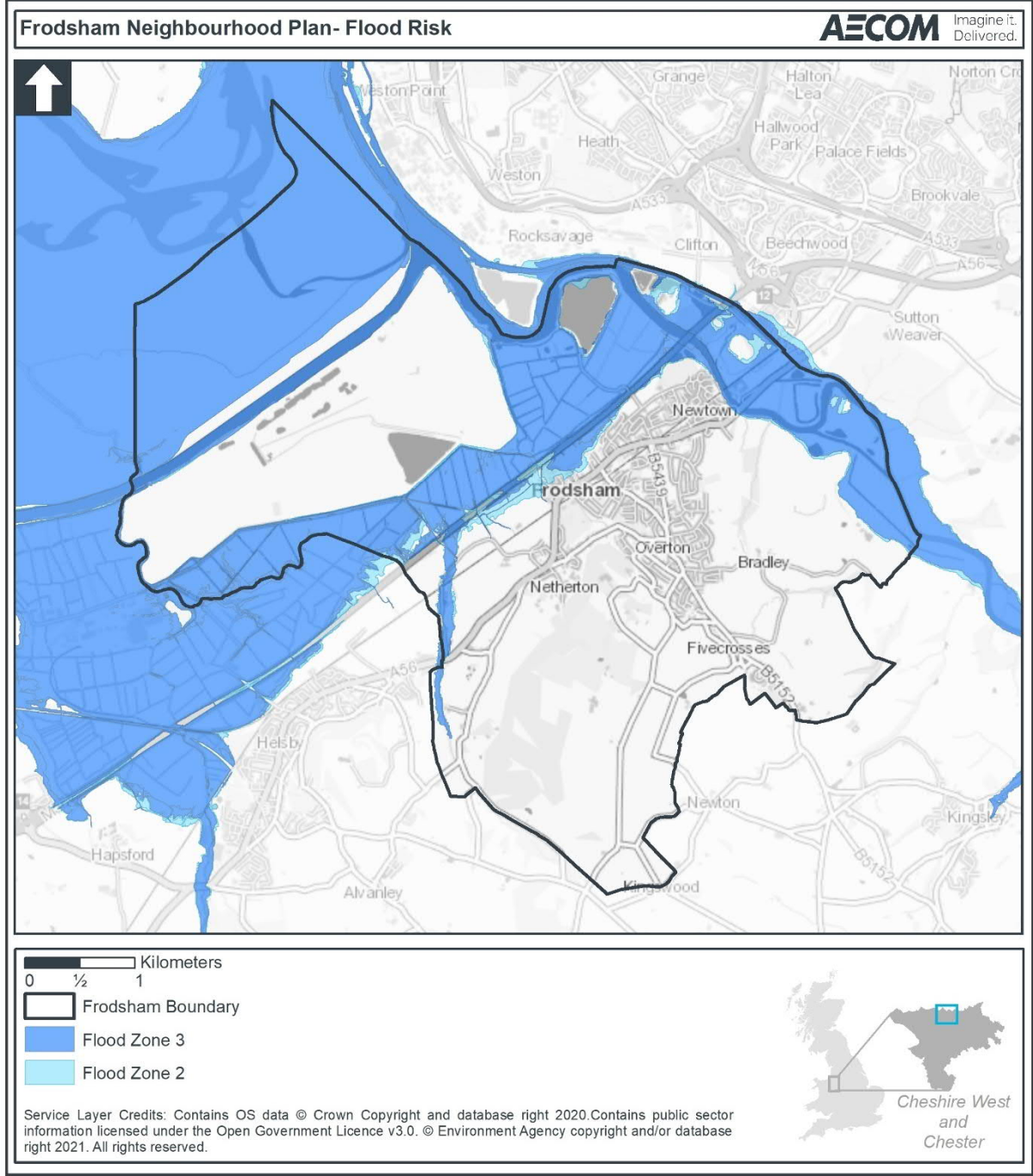
- 4.17 The CWCC Open Space Study also assessed accessibility of the existing open space within the borough. The findings for Frodsham are reproduced in table 4-6.

¹⁷ Source: Cheshire West and Chester Open Space Study 2016-2030 available at https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/cw_lp_part_two/ev_base/oss_pps?tab=files

Table 4-6 Summary of open space access issues

Type	Current Access
Allotments	Small gaps are present within the south of Frodsham.
Amenity Green Space	Access generally good with a small gap in the south and west.
Parks and Recreation Grounds	Access good throughout Frodsham.
Play Space (Children)	Thin strip with no access to provision within the north east and south.
Play Space (Youth)	No access to Play spaces (Youth) along the east of Frodsham.
Natural Green Space	Access is generally good.
Natural Greenspace, green corridors and Rights of Way	Frodsham has a good network of ROW, linking with natural space.

Figure 4-1 Fluvial Flood Risk in the NDP area



Summary of future baseline

- 4.18 There is potential for climate change to increase the occurrence of extreme weather events in the NDP area. Such weather events are likely to increase the risks associated with climate change (including fluvial flooding) with an increased need for resilience and adaptation.
- 4.19 In terms of climate change, GHG emissions could decrease through the adoption of energy efficient measures and cleaner energy (especially in Industry and transport sectors, key contributors in the NDP area). However, increases in population could counteract this.
- 4.20 Flood risk at any specific location may be influenced by local factors such as existing formal or informal flood defences and the capacity of existing drainage systems or road/rail culverts. The adoption of sustainable urban drainage systems (SuDs) and introduction of Green Infrastructure within development schemes may reduce the speed of surface water run-off and have positive effects in terms of mitigating flood risk.
- 4.21 Development in any instance has the potential to exacerbate flood risk within and in the vicinity of the NDP area by increasing the volume of surface water run-off, or by introducing areas of hard standing which could increase the speed of surface water run-off. The risk would be greatest if development were to take place in proximity of Flood Zone 2 or Flood Zone 3 areas.
- 4.22 In the absence of the Plan, there will still be a need to satisfy policy measures relating to flood management.

Key headline issues

- 4.23 The key issues are as follows:
- Average per capita CO₂ emissions are substantially higher in the borough compared to the rest of the North West and England.
 - Total greenhouse gas emissions are on a downward trend.
 - The NDP area falls predominantly within Flood Zone 1, although there are stretches of Flood Zone 2 and 3 running along the Mersey Estuary, the River Weaver and a band along the M56.
 - There is potential for surface water flooding to occur across the NDP area, although areas susceptible to this are scattered amongst areas with lower risk of fluvial flooding.
 - The likelihood of flooding from fluvial and non-fluvial sources could be exacerbated by development in the NDP area. However, opportunities for mitigation exist in sustainable design and Sustainable Urban Drainage.

Scoping outcome

- 4.24 With regards to climate change mitigation, the Plan is unlikely to have a significant effect on carbon emissions. It is limited in the ability to implement higher standards of energy efficiency, and there are no plans in the scope of the Plan to identify areas of potential for renewable energy schemes. The scale of growth will not lead to significant emissions beyond what might be otherwise experienced in the absence of the Plan (likewise, any reduction is not likely to be significant). Therefore, this factor has been **SCOPED OUT** of the SEA process.
- 4.25 Resilience to climate change and flood risk has been **SCOPED IN** to the SEA. There is the potential to explore how resilience to climate change can be enhanced as well as contributing towards flood risk mitigation. Flood risk could also be an important factor in terms of the site selection process.

What are the SEA objectives and appraisal questions for the Climatic Factors SEA theme?

- 4.26 The SEA topic 'Climatic Factors' has been scoped in to the SEA, with a focus on resilience and adaptation. Table 4-7 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

Table 4-7: SEA Framework of objectives and assessment questions: Climatic Factors

SEA Objective	Supporting Questions
Avoid and manage flood risk and support the resilience of the Frodsham Neighbourhood Plan area to the potential effects of climate change.	Will the option/proposal help to: • Improve green infrastructure networks in the plan area to support adaptation to the potential effects of climate change? • Ensure flood risk and erosion is not increased and where possible reduced • Sustainably manage surface water run-off, ensuring that the risk of flooding is not increased (either within the plan area or downstream) and where possible reduce flood risk? • Ensure the potential risks associated with climate change are considered through new development in the plan area? • Avoid placing development in areas that are at the greatest risk of flooding?

5. Historic Environment

5.1 This theme focuses on designated and non-designated heritage assets (including archaeology) and their setting.

Policy Context

5.2 Table 5-1 presents the most relevant documents identified in the policy review for the purposes of the FNP SEA.

Table 5-1 Plans, policies and strategies reviewed in relation to the historic environment

Document Title	Year of publication	Weblink
National Planning Policy Framework (NPPF)	2019	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf
The 25 Year Environment Plan	2018	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf
The National Design Guide	2019	https://www.gov.uk/government/publications/national-design-guide
Historic England Advice Note 1: Conservation Area Appraisal, Designation and Management	2019	https://historicengland.org.uk/images-books/publications/conservation-area-appraisal-designation-management-advice-note-1/
Historic England Advice Note 3: The Setting of Heritage Assets	2017	https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/
Historic England Advice Note 8: Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA)	2016	https://historicengland.org.uk/images-books/publications/sustainability-appraisal-and-strategic-environmental-assessment-advice-note-8/
Historic England Advice Note 11: Neighbourhood Planning and the Historic Environment	2018	https://historicengland.org.uk/images-books/publications/neighbourhood-planning-and-the-historic-environment/
North West Marine Plan	2021	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004490/FINAL_North_West_Marine_Plan_1_.pdf
The CWCC Local Plan Part 1	2015	http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adopted?tab=files
The CWCC Local Plan Part 2	2019	https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/cw_lp_part_two/

5.3 The key messages emerging from the review are summarised below:

- The key high-level principles for the conservation and enhancement of the historic environment are as follows:
 - Heritage assets should be recognised as an ‘irreplaceable resource’ that should be conserved in a ‘manner appropriate to their significance’, taking account of the wider social, cultural, economic and environmental benefits of conservation.
 - The importance of protecting the historic environment, in order to maximise the economic and social impact of heritage and to ensure that everyone can enjoy and benefit from it.
 - The significance of places is the key element which underpins the conservation and enhancement of the historic environment. Significance is a collective term for the sum of all the heritage values attached to a place, be it a building an archaeological site or a larger historic area such as a whole village or landscape.
 - With regards to Conservation Areas (CA); recognising the value of implementing controls through the appraisal and/or management plans which positively contribute to the significance and value of CAs.
- The FNP will be required to be in general conformity with the NPPF, which ultimately seeks to conserve and enhance historic environment assets in a manner appropriate to their significance. The NPPF seeks planning policies and decisions which are sympathetic to local character and history without preventing or discouraging appropriate innovation. Planning Practice Guidance expands on the NPPF recognising the proactive rather than passive nature of conservation.
- The Historic environment plays an important role; contributing to healthy and thriving ecosystems, landscapes and cultural values, including settlement identity, is reiterated through the key messages of the 25 Year Environment Plan and National Design Guide.
- Historic England’s Advice Notes provide further guidance in relation to the conservation and enhancement of the historic environment. Of particular relevance for the FNP is the emphasis on the importance of:
 - Understanding the different types of special architectural and historic interest which underpin designations, as well as how settings and / or views contribute to the significance of heritage assets;
 - Recognising the value of implementing controls through neighbourhood plans, conservation area appraisals and management plans; and
 - Appropriate evidence gathering, including clearly identifying those issues that threaten an area or assets character or appearance and that merit the introduction of management measures.
- The FNP is required to conform with the NWMP and policy NW-HER-1 is of particular relevance here as it seeks to conserve and enhance marine and coastal heritage assets. Proposals that may cause harm to the significance of heritage assets must demonstrate that they will follow the mitigation

hierarchy. Where it is not possible to mitigate then public benefits for proceeding with the proposal must outweigh the harm to the significance of the heritage assets.

- The FNP will also be required to be in general conformity with the Local Plans covering the FNP area which contain policies directly relating to the historic environment. The LPP1 policy ENV5 seeks to protect heritage assets requiring that development safeguard and enhance designated and on-designated heritage assets and their settings. Development would be required to positively respond to such assets and their settings, avoiding loss or harm to their significance. The policy also supports the viable re-use of heritage-at-risk assets.
- In addition to conserving the historic environment, the FNP should seek to identify opportunities to enhance the fabric and setting of the historic environment. It should also seek to rejuvenate features and areas which are at risk of neglect and decay. Development likely to have significant, unavoidable, adverse impacts will not be permitted. The policy is further reinforced by LPP2 policy DM46 which pertains to the protection of Conservation Areas.

Baseline Summary

Summary of current baseline

Designated Heritage Assets

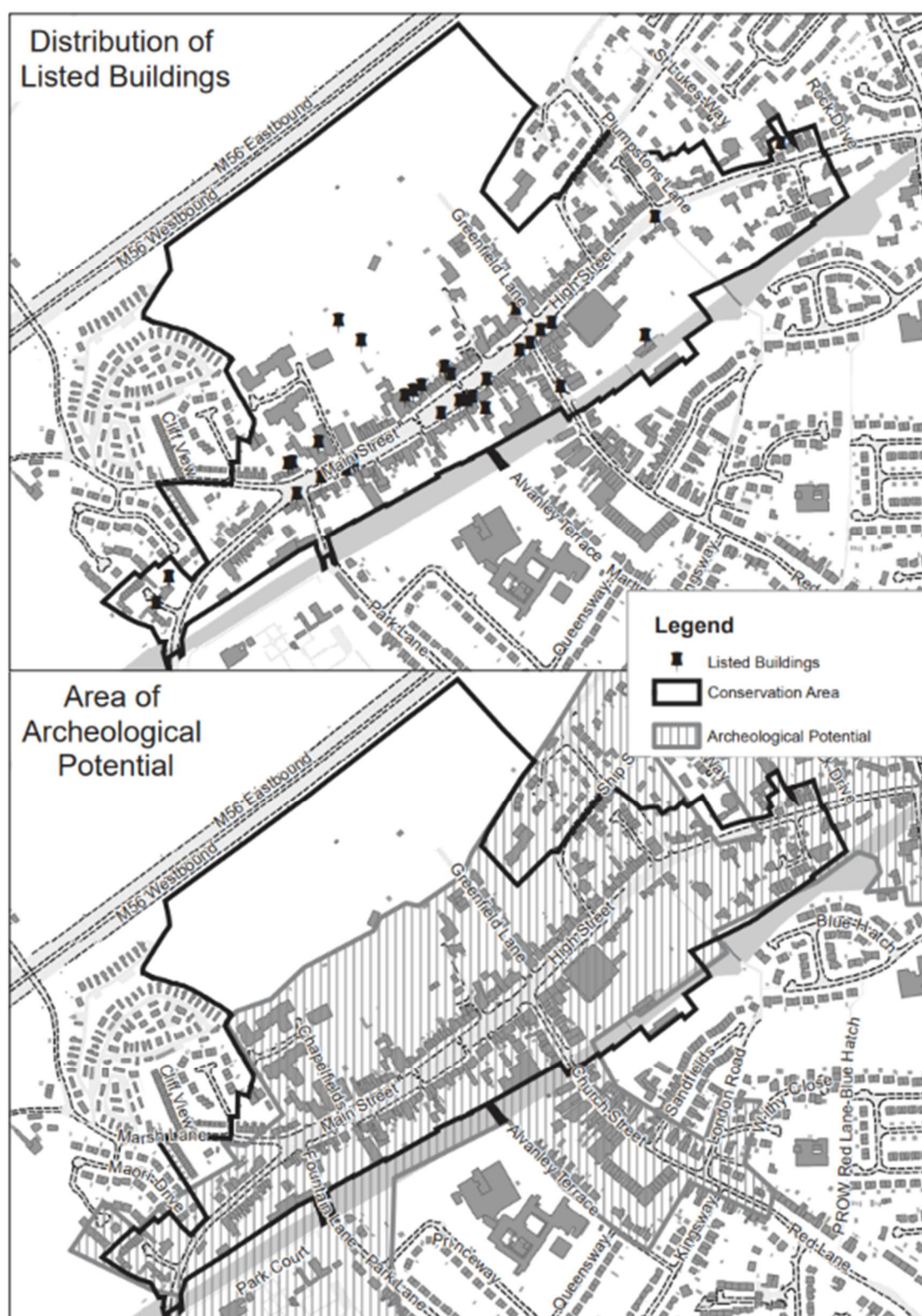
- 5.4 The NDP area contains a Conservation Area (CA) and numerous heritage assets (see figure 5-1) including 62 listed buildings, a registered Park and Gardens and a Scheduled Monument (Table 5-1). These heritage assets have been designated by Historic England as being of special interest by way of their historic and architectural value. However, there are likely to be numerous other, non-designated buildings or features, within the area that have local historic or architectural merit.

- 5.5 Frodsham (Town) Conservation Area sits astride a long established highway (figure 5-1). The part of the town that forms this conservation area is constrained between more recent parallel-aligned transport links, a railway and a motorway. It is essentially linear in urban form and character. Properties survive from the medieval period. Timber-framed and thatched cottages sit next to red brick and slate dwellings and more substantial and formal Georgian, Victorian and Edwardian structures. There are numerous listed and locally important buildings, including some unique structures¹⁸. The CA area appraisal notes there has been some inappropriate alterations (e.g. shop fronts and fascias). Threats to the CA character include disrepair and residential development of contrasting, often inappropriate, design and scale. Examples include; inappropriate materials such as uPVC windows and doors. Through traffic, background noise from the M56 and parking on the main street are cited as creating further adverse impacts such as hazard, noise and smell.
- 5.6 Scheduled Monuments are nationally important archaeological sites. Permission to alter scheduled monuments is required from the Secretary of State. The NP area has one Scheduled Monument in the form of a Hillfort on the crest of the sandstone ridge at Woodhouse Hill. The fort is one of a number of hillforts on the sandstone outcrop which bisects the county from the Mersey estuary to the Welsh border near Wrexham.¹⁹

¹⁸ Source: Frodsham (Town) Conservation Area Appraisal (August 2006) available at [https://www.cheshirewestandchester.gov.uk/documents/planning-and-building-consultancy/total-environment/conservation-and-design/conservation-area-appraisals/Frodsham\(Town\)conservationareaappraisal_part1.pdf](https://www.cheshirewestandchester.gov.uk/documents/planning-and-building-consultancy/total-environment/conservation-and-design/conservation-area-appraisals/Frodsham(Town)conservationareaappraisal_part1.pdf)

¹⁹ Heritage Gateway, List Entry Summary available at https://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=1013297&resourceID=5

Figure 5-1 Frodsham Conservation Area



Source: Frodsham (Town) Conservation Area Appraisal

Table 5-2 Frodsham Heritage Assets

Designations

Grade I	1
Grade II*	1
Grade II	62
Scheduled Monuments	1 (hillfort, woodhouse hill)
Registered Parks and Gardens	1 (Castle Park)

Heritage at Risk

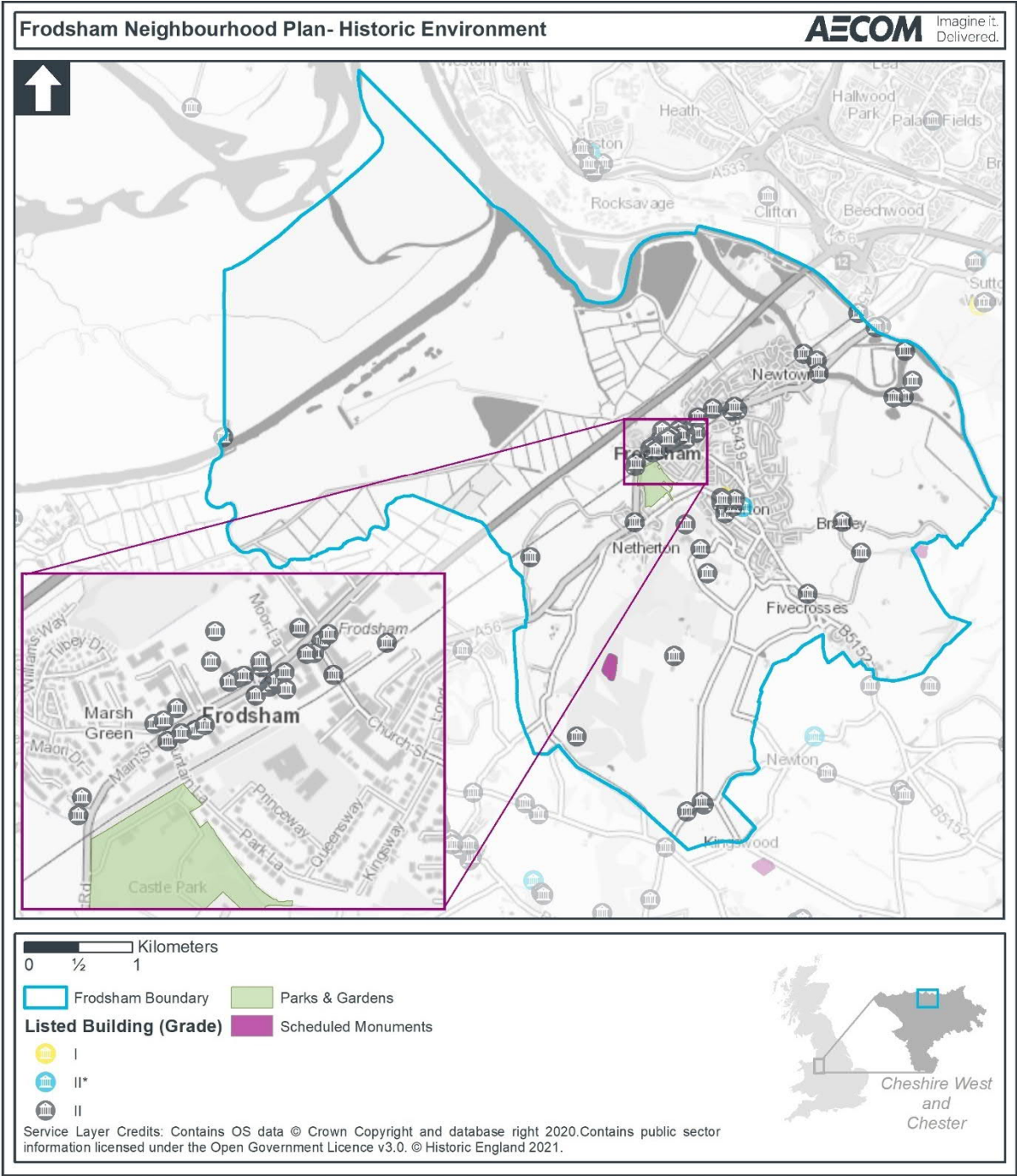
- 5.7 Since 2008, Historic England has released an annual Heritage at Risk Register. The Heritage at Risk Register highlights some of the Grade I, Grade II (within London) and Grade II* listed buildings, scheduled monuments, conservation areas, wreck sites and registered parks and gardens in England deemed to be 'at risk'. There are currently no heritage at risk entries on the Register for Frodsham.

Locally important features

- 5.8 In addition to designated heritage assets, the NP area is likely to contain many non-designated buildings and sites that contribute to the historic environment. The Cheshire Historic Environment Record (HER) currently lists 93 entries for Frodsham. These are mainly buildings But also include other assets of historic interest such as, an Anti-Aircraft Battery (at Overton), boundary stones, wells, Radio Station (Frodsham Hill), Fish Ponds, Mills etc.
- 5.9 There are around 400²⁰ sites of archaeological interest within the NDP area. The majority being Medieval, Roman, Bronze Age, Neolithic and Anglo-Saxon.

²⁰ ARCHI UK

Figure 5-2 Heritage designations in Frodsham



Summary of future baseline

- 5.10 The numerous heritage assets in the NP area render the area sensitive to change. Heritage assets are significant not only due to their physical presence but also due to their setting. The NPPF defines setting as “the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.” Setting includes, for example, key views of the asset in its wider context. Development pressures and poor management of heritage assets may lead to the gradual degradation and erosion of the historic environment in the FNP area.
- 5.11 Development in the NDP area has the potential to impact on the fabric and setting of heritage assets and upon the character of the townscape. This may lead to negative effects, such as the delivery of unsympathetic design and material use. Conversely, it could lead to positive effects through redevelopment of derelict and underused land and buildings. In the absence of a plan, there is less strategic direction for Frodsham though; meaning that negative effects may be more likely to occur.
- 5.12 It should be noted that historic environment designations and the historic environment related policies within the Local Plan (Parts 1 and 2) would offer a degree of protection to heritage assets and their settings regardless.

Key headline issues

- 5.13 The key issues are as follows:
- The NDP area contains numerous heritage assets including a Scheduled Monument, Listed Buildings and a registered Park and Gardens, which could be affected by policies and proposals within the plan (either positively or negatively). Furthermore, there are numerous non-designated heritage assets in the NP area which are particularly vulnerable to change, and these must be similarly protected by assessing the impacts of policies / proposals on their significance and contribution to the historic environment. Assessment of the significance of affected heritage assets (a statement of heritage significance) must stem from the interest(s) of the heritage asset (archaeological, architectural, artistic or historic)²¹.

²¹ Historic England Advice Note 12 “Statements of Heritage Significance: “Analysing Significance in Heritage Assets”

Scoping outcome

- 5.14 Historic Environment has been **SCOPED IN** to the SEA as there is potential for significant effects upon heritage assets and their settings. It is also important to ensure that the wider character of the built and natural environment is protected and enhanced.

What are the SEA objectives and appraisal questions for the Historic Environment SEA theme?

- 5.15 The SEA topic 'Historic Environment' has been scoped in to the SEA. Table 5-3 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

Table 5-3 SEA Framework of objectives and assessment questions: Historic Environment

SEA Objective	Supporting Questions
Protect, enhance and manage the integrity, distinctive character and setting of heritage assets and the wider historic environment.	Will the option/proposal help to: • Conserve, better reveal the significance, and enhance heritage assets, their setting and the wider historic environment? • Contribute to better management of heritage assets? • Identify and protect / enhance features of local importance? • Support access to, interpretation and understanding of the historic environment? • Consider the impact on setting in a manner proportionate to the significance of the heritage asset affected. • Promote heritage-led regeneration? • Lead to the repair and adaptive re-use of a heritage asset and encourage high quality design?

6. Landscape

6.1 This theme focuses on designated and protected landscapes within or near to the FNP area, as well as landscape character, landscape quality and visual amenity.

Policy Context

6.2 Table 6-1 presents the most relevant documents identified in the policy review for the purposes of the FNP SEA.

Table 6-1: Plans, policies and strategies reviewed in relation to landscape

Document Title	Year of publication	Weblink
National Planning Policy Framework (NPPF)	2019	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf
The 25 Year Environment Plan	2018	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf
The National Design Guide	2019	https://www.gov.uk/government/publications/national-design-guide
Cheshire West and Chester Local Plan Part 1	2015	http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adopted?tab=files
Cheshire West and Chester Local Plan Part 2	2019	https://inside.cheshirewestandchester.gov.uk/policies_plans_and_strategies/planning_policy/local_plan/local_plan_part_two
Frodsham Design Code	2019	AECOM report commissioned by the FNP Steering Group

6.3 The key messages emerging from the review are summarised below:

- The FNP will be required to be in general conformity with the NPPF which gives great weight to FNP conserving and enhancing protected landscapes, as well as landscape character and scenic beauty. The NPPF recognises the role of green infrastructure in landscape settings, as well as the importance of designated biodiversity sites, habitats, woodland, historic features, agricultural land and cultural landscapes. The positive contribution that land remediation can make in terms of addressing despoiled, degraded, derelict, contaminated and unstable land is also recognised.
- The 25-year Environment Plan and National Design Guide complement each other with their aims for a cleaner, greener country which puts the environment first and celebrates the variety of natural landscapes and

habitats. Design is focused on beautiful, enduring and successful places, which respond to local character and provide a network of high quality green open spaces.

- The FNP will also be required to be in general conformity with the Local Plan policies covering the FNP area. The CWCC LPP2 policy ENV2 (Landscape) seeks to protect and enhance landscape character and local distinctiveness by identifying key gaps in LP land allocations and between settlements in the greenbelt and protecting these by maintaining their character, supporting designation of Local Green Space and protecting the borough's estuaries and undeveloped coast. Policy DM49 (Registered parks and gardens) seeks to protect landscapes registered as Historic Parks and Gardens by ensuring great weight is given to the assets' conservation and significance.
- The FNP Steering group commissioned AECOM to produce a Design Code for Frodsham with the aim of providing design principles and codes for all development in Frodsham Parish, which can be applied to potential development sites. A series of design codes have been produced to provide guidance for developments in Frodsham. Of particular relevance to landscape and townscape are:
 - Key Views and Vistas (KVV) requires development to be planned to respond to existing view corridors and reinforce views of existing landmarks. The spacing of development should allow for long distance views of Frodsham Hill or open countryside. Key vistas should be protected by controlling development densities and building heights, particularly when in the sight lines of local landmarks.
 - Environmental Designations (GI-ED) includes the requirement that development enhance biodiversity and geodiversity wherever possible. This will involve restoring and increasing the total area of natural habitats and landscape features.
 - Open Space (GI-OS) requires residential development to provide appropriate quantity and quality of outdoor private amenity space. Development adjoining public open spaces should enhance the character of the space helping create a sense of place.
 - Woodland, Tress and Hedgerows (GI-WTH) requires schemes to replace trees, hedgerows and woodland lost through new development. The spacing of development should reflect the rural character and allow for long distance views of the countryside from the public realm. Trees and landscaping should be incorporated in the design. Within the countryside, frontage areas should preserve the rural character of the roads by retaining grass verges, hedgerows and trees.

Baseline Summary

Summary of current baseline

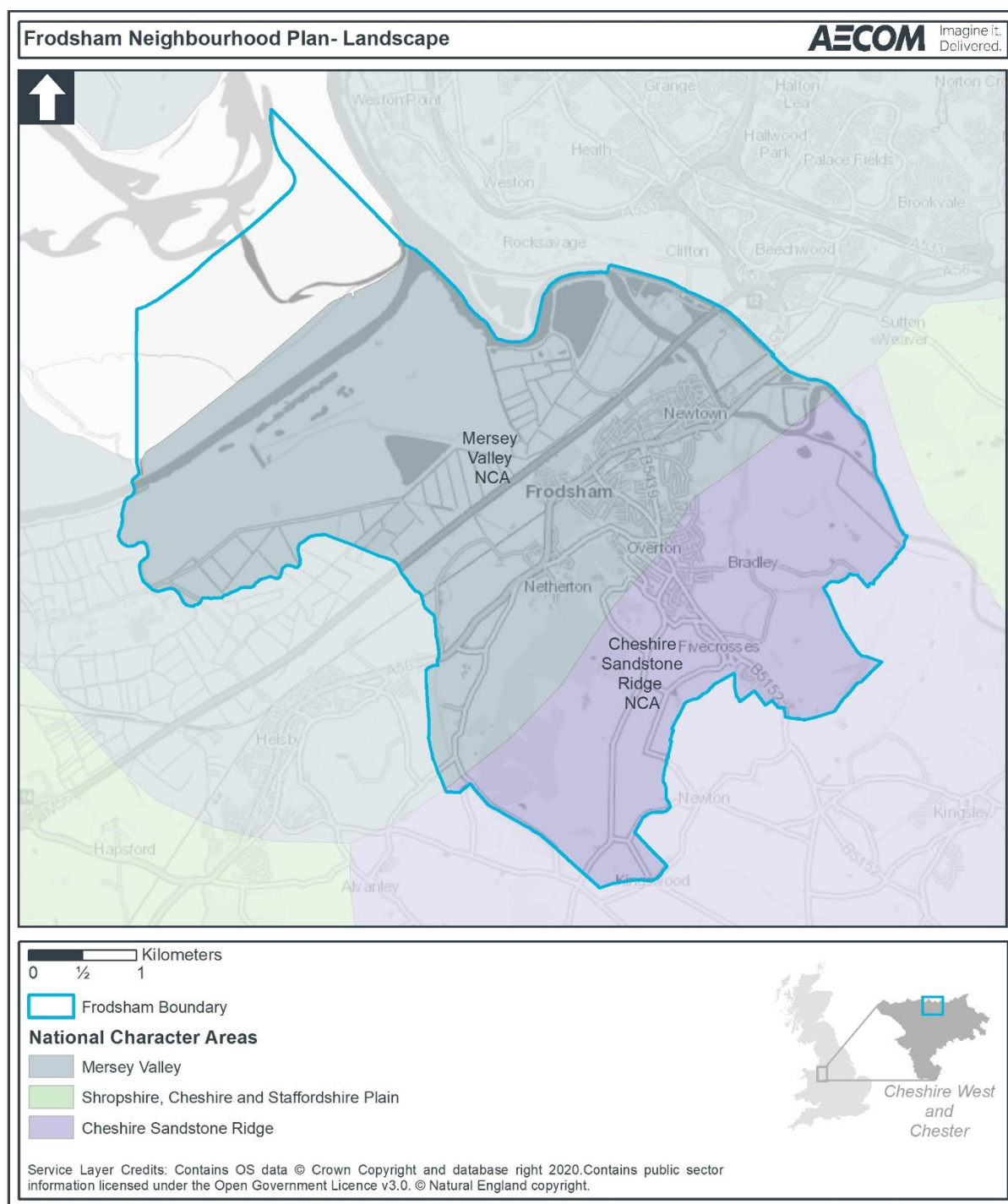
- 6.4 National Character Areas (NCAs) are areas that share similar landscape characteristics, and which follow natural lines in the landscape rather than administrative boundaries, making them a good decision making framework for the natural environment. In this regard, the Frodsham Neighbourhood Plan area falls within two NCAs: the ‘Mersey Valley’ NCA and the ‘Cheshire Sandstone Ridge’ NCA (Figure 6-1).
- 6.5 The Mersey Valley NCA consists of a wide, low-lying river valley landscape focusing on the River Mersey, its estuary, associated tributaries and waterways. Farmland in the north of the Mersey Valley NCA is predominantly arable, while in the south there is a mix of arable and pasture. Urban and industrial developments line the banks of the River Mersey. Industrial infrastructure is often prominent, with large-scale, highly visible development including chemical works and oil refineries.²²
- 6.6 A number of Statements of Environmental Opportunity (SEOs) have been prepared for the Mersey Valley NCA which highlight areas that could be enhanced and/or protected by development brought through the Plan. These are detailed below:
- SEO 1: Conserve and enhance the Mersey Valley's rivers, tributaries and estuary, improving the ability of the fluvial and estuarine systems to adapt to climate change and mitigate flood risk while also enhancing habitats for wildlife and for people's enjoyment of the landscape.
 - SEO 2: Promote the Mersey Valley's historic environment and landscape character and positively integrate the environmental resource with industry and development, providing greenspace within existing and new development, to further the benefits provided by a healthy natural environment, as a framework for habitat restoration and for public amenity.
 - SEO 3: Manage the arable and mixed farmland along the broad linear Mersey Valley, and create semi-natural habitats, woodlands and ecological networks, to protect soils and water, enhance biodiversity, increase connectivity and improve the character of the landscape, while enabling sustainable food production.
 - SEO 4: Manage and enhance the mossland landscape in the east, safeguarding wetlands including the internationally important lowland raised bogs, to conserve peat soils, protect and enhance biodiversity, conserve archaeological deposits, contribute to landscape character and store carbon.

²² Natural England (2013): '60 Mersley Valley' [online] available at:
<http://publications.naturalengland.org.uk/publication/6387892108656640?category=587130>

- 6.7 The Cheshire Sandstone Ridge NCA is situated between Malpas and Frodsham. Compared with the surrounding plain, the NCA has a strong mosaic of broadleaved mixed woodland comprising ancient woodland and some post-medieval conifer plantations, with large blocks of commercially managed conifers to the east. A thick layer of glacial till covers the lower slopes of the ridge and the surrounding plain is punctuated by numerous ponds and meres. Lowland heath was once more widespread, but now consists solely in discrete areas.²³ The NCA has been shortlisted for Area of Outstanding Natural Beauty (AONB) designation. The AONB designation offers protection under the Countryside and Rights of Way Act 2000 (CROW Act). It protects the land to conserve and enhance its natural beauty.
- 6.8 A number of Statements of Environmental Opportunity (SEOs) have been prepared for the Cheshire Sandstone Ridge NCA, which highlight areas that could be enhanced and/or protected by development brought through the Plan. These are detailed below:
- SEO 1: Manage and enhance the rivers, streams and wetland habitats, including flood plain grazing marsh and wet woodland, protecting them from diffuse pollution and maintaining the integrity and unique conditions for the preservation of the lakes and standing waters of internationally important sites.
 - SEO 2: Manage and expand areas of semi-natural woodland, restore and reinstate hedgerows and hedgerow trees, protect and restore ancient woodland, for example in the Delamere Forest Park and throughout the Mersey Forest, thus reducing habitat fragmentation to benefit landscape character, biodiversity, resource protection and climate regulation while enhancing the recreational, educational and experiential qualities of the NCA.
 - SEO 3: Protect and manage the geological sites, with an emphasis on demonstrating the strong link between geology and its influence on landscape and industrial development, and promoting greater understanding of the link between wildlife and geodiversity, particularly in the distribution of habitats and species, recognising the importance of former extraction sites for both geodiversity and biodiversity.
 - SEO 4: Manage and, where appropriate, expand areas of characteristic heathland and other priority habitats, including lowland meadows and lowland grassland, thus reducing habitat fragmentation to benefit landscape character, sense of place, biodiversity and resource protection while enhancing the recreational and experiential qualities of the NCA.

²³ Natural England (2014): '62 Cheshire Sandstone Ridge' [online] available at:
<http://publications.naturalengland.org.uk/publication/5655719219036160?category=587130>

Figure 6-1 Frodsham National Character Areas



- 6.9 Landscape Character Assessment (LCA) is an assessment of the distinct and recognisable pattern of elements that occur consistently in a particular landscape. The Chester and Cheshire West LCA details 16 separate landscape types and 53 separate landscape areas within the authority. The main settlement area of Frodsham is identified as an 'Urban area'. However, the north westernmost part of the Plan area falls within the 'Drained Marsh' LCT and, beneath this, the Frodsham, Helsby and Lordship Marshes LCA.²⁴
- 6.10 The Drained Marsh LCT is located on former saltmarsh or mudflats adjacent to the Dee and Mersey estuaries. It is drained by inter-connecting networks of drainage channels arranged in a regular, often linear pattern, and this gives the impression of an open unenclosed landscape. The former marsh resulted from the marine and alluvial deposits of clay, salt and silt deposited under tidal and estuarine influence. This overlies Kinnerton Sandstone, Chester Pebble Beds and Wilmslow Sandstone. Soils comprise humic and alluvial gleys on the improved reclaimed coastal floodplain. Small patches of scrub are common, with few trees. Where there are hedgerows they are mostly grown out and in poor condition. Reeds and other aquatic or emergent plants are mainly restricted to ditches. The drained marsh has ornithological interest as a wintering ground for wading birds and wildfowl as well as birds of prey. Marshland is an unappealing location for settlement and as such these areas have remained largely unsettled, restricted to a few isolated farms.²⁵
- 6.11 The Frodsham, Helsby and Lordship Marshes LCA (shown in Figure 6-2) underlies the north westernmost part of the Plan area. Key characteristics of this landscape include²⁶:
- A flat, low lying landscape of former mudflats and saltmarsh alongside the Mersey Estuary, contrasting with surrounding built development (previously designated as an Area of Significant Local Environmental Value).
 - Strong interconnection and intervisibility with LCT 16 Mudflats and Saltmarsh to the north.
 - A landscape etched with a distinctive pattern of straight drainage ditches which delineates the field pattern of planned 19th century enclosure.
 - Incomplete hedgerow boundaries provide partial enclosure along some field boundaries.
 - Canal dredging grounds defined by high earth embankments.
 - An isolated, bleak and open landscape, where settlement is limited to isolated farms linked by rough tracks between ditches.

²⁴ Cheshire West and Chester Gov (n.d.): 'LCT 4: Drained Marsh' [online] available at: https://www.cheshirewestandchester.gov.uk/documents/planning-and-building-consultancy/total-environment/landscape-assessment/LCT4_Drained_Marsh.pdf

²⁵ Cheshire West and Chester Gov (n.d.): 'LCT 4: Drained Marsh' [online] available at: https://www.cheshirewestandchester.gov.uk/documents/planning-and-building-consultancy/total-environment/landscape-assessment/LCT4_Drained_Marsh.pdf

²⁶ Cheshire West and Chester Gov (n.d.): 'LCT 4: Drained Marsh' [online] available at: https://www.cheshirewestandchester.gov.uk/documents/planning-and-building-consultancy/total-environment/landscape-assessment/LCT4_Drained_Marsh.pdf

- Although much of the LCA is actively farmed, the degraded hedgerows and broken fencing shows this to be a landscape in need of improved management. Some land to north of Lordship Lane remains in use for canal dredgings and has undergone change as a result of the preliminary works for the permitted windfarm.
- Wet grassland species have been lost and ditches are eutrophic as a result of the intensive agricultural use of the land.

6.12 The Cheshire West and Chester Local Authority indicate that the overall management strategy for this landscape should be to enhance and restore the condition of habitats and features of the marshes whilst safeguarding its open character, through measures such as²⁷:

- Encouraging recreational development as a means of managing some of the more derelict and degraded areas of the landscape.
- Maintaining the distinctive field pattern that reveals the planned 19th century enclosure of the marsh.
- Seeking to restore thorn hedgerows that are falling into decline.
- Considering opportunities to create views across the Mersey Estuary.
- Conserving the 'remote' character of the marshes away from the main transport corridor of the M56.
- Consider views to and from the Frodsham Sandstone Ridge and Helsby Hill when planning any change.

²⁷ Cheshire West and Chester Gov (n.d.): 'LCT 4: Drained Marsh' [online] available at: https://www.cheshirewestandchester.gov.uk/documents/planning-and-building-consultancy/total-environment/landscape-assessment/LCT4_Drained_Marsh.pdf

Figure 6-2 The Frodsham, Helsby and Lordship Marshes²⁸



²⁸ Cheshire West and Chester Gov (n.d.): 'LCT 4: Drained Marsh' [online] available at: https://www.cheshirewestandchester.gov.uk/documents/planning-and-building-consultancy/total-environment/landscape-assessment/LCT4_Drained_Marsh.pdf

6.13 At the parish level, Frodsham Town Council conducted a review of landscape and townscape types within the local area. Seven landscape types were identified, listed below²⁹:

- LCT 1: Estuary.
- LCT 2: Reclaimed Saltmarsh.
- LCT 3: Floodplain.
- LCT 4: Valley-side.
- LCT 5: Scarp Foot.
- LCT 6: Wooded Escarpment.
- LCT 7: Undulating Elevated Land.

6.14 With regards to townscape, fifteen townscape areas were identified within the town, these are shown in Figure 6-3 and detailed in Table 6-1.

²⁹ K Gee (2008) Landscape Character Assessment of Frodsham Civil Parish UNPUBLISHED.

Table 6-2 Townscape areas, Frodsham³⁰

Townscape area	Key characteristics	Extent
Townscape Area 01: Marsh Lane	The area is predominantly residential. Many properties are brick built with pitched slate or tile roofs.	The Marsh Lane Townscape Area comprises properties on the northwestern edge of the town and is bounded by the embankment of the Chester to Warrington railway line in the southeast.
Townscape Area 02: Motorway Buffer Zone	The area is predominantly green infrastructure comprising a mixture of recreational open space and wildlife habitat that has developed from agricultural land since the Preston Brook to Hapsford section of the M56 was opened in 1971.	The Motorway Buffer Zone is an area of Green Belt land between the Town Policy Boundary and the M56.
Townscape Area 03: Commercial Core	The public face of the Commercial Core is a diverse mix of buildings mostly with domestic origins. The character of the core owes much to its surviving historic buildings and their use of contrasting building materials and styles.	The area is located between Castle Park and Marsh Lane Townscape Areas in the west and the Frodsham Bridge Townscape Area to the east.
Townscape Area 04: Ashton Drive	The area has grown in discrete phases since the mid-20th century and each development retains much of its original character, e.g. among the older developments are the tile hung 'Cornish' houses on Ship Street and Hayes Crescent.	The Ashton Drive area lies on the northern edge of Frodsham and is bisected by the railway line: the larger part, north of the railway, has vehicular access from Ship Street and St Hilda's Drive; whilst the southern part is reached from Volunteer Street.

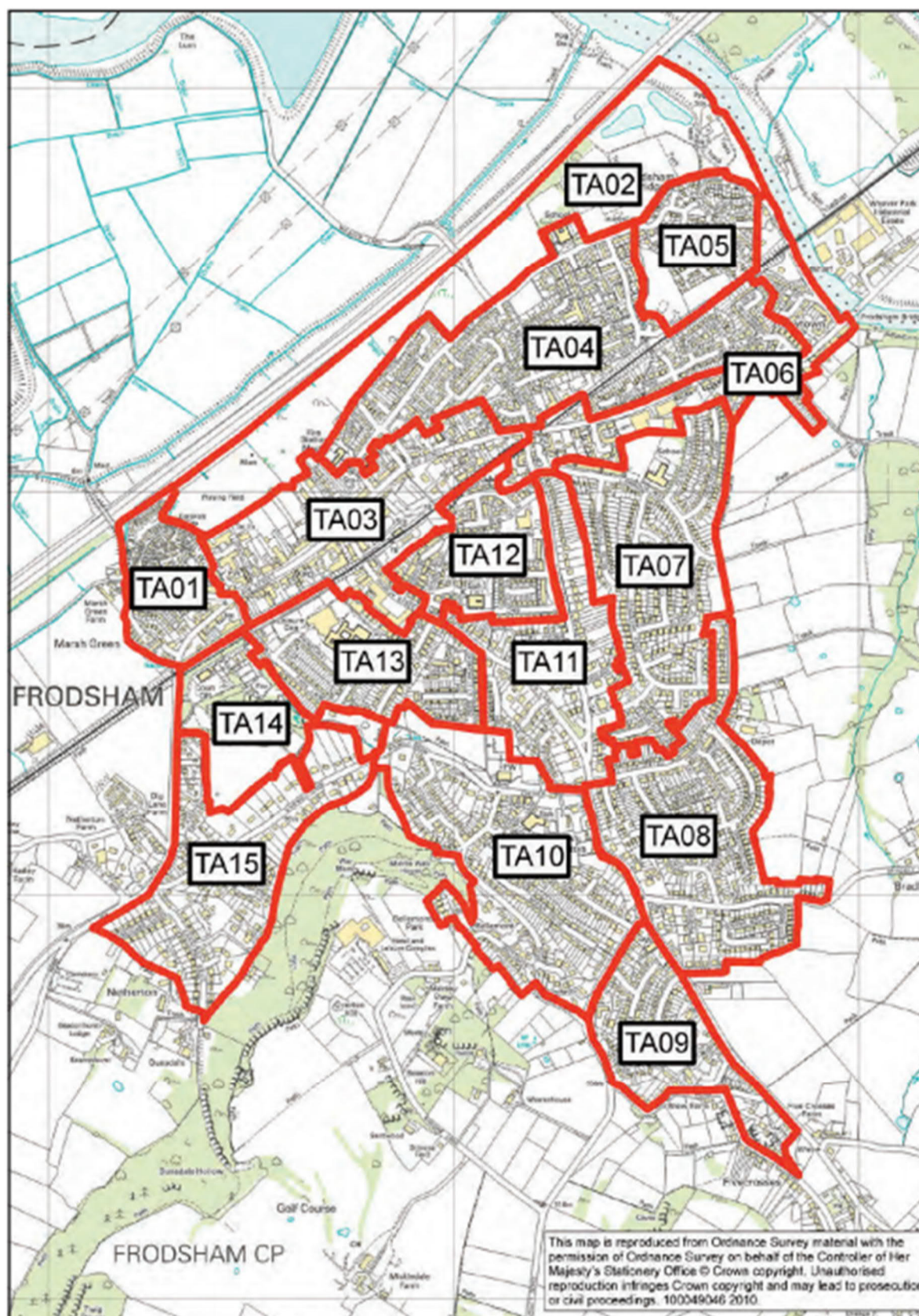
³⁰ Frodsham Town Council (2010): 'Frodsham Design Statement' [online] available at: <http://frodshamplan.org.uk/images/docsandreprs/Town%20Design%20Statement%20-%20Frodsham%20-%20July%202010.pdf>

Townscape Area 05: Saltworks Farm	Detached houses in a variety of styles predominate along the curving principal road with semi-detached and terraced properties common on the cul-de-sac spurs.	This townscape area is located in the northeast of Frodsham, in the residential hub at Saltworks Farm.
Townscape Area 06: Frodsham Bridge	Frodsham Bridge Townscape Area is characterised by its domestic / commercial mix concentrated along the south side of Bridge Lane.	Frodsham Bridge Townscape Area reaches the Town Policy Boundary at the river's edge in the east and the Green Belt/Town Policy Boundary in the south. The area extends westwards along Bridge Lane to its junction with Fluin Lane.
Townscape Area 07: The Lakes	Properties vary in size and type: they are mostly 2-storey detached houses and dormer bungalows, e.g. Penrith Close and Borrowdale Close, with semi-detached houses in Silverdale Close and Thirlmere Close, and semi-detached bungalows in Keswick Drive. Building materials are predominantly brick with tiled roofs in a variety of modern styles.	The area is on the eastern side of town on land that rises to the south and east. The medieval salt route / hollow way, leading to Bridge Lane and the former river port, marks the area's eastern edge and the Town Policy Boundary.
Townscape Area 08: Doric Avenue	The Doric Avenue Townscape Area is predominantly residential and reflects development that has taken place since pre-Victorian times to the late 20 th century resulting in a wide variety of property types and styles.	Doric Avenue is central to this townscape area and links two busy access routes: Townfield Lane and Bradley Lane.

Townscape Area 09: Five Crosses	Five Crosses Townscape Area is almost entirely residential, but includes former sandstone quarries, now wildlife habitat, on the west side of Kingsley Road. The area reflects development has taken place since the Victorian era to the late 20 th century, resulting in a large range of architecture.	The area lies on the southern edge of town, between Kingsley Road and Manley Road, on land that rises to the southwest below the wooded slopes of Beacon Hill.
Townscape Area 10: Overton	Overton Townscape Area is mainly residential but includes a core of small businesses and community facilities centred on School Lane and the northern ends of Hillside Road and Bellemonte Road.	The area is situated at Overton in the south west of Frodsham.
Townscape Area 11: Fluin Lane	The Fluin Lane Townscape Area is entirely residential and development ranges from Victorian to 21 st century in age.	The Fluin Lane Townscape Area extends southwards from the western end of Langdale Way and rises steadily to Townfield Lane.
Townscape Area 12: Community Centre	A large amount of 1960s development surrounds older property in this area. Specific design features that contribute to local distinctiveness include decorative brickwork detail on eaves, gable ends and chimneys, terracotta roof ridge tiles, doorways and front wall detail in Sandfields.	The Community Centre Townscape Area lies between Church Street and Fluin Lane with railway property forming its northern boundary.
Townscape Area 13: Kingsway	The Kingsway Townscape Area is predominantly residential and properties demonstrate a diversity of styles with ages ranging from Victorian to 21 st century. Most are medium sized semi-detached houses with a few bungalows and some larger properties interspersed.	The Kingsway Townscape Area is bounded by the railway embankment to the northwest and by the extensive green wedge of Castle Park and Churchfields to the south.

Townscape Area 14: Castle Park	Castle Park Townscape Area forms the major part of the Frodsham (Castle Park) Conservation Area; most of the park is a Registered Historic Park and Garden, the lower park is part of the Frodsham Area of Archaeological Potential, and all of it is part of the green infrastructure.	The Castle Park area is situated at the site of the fortified manorhouse / “castle” in late medieval times in the west of Frodsham.
Townscape Area 15: Howey Lane	The Howey Lane Townscape Area is characterised by its verdant appearance and is a valuable component of the town’s green infrastructure. The area extends out to the Green Belt on three sides, and to Castle Park in the north.	The area is located in the south west of Frodsham and extends out to the Green Belt / Town Policy Boundary on three sides, and to Castle Park in the north.

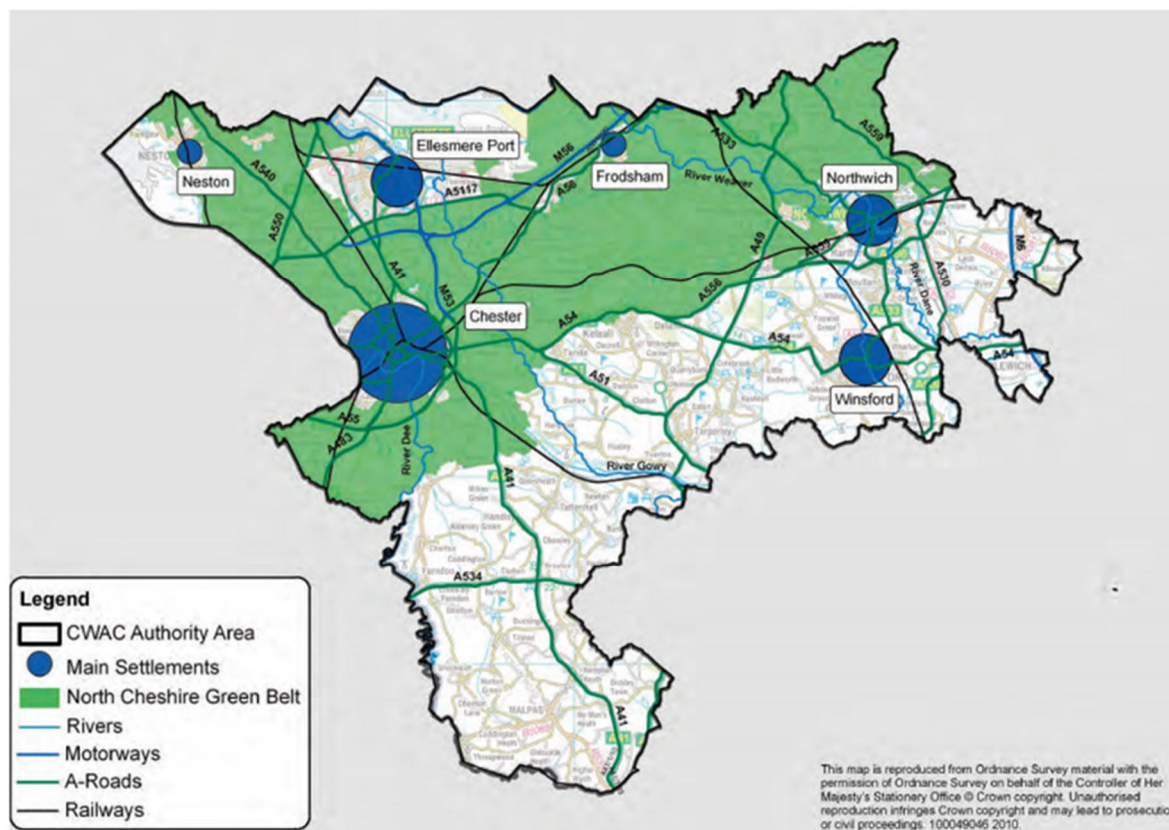
Figure 6-3 Frodsham Townscape Areas³¹



³¹ Frodsham Town Council (2010): 'Frodsham Design Statement' [online] available at: <http://frodshamplan.org.uk/images/docsandreps/Town%20Design%20Statement%20-%20Frodsham%20-%20July%202010.pdf>

- 6.15 Green belts act as important mechanism to prevent urban sprawl/extensive urbanisation within an area, and protect the countryside. The North Cheshire Green Belt covers the entirety of the Plan area (shown in Figure 6-4, below).

Figure 6-4 North Cheshire Green Belt³²



Summary of future baseline

- 6.16 Several policies noted within the adopted local plan provide some protection to current landscape features in Frodsham, including STRAT 9 (Green belt and countryside), ENV2 (Landscape) and STRAT 8 (Rural Area).
- 6.17 However, depending on the scale of development, a lack of overall vision and framework could result in the delivery of less sympathetic development styles, layouts and material choice. This could have a disruptive impact on the landscape through the lack of cohesive development. Insensitive development could also result in the loss of landscape features and adverse visual impact. Conversely, sensitive development presents an opportunity to enhance the existing townscape character of Frodsham whilst respecting the key characteristics of the landscape.

³² Frodsham Town Council (2010): 'Frodsham Design Statement' [online] available at: <http://frodshamplan.org.uk/images/docsandreps/Town%20Design%20Statement%20-%20Frodsham%20-%2020July%202010.pdf>

Key headline issues

6.18 The key issues are as follows:

- There are valuable landscapes in the NP area that make a significant contribution to the character of the area. These comprise the Drained Marsh LCT and its corresponding LCAs.
- The North Cheshire green belt, which encompasses the majority of the Plan area will require protection in line with Policy STRAT 19 of the Local Plan.
- Frodsham Town Council have noted fifteen townscape areas, each with their own unique characteristics that contribute to the sense of place of the Plan area. Development brought forward through the plan will need to take into account the style, layout and massing of current features of notable landscape value within these areas.
- The Local Plan's policies offer a degree of protection to landscape assets and their settings, but insensitive development could have a disruptive impact on landscape

Scoping outcome

6.19 Landscape has been **SCOPED IN** to the SEA as there is potential for significant effects upon the character of landscapes. The FNP allocates sites for housing which can potentially have impacts (positive and negative) on landscape.

What are the SEA objectives and appraisal questions for the Landscape SEA theme?

6.20 The SEA topic 'Landscape' has been scoped in to the SEA. Table 6-3 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

Table 6-3: SEA Framework of objectives and assessment questions: Landscape

SEA Objective	Supporting Questions
Protect, enhance and manage the distinctive character and appearance of landscapes.	Will the option/proposal help to: • Conserve, better reveal the significance and enhance landscape assets? • Contribute to better management of landscape assets? • Identify and protect/enhance features of local importance? • Support access to, interpretation and understanding of the surrounding landscape? • Improve linkages to open space and the countryside? • Preserve and enhance the North Cheshire Green Belt?

7. Land, Soil and Water Resources

7.1 This theme focuses on the quality of soil resources, the extent of mineral resources, water supply resources and water quality in the FNP area.

Policy Context

7.2 Table 7-1 presents the most relevant documents identified in the policy review for the purposes of the FNP SEA.

Table 7-1 Plans, policies and strategies reviewed in relation to land, soil and water resources

Document Title	Year of publication	Weblink
National Planning Policy Framework (NPPF)	2019	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf
The 25 Year Environment Plan	2018	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf
Safeguarding our Soils: A strategy for England	2009	https://www.gov.uk/government/publications/safeguarding-our-soils-a-strategy-for-england
Future Water: The government's water strategy for England	2011	https://www.gov.uk/government/publications/future-water-the-government-s-water-strategy-for-england
Water for Life	2011	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228861/8230.pdf
United Utilities' Water Resource Management Plan (WRMP)	2019	
North West River Basin District Management Plan	2015	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718335/North West RBD Part 1 river basin management plan.pdf
Cheshire Replacement Minerals Local Plan	2019	https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adopted?pointId=1419339111281

Document Title	Year of publication	Weblink
Cheshire West and Chester Local Plan Part 1	2015	http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adopted?tab=files
Cheshire West and Chester Local Plan Part 2	2019	https://inside.cheshirewestandchester.gov.uk/policies_plans_and_strategies/planning_policy/local_plan/local_plan_part_two
Cheshire Waterways Strategy	2016	

7.3 The key messages emerging from the review are summarised below:

- The FNP will be required to be in general conformity with the NPPF, which seeks to protect high quality soil resources, and improve the water environment; recognising the wider benefits of natural capital and derived from ecosystem services. Furthermore, the NPPF recognises the need to take account of the long-term implications of climate change and build resilience in this respect. The NPPF encourages efficient land use, utilising brownfield land opportunities and land remediation schemes where appropriate and delivering environmental gains.
- The 25-year Environment Plan presents a focus for environmental improvement in the next couple decades, with aims to achieve clean air, clean and plentiful water, and reduced risk from environmental hazards. This includes measures to improve soil quality, restore and protect peatlands, use water more sustainably, reduce pollution, maximise resource efficiency and minimise environmental impacts. This leads on from and supports the soil strategy for England (Safeguarding our soils) which seeks to ensure that all England's soils will be managed sustainably and degradation threats tackled successfully by 2030, as well as the national water strategies which seek to secure sustainable and resilient water resources and improve the quality of waterbodies, and the national waste plan which seeks to identify measures being taken to move towards a zero waste economy.
- The United Utilities WRMP further highlights the acute stresses that the catchment faces in the coming years and the challenges faced by the council in terms of securing water resources into the future in one of the driest regions in England. The Plan sets out how the organisation will ensure the sufficient supply of water over a 25-year period (2020-2045). The plan objective is to manage demand, offsetting future demand pressures through leakage reductions (20% by 2025 and over 40% by 2045) and increased resilience.

- The FNP will also be required to be in general conformity with the Cheshire Replacement Minerals Local Plan, which form part of the Local Development Frameworks for each county. These plans identify and safeguard sites and resources important to the continued sustainable management of mineral extractions and waste arisings.
- Furthermore, the FNP will also be required to be in general conformity with the Local Plans covering the FNP area, which contain policies specifically relating to efficient land use, the sustainable use of resources, soil protection, the efficient use of water, and protection for water quality.
- Additionally, the Cheshire Waterways Strategy (2016) presents opportunities to enhance and improve waterways systems in Cheshire.

Baseline Summary

Summary of current baseline

Soil resources

- 7.4 The Agricultural Land Classification categorises land into six grades (plus 'non-agricultural' and 'urban'), where Grades 1 to 3a are the 'best and most versatile' land (BVM) and Grades 3b to 5 are of poorer quality. Figure 7-1 shows that a large portion of the Plan area is underlain by Grade 3 quality land, according to the pre-1988 assessment. Though it is not possible to ascertain whether this land is Grade 3a or 3b, the 'Predictive BMV Land Assessment' for the North West indicates a high likelihood of BMV land in Frodsham, in particular, in the north west of the Plan area (>60% likelihood). Additionally, there are some smaller areas of Grade 2 quality land at localized spots outside the main town of Frodsham.
- 7.5 Further, as illustrated in Figure 7-2, a more detailed assessment conducted post-1988 indicates that part of the Plan area is underlain by Grade 2 ('very good quality' land) and 3a ('good quality' agricultural land). Some of this area lies adjacent to Frodsham town, the main developed part of Frodsham.
- 7.6 With regards to minerals, the NDP overlaps a relatively small mineral safeguarding area (MSA) at the north eastern tip of the NDP, an area lying between the M56 and the A56 just before Junction 12 of the M56. However, it should be noted that the quality of the map in the assessment is not sufficiently clear to rule out other MSAs in the area.³³ It is recommended that this is evaluated by the council at a later stage of the planning process.

³³ Cheshire West and Cheshire (2019): 'Local Aggregate Assessment' [online] available at: https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/minerals_and_waste/laa?tab=files

Figure 7-1 Indicative Agricultural Land Classification

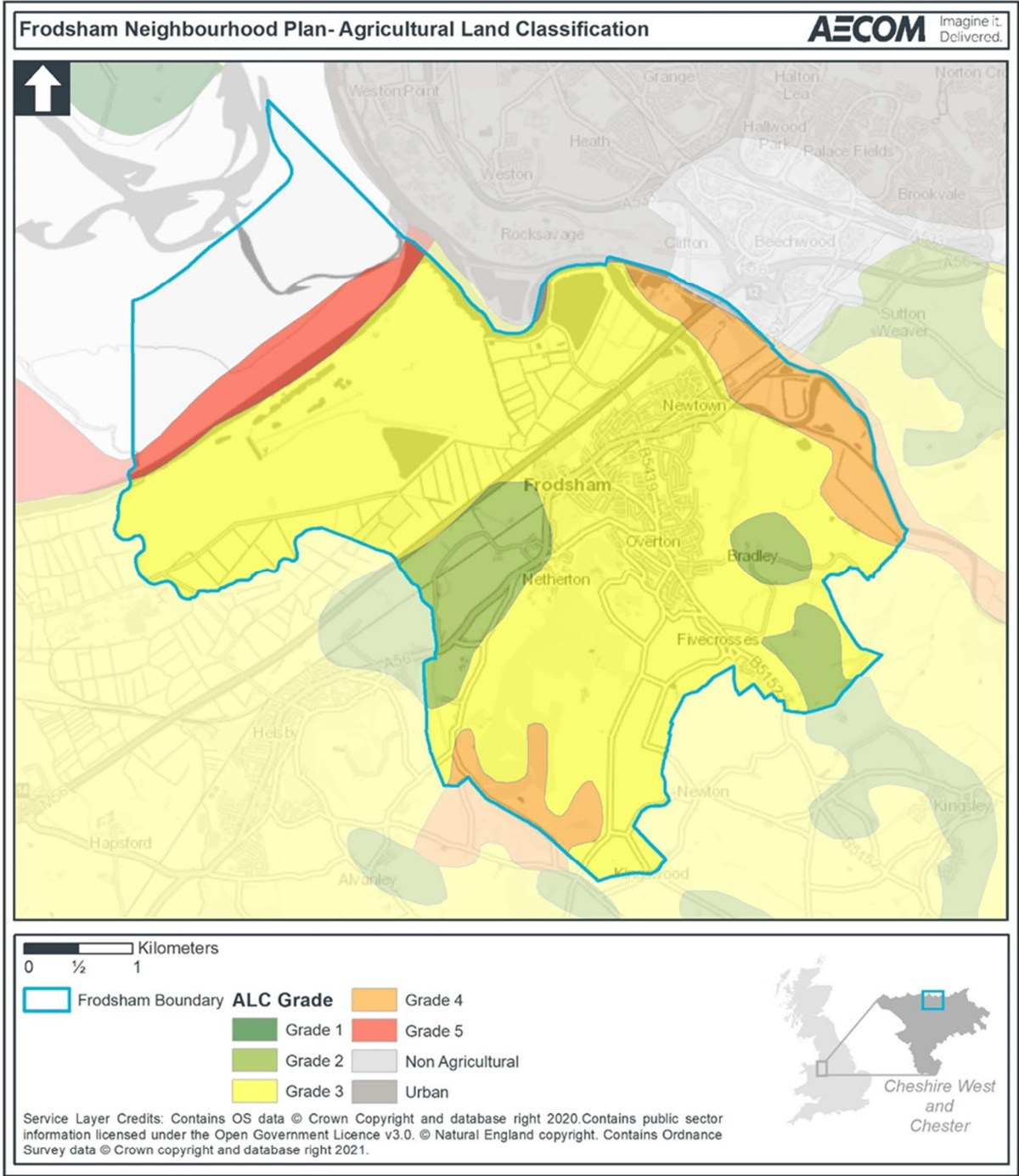
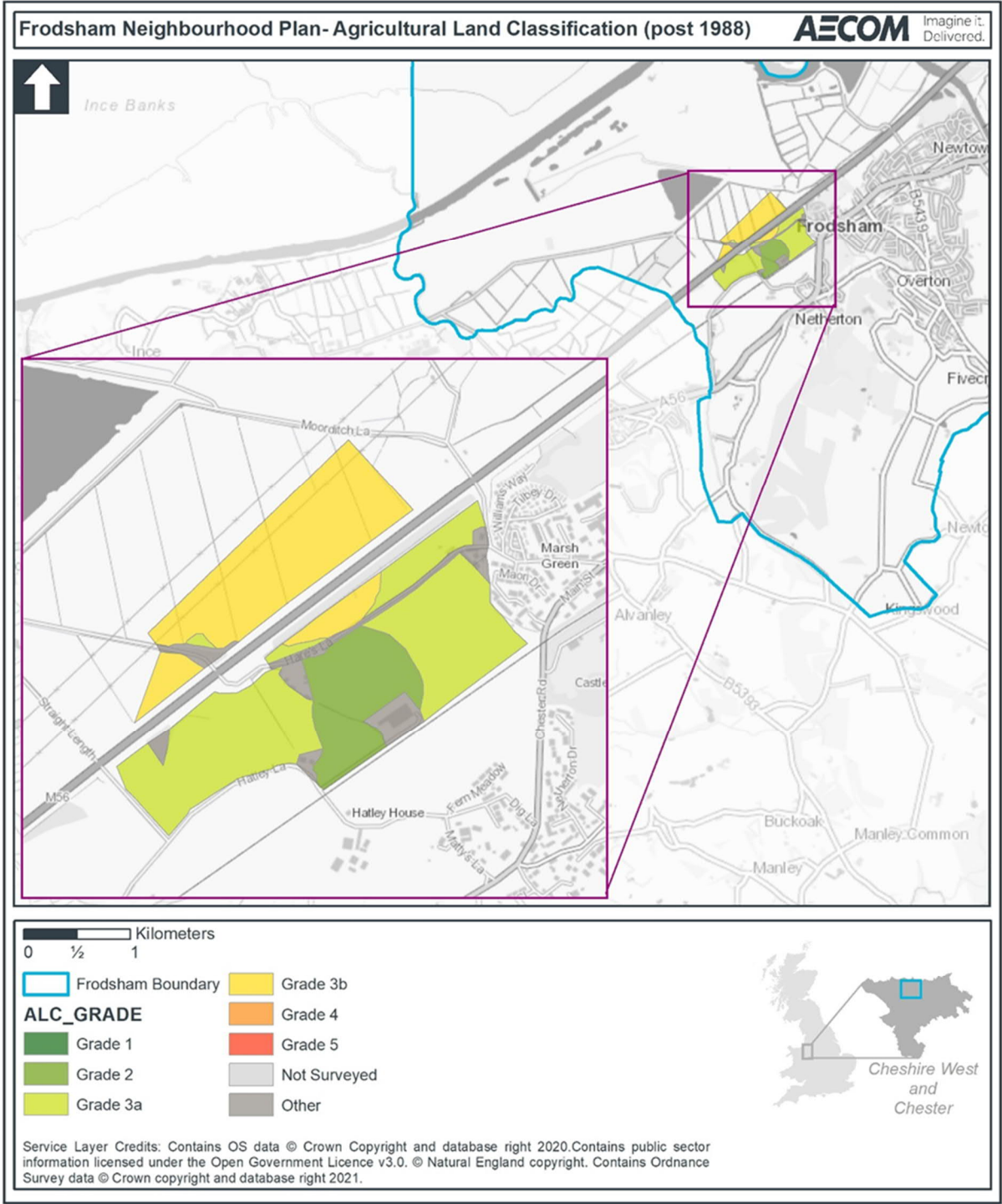


Figure 7-2 Agricultural Land Classification (Post 1988)



Watercourses and water quality

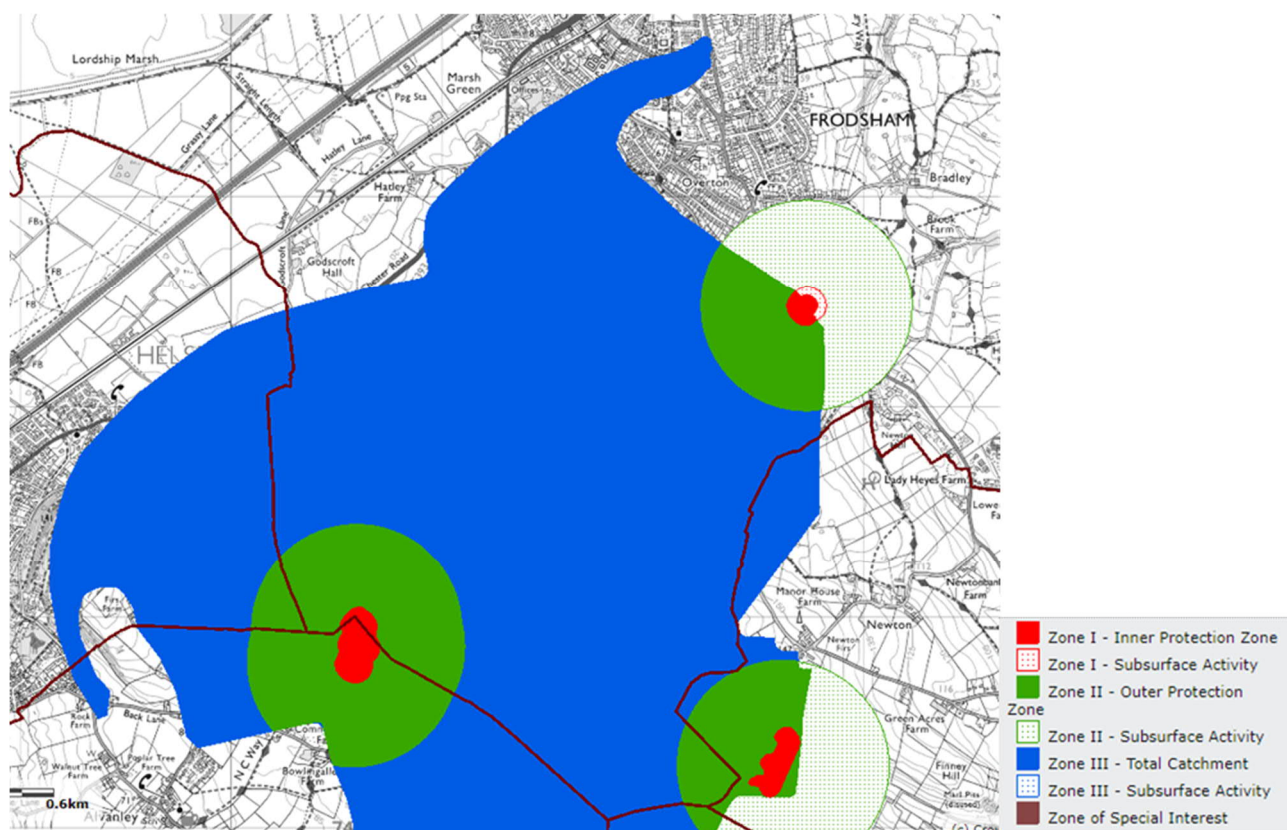
- 7.7 The Frodsham Plan area falls within the North West River Basin District, Weaver Gower Management Catchment and Weaver Lower Operational Catchment. The Weaver Lower Operational Catchment is located in north Cheshire and the main river in the catchment is the river weaver. Ultimately, the catchment drains into the Mersey Estuary, joining the Manchester Ship Canal at Runcorn. Around 80% of the river basin district is rural, with the majority of land being used for agriculture.³⁴
- 7.8 The River Weaver runs through the north east side of the Plan area. The Environment Agency (EA) measures the quality of England's rivers in two ways. An ecological measure examines the diversity and health of its wildlife, while a chemical measure assesses whether rivers contain too much sewage, phosphate or other harmful substances. As of 2019, the ecological status of the river is 'moderate', whilst the river failed to meet standards for good chemical status. The main reasons for not meeting the required chemical status included poor livestock management, urbanisation, sewage discharge, and poor soil and nutrient management.³⁵
- 7.9 Groundwater Source Protection Zones (SPZs) have been designated by the Environment Agency in England and Wales to protect groundwater sources such as wells, boreholes and springs that are used for public drinking water supply. The zones show the risk of contamination from activities that might cause groundwater pollution in the area. In this regard, there is one SPZ within Frodsham, which covers the westernmost extent of the Plan area, shown in Figure 7.3.
- 7.10 The Nitrates Directive (91/676/EEC) requires Member States to identify areas where groundwaters have nitrate concentrations of more than 50 mg/l nitrate or are thought to be at risk of nitrate contamination. Areas associated with such groundwaters are designated as Nitrate Vulnerable Zones (NVZs) within which, Member States are required to establish Action Programmes in order to reduce and prevent further nitrate contamination. The majority of the Plan area falls within a Surfacewater NVZ: Peckmill Brook, Hoolpool Gutter at Ince Marshes.³⁶

³⁴ Environment Agency (2015): 'North West river basin district management plan' [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718335/North_West_RBD_P art_1_river_basin_management_plan.pdf

³⁵ Environment Agency (2019): 'Catchment Explorer' [online] available at: <https://environment.data.gov.uk/catchment-planning/OperationalCatchment/3524>

³⁶ Environment Agency (2019): 'Peckmill Brook NVZ' [online] available at: <https://environment.data.gov.uk/catchment-planning/ReasonsForNotAchievingGood/489518>

Figure 7-3 Groundwater Source Protection Zones (SPZs) in the NA



7.11 The water suppliers for the Frodsham area are United Utilities (UU). UU's water resources management plan states that over 50% of the region's water comes from resources in Cumbria and Wales. The water travels through an extensive network of pipes known as large diameter trunk mains and huge, gravity-fed aqueducts bringing water from Cumbria. The geographical area that relies on these water sources is home to over seven million people.³⁷

Summary of future baseline

7.12 In terms of water quality; requirements set out in the Water Framework Directive are likely to lead to continued improvements to water quality in watercourses in the wider area. However, water quality could be affected by pollution incidents in the area, increased consumption, diffuse pollution, waste-water discharges, water run-off, modification, and the presence of non-native species and physical modifications to water bodies.

7.13 Development which requires sewage treatment may, if not designed correctly or located appropriately, result in an increased risk of pollution to groundwater and surface water. Development will therefore need to have due consideration to the capacity of sewage works.

³⁷ United Utilities (2019) Water Resources Management Plan. Available at [REDACTED]

- 7.14 There is potential for amounts of agricultural land to be lost to development, as future development is likely to fall within or adjacent to the built area of Frodsham, which had been predicted to be predominantly underlain by Grade 3 quality land (>60% likelihood).

Key headline issues

- 7.15 The key issues are as follows:
- The NDP area mainly consists of non-agricultural land and Grade 3 agricultural land. Some of this is likely to be best and most versatile land. Development should seek to avoid the loss of high quality land wherever possible by prioritising development on pre-existing brownfield sites.
 - There are Surfacewater NVZs and Groundwater Source Protection Zones in the NDP area, which present potential constraints to development. Additionally, development could affect water quality, but effects could be avoided. Consequently, it will be important for future development to avoid any detrimental impacts on water quality both on and off-site.
 - The FNP could also seek to support extended measures to improve the resilience of water supplies, including through local water recycling schemes and opportunities to increase efficiency in water use.

Scoping outcome

- 7.16 The topic of 'Land, Soil and Water Resources' has been **SCOPED OUT** of the SEA, as the Plan is unlikely to have a significant effect on land and water quality.
- 7.17 There are important soil resources in the NDP area that ought to be avoided. However, the limited scale of development proposed in the NDP is unlikely to allocate sites exceeding 10 ha in total, and so a significant effect upon soil resources is considered unlikely in any event. For this reason, soil is scoped out of the SEA. This does not mean that higher quality agricultural land should not be protected.

- 7.18 Whilst the NDP area does overlap a SPZ and a NVZ (adverse impacts are primarily associated with agricultural land use), it is considered unlikely that significant effects upon water quality would occur as a result of the NDP. However, it is important that areas within Zones 1 and 2 SPZ are avoided when allocating sites for development. The potential development sites being considered in the draft NP do not overlap Zone 1 or Zone II³⁸. In terms of potential effects on European sites, produced by increased surface water runoff, the Mersey Estuary is over 50km² and drains an extensive area of north-west England. Therefore, surface water runoff from the development proposed in the FNP is unlikely to produce significant effects. Moreover, all the FNP allocated sites are on the opposite side of the M56 from the SPA/Ramsar site and are separated from it by both Frodsham Marsh and the Manchester Ship Canal. Impacts associated water quality due to surface water runoff have therefore been **SCOPED OUT**.
- 7.19 In terms of wastewater treatment; United Utilities (the wastewater utility for the NP area) is set to invest in wastewater treatment and sustainability and have the capacity to accommodate the additional allocated sites and housing numbers proposed within the FNP³⁹. Changes in water quality as a result of the discharge of sewage effluent have therefore been **SCOPED OUT**.

³⁸ One site assessed falls within a Zone II (subsurface) but this was rejected in the site assessment process as it falls within the green belt.

³⁹ United Utilities (2019) Water Resources Management Plan. Available at: [REDACTED]

8. Population and Housing

Focus of theme:

- 8.1 The theme focuses on population demographics and housing delivery and affordability in the FNP area.

Policy Context

- 8.2 Table 8.1 presents the most relevant documents identified in the policy review for the purposes of the FNP SEA.

Table 8-1 Plans, policies and strategies reviewed in relation to the population and housing

Document Title	Year of publication	Weblink
National Planning Policy Framework (NPPF)	2019	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf
Housing and Economic Land Availability Assessment 2017	2017	https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/land/helaa2017?tab=files
The CWCC Local Plan Part 1	2015	http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adopted?tab=files
The CWCC Local Plan Part 2	2019	https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/cw_lp_part_two/

- 8.3 The key messages emerging from the review are summarised below:

- The FNP will be required to be in general conformity with the NPPF, which on the whole seeks to retain and enhance access to community services and facilities, including health facilities, educational facilities and open space. The NPPF recognises the benefits of a range of local provisions supporting community needs, including in rural areas. The framework seeks to protect settlement and community identities, including through the protection and retention of Green Belt land. Furthermore, the NPPF recognises the benefits of creating cohesive communities, in safe environments where crime and the fear of crime do not undermine the quality of life of residents. It also requires the size, type and tenure of housing needed for different groups in the community to be assessed and reflected in planning policies. Where a need for affordable housing is identified, planning policies should specify the type of affordable housing required and expect it to be met on-site where possible.
- The FNP will also be required to be in general conformity with the Local Plan which contains policies specifically relating to housing, community services and facilities, accessibility and infrastructure requirements.

- The CWCC Housing and Economic Land Availability Assessment 2017 (HELAA) informed the preparation of the CWCC LPP2. It identifies sites and broad locations (including in the FNP area) for housing and employment land available to meet the future needs for housing and employment land. The assessment concluded that the total potential capacity meets and significantly exceeds the minimum Local Plan requirement.
- Meeting objectively assessed future housing needs in the borough is one of the main objectives of the CWCC LPP1. Policy STRAT 2 Strategic Development, identifies a requirement for at least 22,000 (or 1,100 net new dwellings per annum) new dwellings for the period up to 2030. Policies STRAT 2 to STRAT 8 (LPP1) seek to ensure that new development in the Borough is brought forward in line with identified needs, focusing the majority of new development within or on the edge of the main urban centres. The plan also makes provision for a specific level of development to be brought forward in Frodsham, identified as one of ten Key Service Centres. The Plan allocates 250 dwellings in Frodsham (Policy STRAT8). Policy ECON2 seeks to maintain the important role of Frodsham's town centre as a retail and service centre. Policies SOC3 and SOC5 (LPP1) support mixed, balanced, sustainable communities through the provision of market and affordable housing that meets identified future needs.
- The LPP1 policy SOC1 seeks affordable housing (AH) provision in rural areas (which include Frodsham) on all new residential development (subject to viability) of three or more dwellings or those with a plot area of 0.1 ha and more.

Baseline Summary

Summary of current baseline

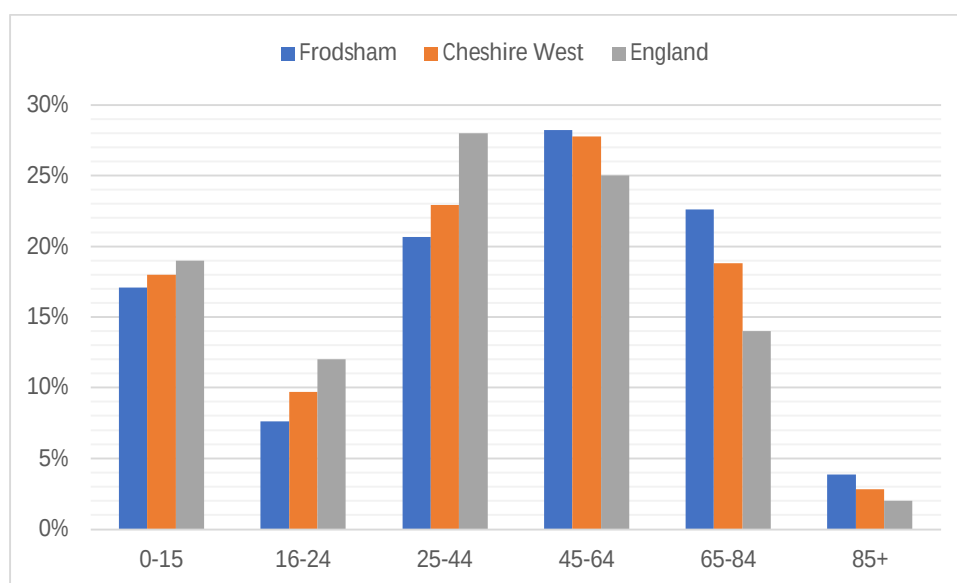
Age Structure

- 8.4 In 2019, the population of Frodsham was estimated to be 9,171 (ONS Parish population estimates) having increased by around 1% since 2011. In comparison, Cheshire West and Chester has seen a 4% increase in population since 2011.
- 8.5 Table 8-2 and figure 8-1 show the age structure of the local population in comparison to that of the rest of Borough and England. It is apparent that Frodsham has a lower proportion of residents in the 0-15, 16-24 and 25-44 age groups compared to the wider Borough and England as whole. The trend is reversed for the 65 and over age groups with Frodsham showing a higher proportion of residents in these age groups compared to West Cheshire and Chester and England. Both Frodsham and Cheshire West have a slightly higher proportion of residents in the 45-64 cohort compared to England.

Table 8-2 Age Structure in 2019 (ONS)

	Frodsham	Cheshire West & Chester	England
0-15	17%	18%	19%
16-24	8%	10%	12%
25-44	21%	23%	28%
45-64	28%	28%	25%
65-84	23%	19%	14%
85+	4%	3%	2%
Total population	9,171	343,071	56,287,00

Figure 8-1 Population distribution by age group in 2019



Housing Delivery and Tenure

- 8.6 With regards to housing delivery, Table 8-3 shows that over the last 5 years 2,066 dwellings were completed, per annum, on average; which is considerably higher than the target set in the emerging local plan (1,100 dpa). A total of 14,993 net completions have been achieved in the Borough over the period 2011 to 2020 or 1,666 dpa.

Table 8-3 Net Housing Completions in Cheshire West & Chester⁴⁰

	2015/16	2016/17	2017/18	2018/19	2019/20
Completions (net)	1,769	2,017	2,542	2,152	1,849
Housing target	1,100 dpa				

- 8.7 With regards to housing tenure, data from the 2011 census shows that the proportion of owner occupation in the NDP area is substantially higher than in the wider region and England as a whole (Table 8.3). Conversely, the proportion of rented accommodation (private and social rents) is smaller in the NDP area compared regional and national levels. A small proportion of tenures are shared ownership tenures which is line with the rest of the region and England. The social rented sector is notably lower in Frodsham (10%) compared to the corresponding levels for the North West (15%) and England (18%).

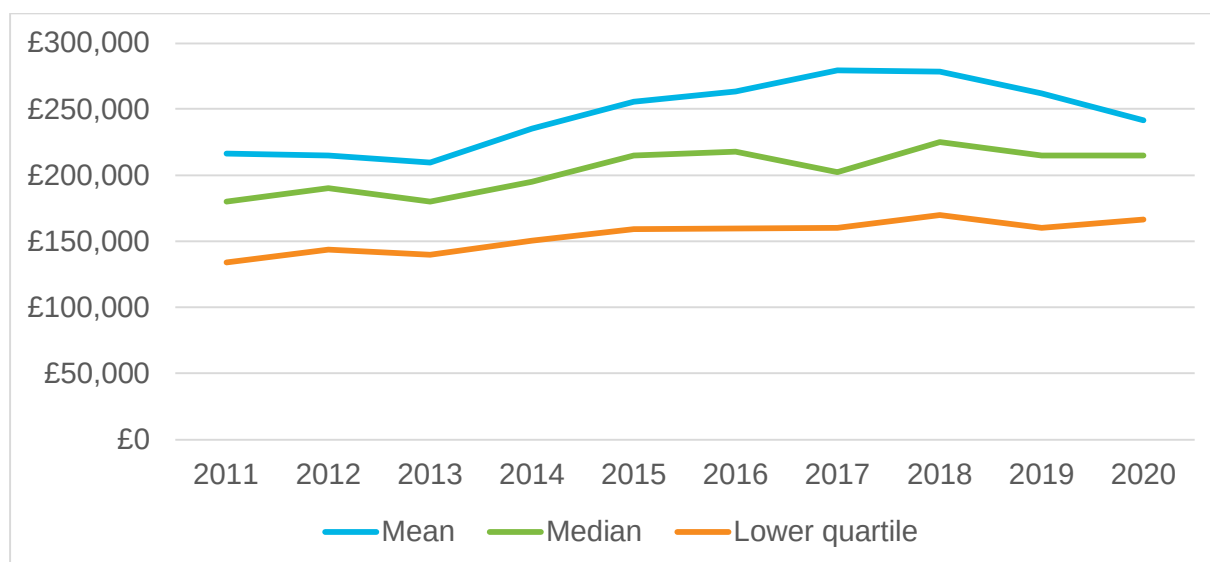
Table 8-4 Housing Tenure in 2011 (ONS Housing Tenure)

	Frodsham	The North West	England
Owned (Total)	77%	65%	63%
Shared Ownership	0.8%	1%	0.8%
Socially Rented	10%	18%	18%
Private Rented	11%	15%	17%
Living Rent Free	1%	1%	1.2%

⁴⁰ Source: CWCC Local Plan annual monitoring report 2020 available at: http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/mon/

- 8.8 The average house price in Frodsham in 2020 was £241,556⁴¹ around 3.3% lower than the average property price for England as a whole (£249,402). Figure 8-2 shows property price trends in the NDP area over the past 10 years. This shows that prices have fluctuated over the past 10 years, but the overall trend shows increasing prices over this period. The average property price increased by just under 12% in the past ten years in Frodsham.

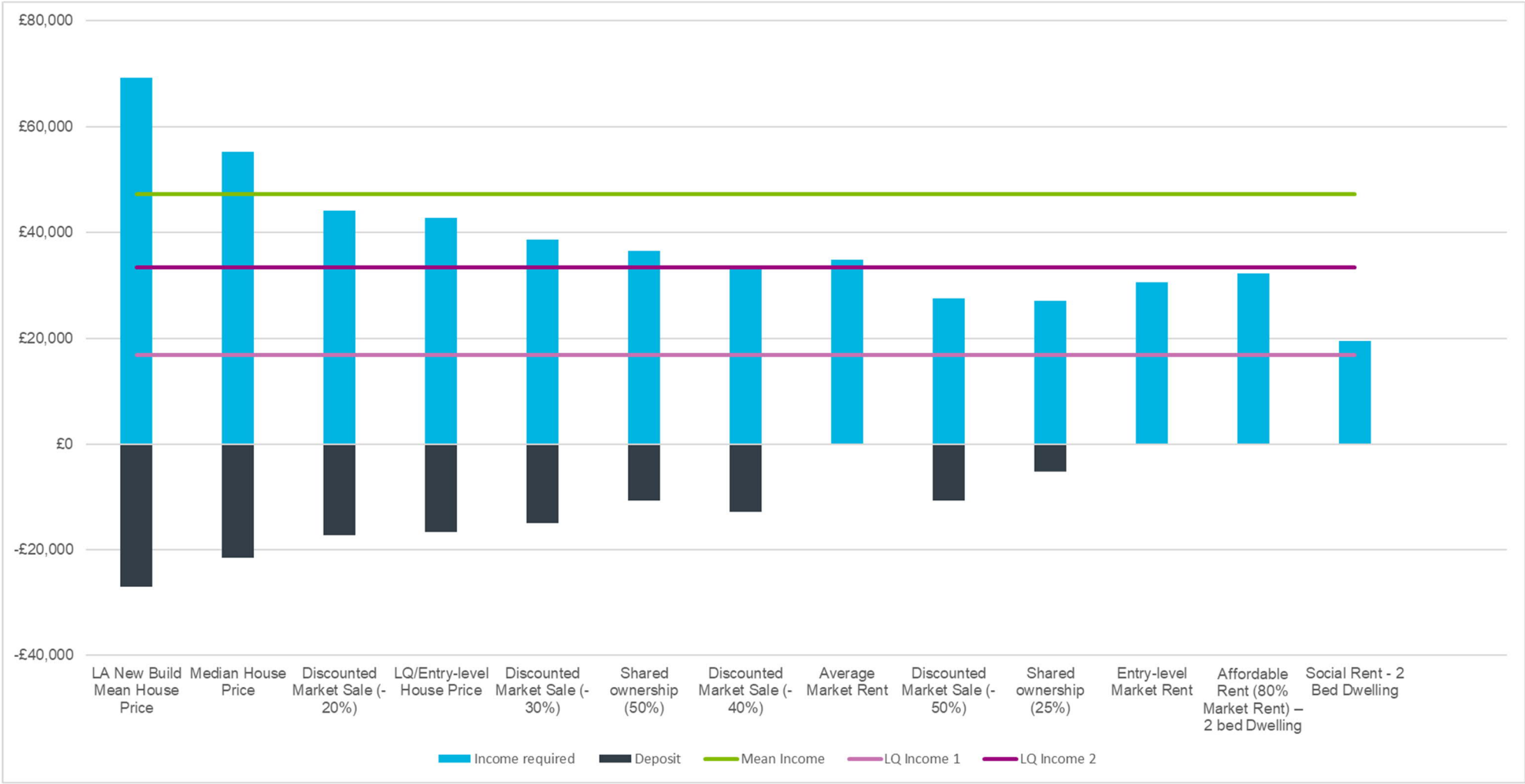
Figure 8-2 House prices in Frodsham 2011-2020



- 8.9 The average household income in the NDP area is around £47,300 and lower quartile income is around £16,777 (or £33,554 for double earning LQ households). Preliminary affordability thresholds calculations carried out by AECOM (Figure 8.3) indicate that average price market homes and average new builds are unaffordable to average income households in Frodsham. Potential affordable tenures for such households include entry-level homes, discounted market homes and shared ownership tenures. For double earning LQ households the only affordable ownership options would be heavily discounted (40-50%) market homes and shared ownership homes. Notably none of the ownership or rental options are affordable for single earning LQ households.

⁴¹ Source: Land Registry PPD and AECOM calculations

Figure 8-3 Affordability thresholds in Frodsham



Summary of future baseline

- 8.10 Population in the NDP area grew by 1% since 2011. The largest age group is the 45-64 (28%) and smallest is the 16-24 group (8%). The older age groups (65 plus) constitute around 27% of the resident population. Given the large proportion of 45 plus cohort (55%) and the relatively small proportion of 16-24% cohort, the population may flatline or decline overtime.
- 8.11 Over the past five years the rate of delivery of new housing in the borough has consistently exceeded annual targets set in the local plan. The borough has a demonstrable land supply, in excess of that required for the housing allocated in the adopted Local Plan. Therefore, the delivery rate of new housing is likely to continue to meet annual targets.
- 8.12 The Local Plan sets allocates 250 dwellings for the NDP area (to 2030) or 12.5 dpa on average over the local plan period. The latest CWCC annual monitoring report⁴² shows that 180 new dwellings have been completed since 2010 (an average of 18dpa) and a further 29 have extant planning permissions, leaving a residual 41 units to 2030. The sites allocated for housing in the draft FNP add up to around 116 new dwellings which is 33% above the Local Plan housing requirement for Frodsham (once completions and commitments are taken into account).
- 8.13 The NDP area has a high level of home ownership (77%) substantially exceeding the corresponding figure for the wider region and England. This combined with the low levels of shared ownership and rental tenures (private and social) may serve to make ownership increasingly unaffordable in Frodsham.
- 8.14 Average house prices in Frodsham are slightly lower than the average for England. However, the affordability thresholds calculation shows that the income required to buy an average market home for sale is higher than the average household income in Frodsham. Discounted homes (e.g. through the recently introduced First Homes initiative) offer potential ownership options to average income households, whilst for households on double lower quartile incomes more heavily discounted options (45-50%) and shared ownership tenures are likely to be affordable. Importantly none of the ownership or rental tenures are currently affordable to single earning lower quartile income households. In the long term house prices are likely to continue to increase, though prices may fluctuate in the interim.
- 8.15 Social and economic changes as a result of COVID-19 may affect housing including but not limited to, housing need, affordable housing need, the type of housing required locally and house prices. However, the long term impact of COVID-19 is uncertain at this stage.

⁴² Local Plan Annual Monitoring Report 2020 available at <http://consult.cheshirewestandchester.gov.uk/file/5765218>

Key headline issues

8.16 The key issues are as follows:

- The NDP area has an increasingly ageing population profile.
- Net housing completions trend in Cheshire West and Cheshire currently exceed targets set in the local plan.
- Average market housing is unaffordable to average income households in the NDP area. Other routes to ownership such as First Homes, shared ownership and rent-to-buy potentially offer a route to ownership in the NA. However, substantial discounts on market homes (40-50%) would be required for households on double LQ income to enable them to access ownership tenures.
- None of the ownership or rental tenures are affordable to those households likely to be in the most acute need such as single earning LQ households.
- The recently introduced First Homes scheme, offering discounted market homes, may offer residents a step onto the property ladder. Analysis carried out herein suggests that higher discounts (40%-50%) may be more appropriate than the nominal 30% First Homes discount to benefit the widest group of residents in the NA.
- It is likely that COVID-19 will have an effect on housing factors, but these are uncertain at this stage.

Scoping outcome

- 8.17 The SEA topic 'Population and Housing' has been **SCOPED IN** to the SEA. The NDP intends to allocate sites for housing delivery. It includes policies pertaining to affordable housing which will influence the nature of housing delivered within the Plan area, associated infrastructure and services required to support sustainable communities.

What are the SEA objectives and appraisal questions for the Population and Housing SEA theme?

- 8.18 The SEA topic 'Population and Housing' has been scoped in to the SEA. Table 8-5 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

Table 8-5: SEA Framework of objectives and assessment questions: Population and Housing

SEA Objective	Supporting Questions
Provide everyone with the opportunity to live in good quality, affordable housing which meets the needs of occupiers throughout their life.	Will the option/proposal help to: • Support the provision of a range of house types and sizes targeted at aligning the housing stock with local needs? • Provide everyone with the opportunity to live in good quality and affordable housing? • Create sustainable communities with good access to a range of local services and facilities?

9. Health and Wellbeing

- 9.1 This theme focuses on health indicators and deprivation, healthcare provision in the FNP area and influences on residents' health and wellbeing, including access to open space and the countryside.

Policy Context

- 9.2 Table 9-1 presents the most relevant documents identified in the policy review for the purposes of the FNP SEA.

Table 9-1 Plans, policies and strategies reviewed in relation to health and wellbeing

Document Title	Year of publication	Weblink
National Planning Policy Framework (NPPF)	2019	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf
The 25 Year Environment Plan	2018	https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf
Health Equity in England: The Marmot Review 10 Years On	2020	https://www.health.org.uk/publications/reports/the-marmot-review-10-years-on
Cheshire West and Chester Local Plan Part 1	2015	http://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/adopted_cwac_lp/lp_1_adopted?tab=files
Cheshire West and Chester Local Plan Part 2	2019	https://inside.cheshirewestandchester.gov.uk/policies_plans_and_strategies/planning_policy/local_plan/local_plan_part_two
Cheshire West and Chester Health Improvement Strategy	2018	
Cheshire West and Chester Playing Pitch Strategy (updated)	2018	https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/cw_lp_part_two/ev_base/oss_pps

9.3 The key messages emerging from the review are summarised below:

- The FNP will be required to be in general conformity with the NPPF, which seeks to enable and support healthy lifestyles through provision of appropriate infrastructure, services and facilities, including; green infrastructure, access to healthier food, allotments and layouts that encourage walking and cycling. The NPPF recognises the role of development plans in helping to deliver access to high quality open spaces and opportunities for sport and physical activity which contribute to the health and wellbeing of communities. The health benefits of access to nature, green spaces and green infrastructure is further reiterated through the 25-year Environment Plan.
- The 2020 Health Equity in England report identifies that the health gap between less and more deprived areas has grown in the last decade, where more people can expect to spend more of their lives in poor health, and where improvements to life expectancy have stalled, or even declined for the poorest 10% of women.
- The FNP will also be required to be in general conformity with the Local Plans covering the area, which contain policies directly relating to access to healthcare, green infrastructure and open spaces, and design that supports active travel opportunities.
- The Cheshire West and Chester Health Improvement Strategy identifies local health challenges and sets out how, over the next four years, the council will support residents to live and enjoy healthy lifestyles.
- The Cheshire West and Chester Playing Pitch Strategy (2018) has been developed from research and analysis of playing pitch provision and usage within Cheshire West and Chester to inform local planning policy.

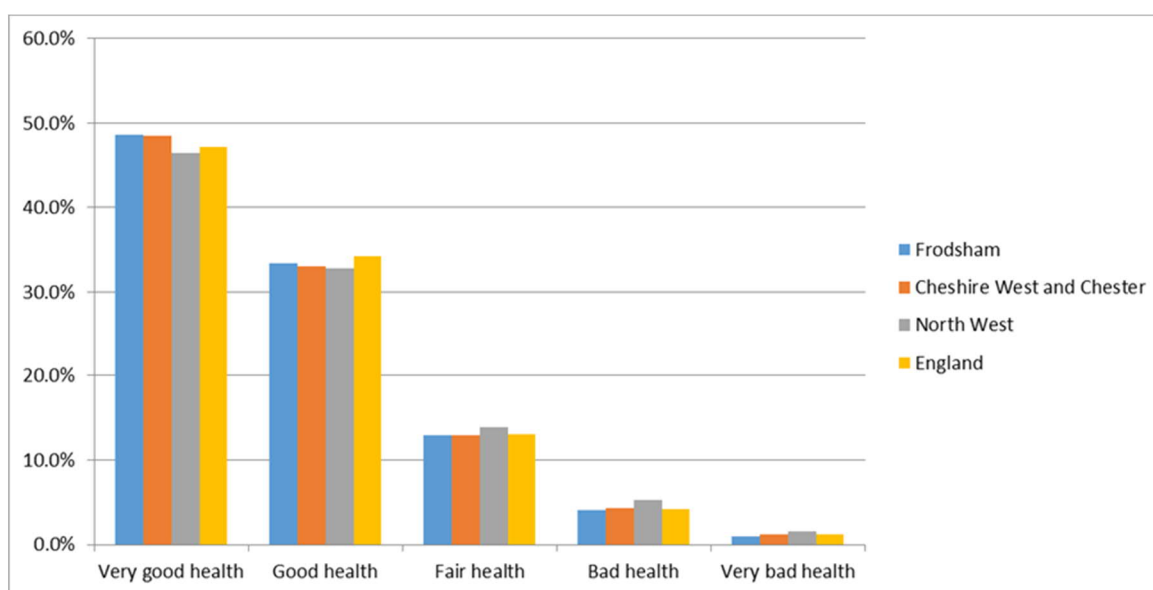
Baseline Summary

Summary of current baseline

Health indicators

- 9.4 General health in Frodsham (shown in Figure 9-1) is good. 89.1% of residents report at least 'good' if not 'excellent' health as per the 2011 Census, compared to 81.5% at the district level, 79.3% at the regional level and 81.4% nationally. A very low proportion of residents have 'very bad' health (0.98%).

Figure 9-9-2 Residents General Health (Census 2011: KS301EW)



- 9.5 With regards to long term health conditions, a large proportion of the population are not limited by their long-term health conditions (81.3%), in line with figures for Cheshire West and Chester (81.4%).
- 9.6 Information from the Cheshire West and Chester Health Improvement Strategy presents data from 2017 regarding the health and wellbeing of the district/unitary authority population.⁴³ Key issues include:
- Breastfeeding initiation is 68.9% in the area compared to the England average of 74.3%.
 - At six to eight weeks after birth, 35.4 per cent of mothers are still breastfeeding compared with the England average of 43.8 per cent.
 - Almost one fifth of children in their school reception year are either overweight or obese (23.1%), slightly higher than the England average of 21.9%.
 - A third of children aged 10-11 are either overweight or obese (33.6%), similar to the England average of 34.2%.

⁴³ Cheshire West and Chester Council (2018): 'Health Improvement Strategy' [online] available at: [redacted]

- 176,970 adults (64.2%) are overweight or obese, similar to the England average of 64.8 per cent 69,860 adults (25.5%) are obese.
- 24.2% of adults are inactive (i.e. do less than 30 minutes of moderate intensity activity per week).
- 23.8% of people are using outdoor space for exercise/health reasons.
- 923 deaths per year are attributed to physical inactivity and the annual cost to the local authority is £17.3 million.
- On average, local residents spend seven hours per day in sedentary positions. The most sedentary age group is 14-18 year olds, with lack of time and motivation being the most frequently cited reasons.

9.7 Local Health Profiles provide an overview of health for each local authority in England. The local authority health profile⁴⁴ for Cheshire West and Chester notes the following key indicators:

Table 9 2 Local Authority health profile, Cheshire West & Chester (2017-19)

	Life expectancy at birth (male)	Life expectancy at birth (female)	Under 75 mortality rate from all causes	Under 75 mortality rate from cardiovascular diseases	Under 75 mortality rate from cancer	Suicide rate
CW&C	80.1	83.3	324	68.3	133.0	8.4
North West	78.4	82.1	383	86.1	142.4	10.6
England	79.8	83.4	326	70.4	129.2	10.1

Health services

9.8 The nearest hospital services are located at Halton (Halton General Hospital), 4km from the centre of the Plan area. The Frodsham Health Centre at Princeway offers GP Services through the Knoll Centre, which is accessible by a 10-minute walk for most residents in the catchment area.⁴⁵

⁴⁴ Public Health England Frodsham Local Authority Health Profile [online] available at: <https://fingertips.phe.org.uk/profile/health-profiles/data#page/1/ati/202/are/E06000009>

⁴⁵ Active Cheshire (2018): 'Active Design Summary' [online] available at: [http://frodshamplan.org.uk/images/docsandreprs/Active%20Design%20Ready%20Assessment%20Summary%20Frodsham%2017.5.18%20\(1\)DRAFT.pdf](http://frodshamplan.org.uk/images/docsandreprs/Active%20Design%20Ready%20Assessment%20Summary%20Frodsham%2017.5.18%20(1)DRAFT.pdf)

Deprivation

9.9 The Index of Multiple Deprivation 2019 (IMD) is an overall relative measure of deprivation constructed by combining seven domains of deprivation according to their respective weights, as described below. The seven deprivation domains are as follows:

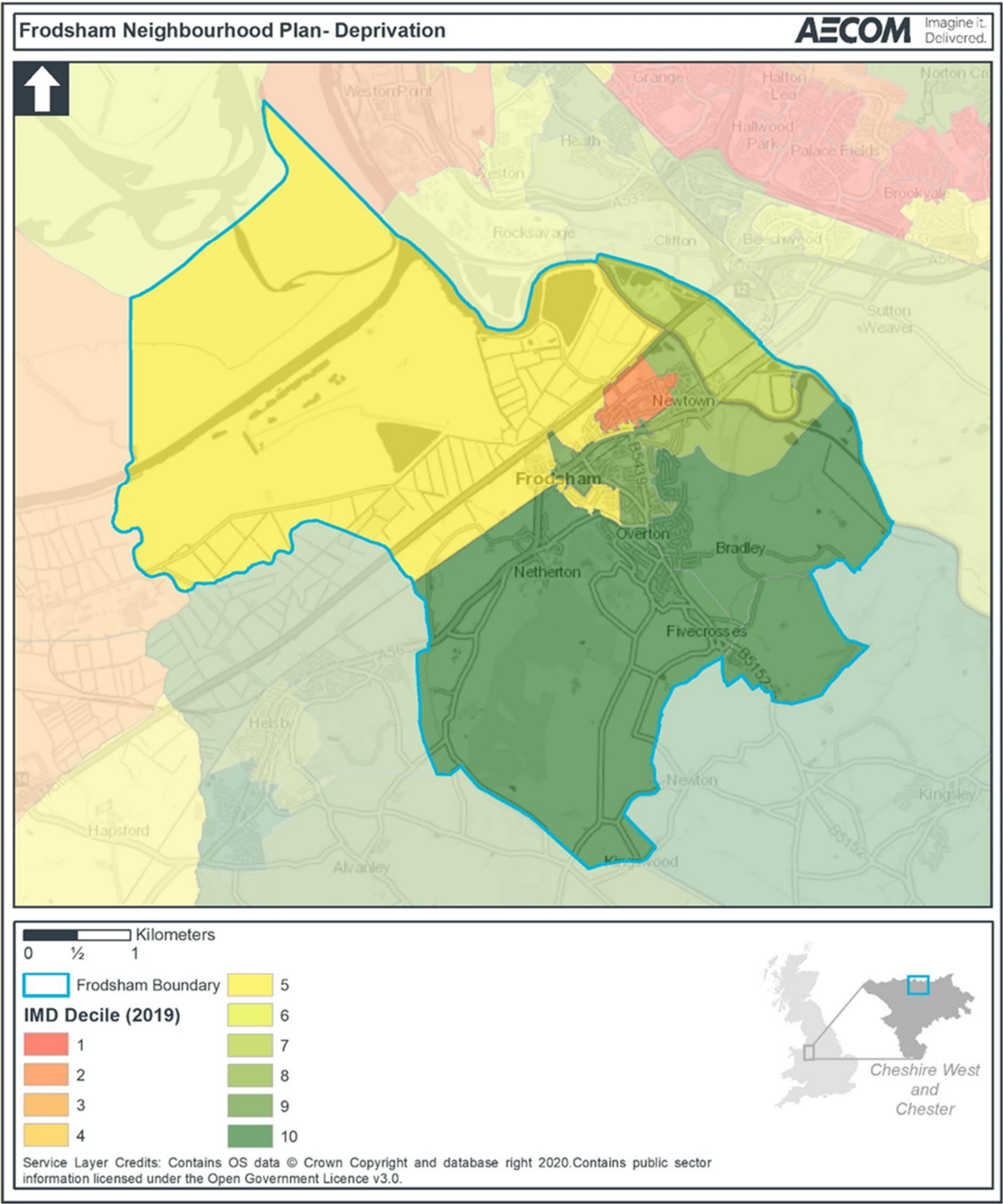
- Income: The proportion of the population experiencing deprivation relating to low income, including those individuals that are out-of-work and those that are in work.
- Employment: The proportion of the working-age population in an area involuntarily excluded from the labour market, including those who would like to work but are unable to do so due to unemployment, sickness / disability, or caring responsibilities.
- Education, Skills and Training: The lack of attainment and skills in the population.
- Health Deprivation and Disability: The risk of premature death and the impairment of quality of life through poor physical or mental health. Morbidity, disability and premature mortality are also considered.
- Crime: The risk of personal and material victimisation at local level.
- Barriers to Housing and Services: The physical and financial accessibility of housing and local services.
- Living Environment: The quality of the local environment, including the quality of housing stock, air quality and road traffic incidents.

Two indices, subsets of the Income deprivation domain, are also included:

- Income Deprivation Affecting Children Index: The proportion of all children aged 0 to 15 living in income deprived families.
- Income Deprivation Affecting Older People Index: The proportion of all those aged 60 or over who experience income deprivation.

9.10 As illustrated in Figure 9-2, the Indices of Multiple Deprivation (IMD 2019) data for the NDP area show that the north westernmost part of the Plan area falls within decile 5 (50% least deprived areas in England), and the south easternmost part of the Plan area falls with decile 10 (10% least deprived areas in England). A small part of the area, at Newtown, falls within a highly deprived area (one of the 20% most deprived area).

Figure 9-2 Indices of Multiple Deprivation 2019 in and around the NDP area



Open greenspace and sport/play facilities

- 9.11 The Cheshire West and Chester Open Space Study (2019)⁴⁶ identified provision for areas of open greenspace and recreation (such as parks), and areas of deficit. Table 9-3 shows that there is a deficit of allotments, amenity greenspace and play spaces in Frodsham.

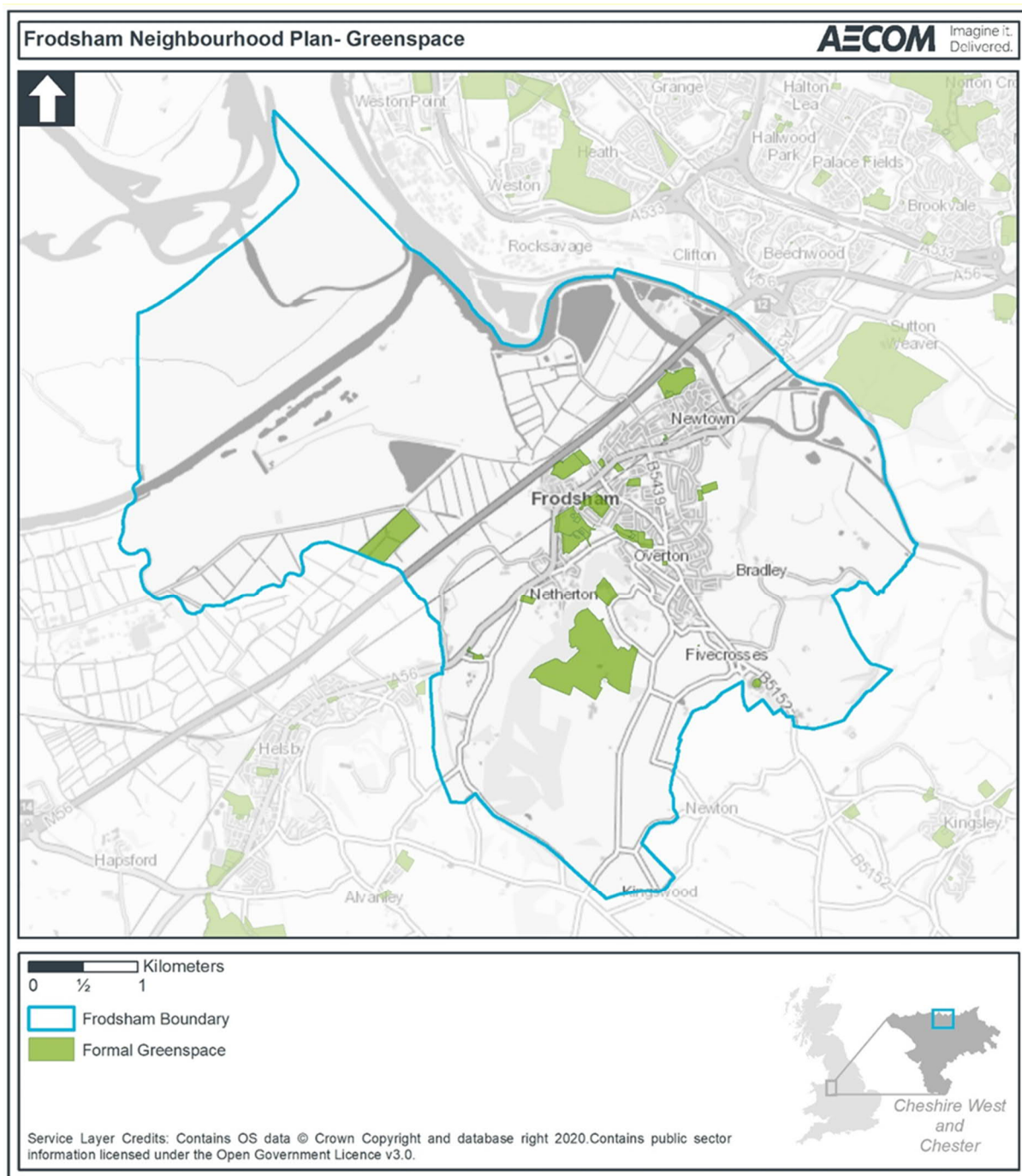
Table 9-3 Existing provision and deficit of open space (ha) in Frodsham

	Allotment	Amenity greenspace	Park and recreation ground	Play space (children)	Play Space (youths)	Natural green space
Provision	1.23	3.44	12.44	0.39	0.14	98.83
Supply/ deficit	-0.13	-2.01	7.9	-0.06	-0.13	n/a

- 9.12 Greenspaces are shown in Figure 9-3, below. Greenspace is mostly located in the centre of Frodsham, as well as some parts of the south west.

⁴⁶ Cheshire West and Cheshire Council (2017): 'Open Space Study' [online] available at: https://consult.cheshirewestandchester.gov.uk/portal/cwc_ldf/cw_lp_part_two/ev_base/oss_pps

Figure 9-3 Greenspace in Frodsham



Summary of future baseline

- 9.13 Frodsham is a generally healthy community with an ageing population. The accessibility of development will be particularly important in terms of supporting resident health and wellbeing. The importance of local services and facilities, and access to open green spaces and recreational areas has been further highlighted through the ongoing pandemic. Furthermore, as a rural area, residents are more susceptible to social isolation. These factors are more likely to be appropriately considered and addressed through planned development rather than unplanned development.
- 9.14 There is a deficit of play spaces for both children and youth in Frodsham as well as amenity greenspace. The NDP area can benefit from improving access to current provision as well as enhancing sites which better appeal to the expectations and demands of users from a broad range of age and mobility.

Key headline issues

- 9.15 The key issues are as follows:
- Frodsham has a broadly healthy population, with good access to medical services in the town centre. However, the ageing population is likely to place additional pressures on health and social services.
 - The majority of the NDP area is within the 50% least deprived category with only small pockets of deprivation.
 - There are several health and recreational facilities within the NDP area, though there is a deficit in play spaces and amenity greenspace.

Scoping outcome

- 9.16 Whilst the scale of development proposed is unlikely to produce significant effects on health and wellbeing. The Plan has the potential to engender effects on health and wellbeing. For example, the plan can help improve open/ green space provision. With this in mind the SEA topic 'Health and Wellbeing' has been **SCOPED IN** to the SEA.

What are the SEA objectives and appraisal questions for the Health and Wellbeing SEA theme?

- 9.17 The SEA topic 'Health and wellbeing' has been scoped in to the SEA. Table 9.4 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

Table 9-4: SEA Framework of objectives and assessment questions: Health & Wellbeing

SEA Objective	Supporting Questions
Improve the health and wellbeing of residents within the FNP area.	Will the option/proposal help to: - Promote accessibility to a range of leisure, health and community facilities, for all age groups? - Provide and enhance community access to open green spaces? - Promote the use of healthier modes of travel, including active travel networks? - Improve access to the countryside for recreational use? - Avoid negative impacts to the quality and/ or extent of existing recreational assets, including formal and informal footpaths? - Contribute to reducing social isolation?

10. Transportation

10.1 This theme focuses on transport infrastructure, transport usage, traffic flows and congestion, and accessibility levels in the FNP area.

Policy Context

10.2 Table 10-1 presents the most relevant documents identified in the policy review for the purposes of the FNP SEA.

Table 10-1: Plans, policies and strategies reviewed in relation to transportation and movement

Document Title	Year of publication	Weblink
National Planning Policy Framework (NPPF)	2019	https://www.gov.uk/government/publications/national-planning-policy-framework--2
The Transport Investment Strategy – Moving Britain Ahead	2017	https://www.gov.uk/government/publications/transport-investment-strategy
The Department for Transport's Cycling and Walking Investment Strategy	2016	https://www.gov.uk/government/publications/cycling-and-walking-investment-strategy-active-travel-investment-models
Decarbonising Transport: Setting the Challenge	2020	https://www.gov.uk/government/publications/creating-the-transport-decarbonisation-plan
Cheshire West and Chester Transport Strategy	2017	https://www.cheshirewestandchester.gov.uk/residents/transport-and-roads/public-transport/transport-strategy/transport-strategy.aspx
Cheshire West and Chester Local Plan Part 1	2015	http://consult.cheshirewestandchester.gov.uk/portal/cwc/ldf/adopted_cwac_lp/lp_1_adopted?tab=files
Cheshire West and Chester Local Plan Part 2	2019	https://inside.cheshirewestandchester.gov.uk/policies_plans_and_strategies/planning_policy/local_plan/local_plan_part_two

10.3 The key messages emerging from the review are summarised below:

- The FNP will be required to be in general conformity with the NPPF, which seeks the consideration of transport issues from the earliest stages of plan-making and development proposals to address any known issues and maximise opportunities to increase accessibility, particularly by walking, cycling and public transport. Larger developments are expected to be delivered in areas which are or can be made sustainable by limiting the need to travel and offering a genuine choice of transport modes. However,

it is recognised that sustainable transport solutions will vary between urban and rural environments.

- National transport strategies set out investment priorities which ultimately all seek to improve the connectivity, effectiveness and reliability of transport networks, whilst reducing impacts on the natural environment (including through decarbonisation). Furthermore, they place great emphasis on making cycling and walking the natural choice for shorter journeys, or as part of a longer journey. This includes investment in new and upgraded infrastructure, changing perceptions and increasing safety.
- The Cheshire West and Chester Transport Plan identifies the transport investment priorities and policies at a more localised scale, but ultimately complement the aims of the national strategies discussed above. Alongside the transport and access policies of the Local Plan, the FNP will be required to be in general conformity with the strategic policy aims.

Baseline Summary

Summary of current baseline

Modes of travel

- 10.4 According to Census data (shown in Figure 10-1), a large proportion of residents travel to work by car (47.1%), higher than figures for Cheshire West and Chester (45.0%), the North West (39.0%), England (37.0%). Additionally, a low proportion of residents travel to work via public transport in Frodsham (3.3%), and travel to work via foot or bicycle (3.1%).

- 10.5 Car ownership in the Plan area, (shown in Figure 10-2) is high (84.1%), higher than Cheshire West and Chester (81.4%), the North West (72.0%) and England as a whole (74.0%).

Figure 10-1 Methods of Travel to Work

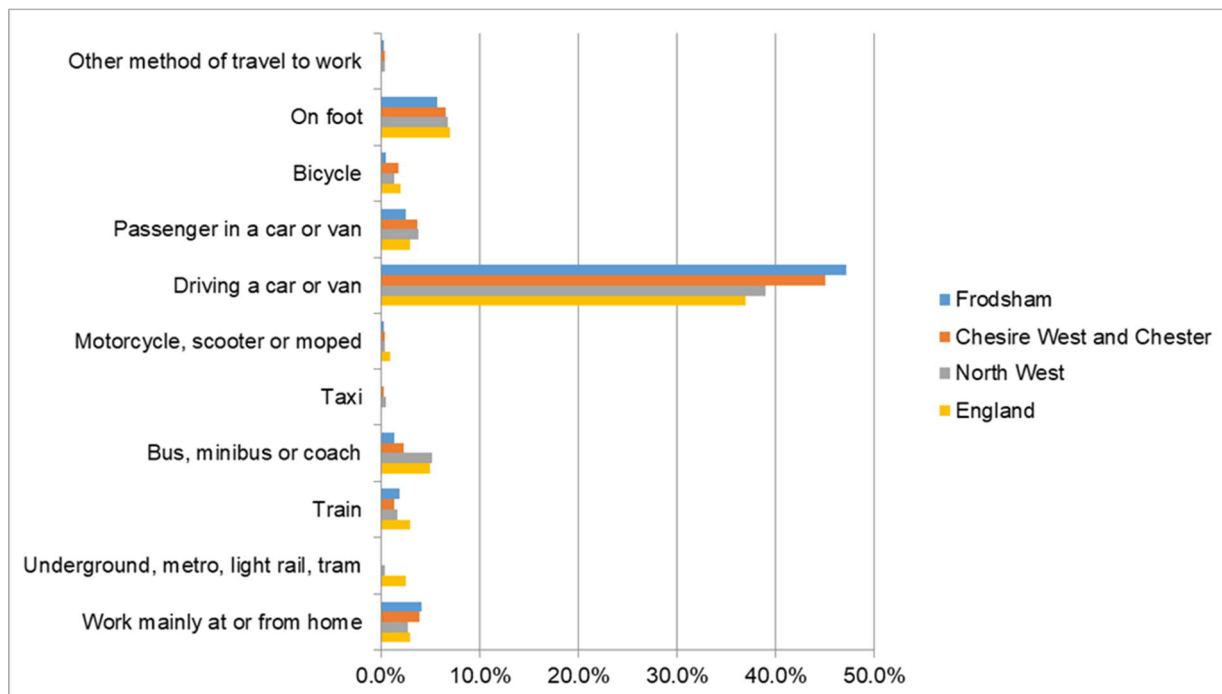
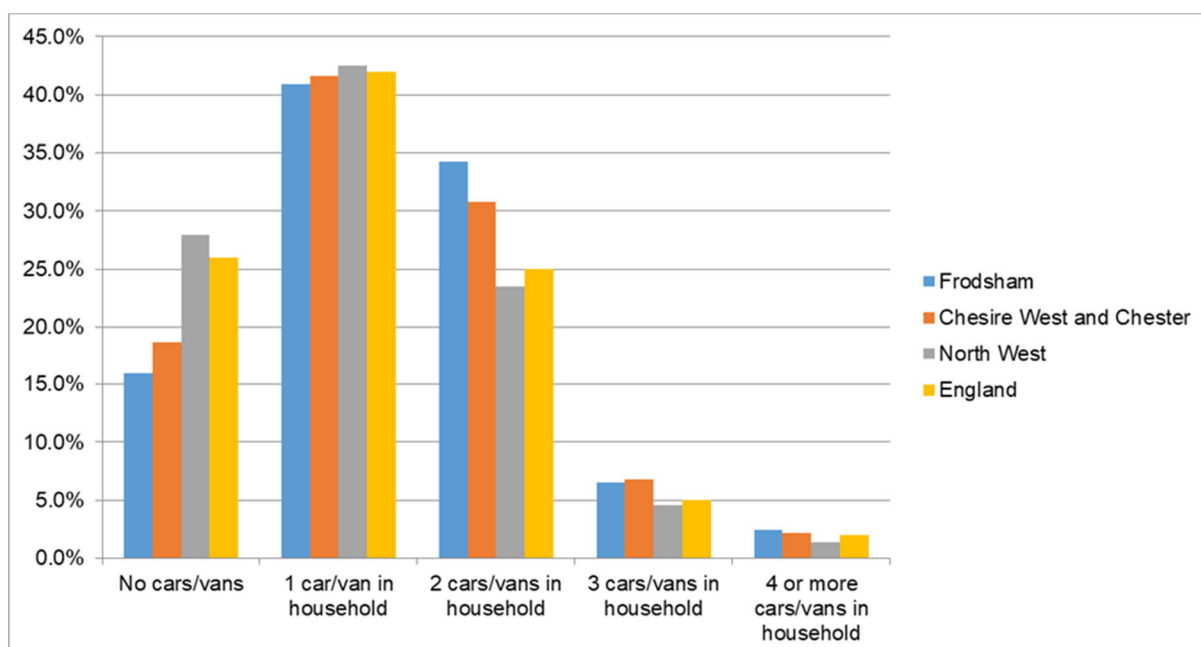


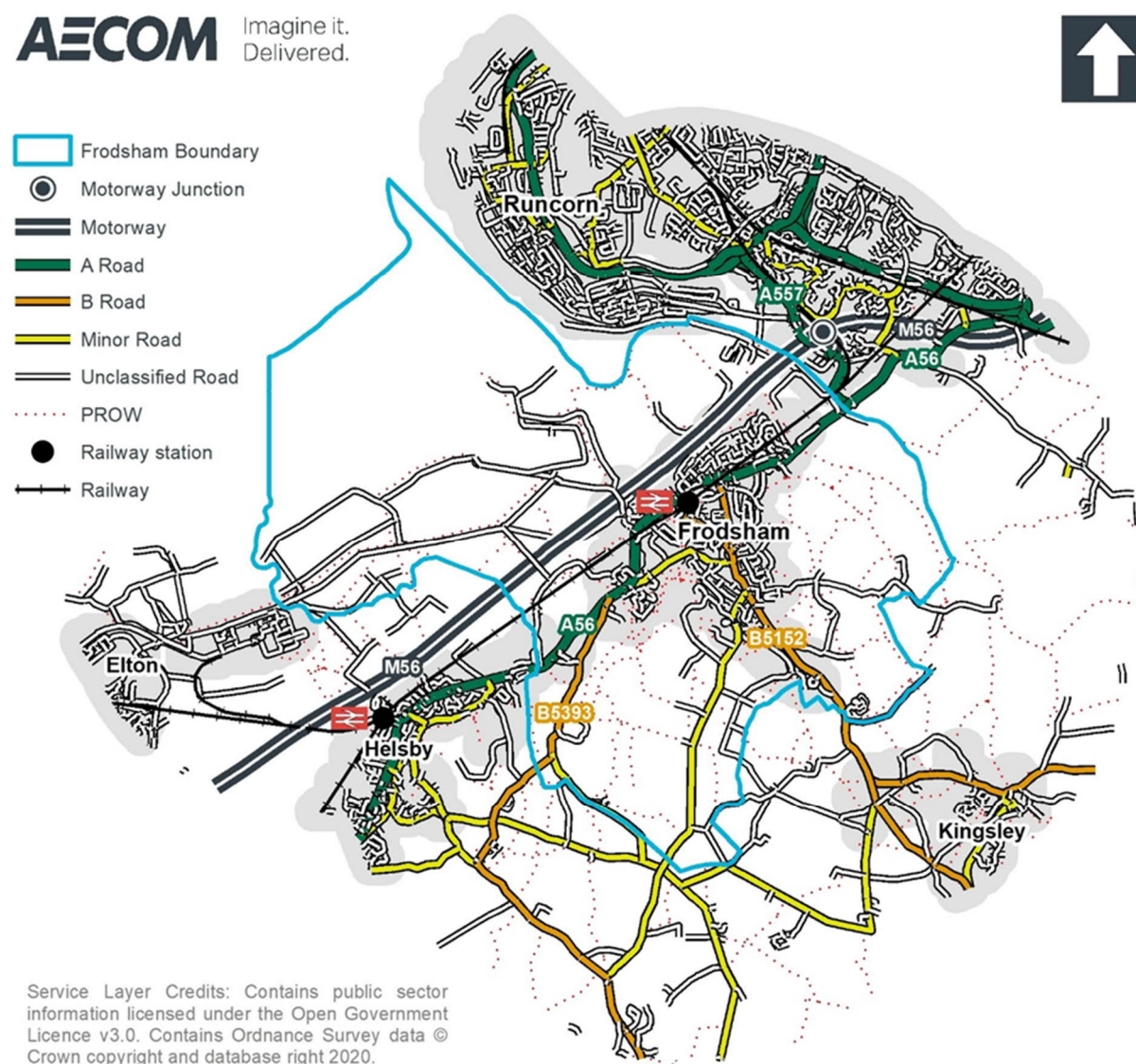
Figure 10-2 Car/ Van Ownership



Wider transport network

- 10.6 The West Cheshire Borough possesses extensive motorway, trunk road and rail networks which carry a significant amount of local, regional and national traffic. Traffic patterns are also influenced by the nearby conurbations of Merseyside and Greater Manchester and there are also strong commuter links with North East Wales.
- 10.7 With regards to the local road network, the M56 passes through the centre of the Plan area and connects Frodsham to Manchester and the smaller towns of Warrington, Runcorn to the east and Ellesmere Port in the west. The A56 Chester to Warrington road is routes along Main Street and High Street. In addition, there are several smaller B roads (B593 and B5152) which provide access to the more rural parts of Frodsham to the south beyond the main settlement.

Figure 10-3 Road network in Frodsham



Traffic and congestion

- 10.8 The Frodsham residents' survey highlighted resident's concerns surrounding traffic and congestion in the area.⁴⁷ Traffic and congestion on the A56 has increased noticeably with the expansion of the Frodsham settlement boundaries, especially during busy periods of the day.
- 10.9 With the exception of Main Street, residential roads carry little traffic but on-street parking contributes to traffic congestion in Marsh Lane and there is intrusive background noise from the M56 throughout the area. Several roads are busy at peak periods especially near the school and local businesses, and on-street parking can inhibit free traffic flow.⁴⁸

Rail and bus network

- 10.10 Frodsham rail station is situated in the centre of the settlement. The station is operated by Transport for Wales, which provide services to Manchester and Liverpool Lime Street every half hour, Monday through to Sunday. Frodsham is also served by a less frequent Northern rail service which runs Monday-Friday from Leeds to Ellesmere Port.
- 10.11 With regards to the bus network, there are four bus routes serving Frodsham. The 48 and 48A run between Frodsham and Northwich, with the two other services terminating in Chester.
- 48 - Frodsham, High Street, Morrisons to Northwich, Watling Street (via Acton Bridge).
 - 48A - Frodsham, High Street, Morrisons to Northwich, Watling Street (via Delamere).
 - 2 - Chester Bus Interchange – Runcorn, a bus service operated by Stagecoach Merseyside and South Lancashire.
 - X30 - Chester Bus Interchange - Warrington Bus Interchange, a bus service operated by Arriva North West.

Pedestrian and cycle routes

- 10.12 National cycle route number 5 passes through the centre of the Plan area runs through Chester to North Wales.

⁴⁷Frodsham plan group (2017): 'Frodsham Residents Survey 2017' [online] available at:
http://frodshamplan.org.uk/images/docsandreps/CWaC-Your_Voice_Matters-Final_Stats_Feb_2018.pdf

⁴⁸ Frodsham Town Council (2010): 'Frodsham Design Statement' [online] available at:
<http://frodshamplan.org.uk/images/docsandreps/Town%20Design%20Statement%20-%20Frodsham%20-%20July%202010.pdf>

10.13 Public Rights of Way (PRoWs) shown in Figure 10-3, are expansive along the southern part of the Plan area and provide connections to more rural locations and their specialist services, such as farms. The town centre of Frodsham is described as 'very walkable' and this is reflected with the presence of frequent pedestrian cut-throughs that significantly reduce journey distance, compared to the normal road routes. The residents of Frodsham have suggested that the quality of pavements could be improved to increase the likelihood of them walking more often in the town.⁴⁹

Summary of future baseline

10.14 In the absence of strategic transport interventions, growth in the Plan area is likely to continue trends which favour the private vehicle as the primary mode of transport. New development therefore has the potential to increase traffic and lead to additional localised congestion issues which in turn may reduce road safety.

10.15 A greater local population through the delivery of Local Plan housing allocations and other developments and subsequent demand for public transport could provide opportunities to increase bus provision. However, Frodsham is unlikely to experience the scale of growth that would be likely to add significant congestion to the local road network or make major improvements to public transport viable.

10.16 Though PRoWs in the area are expansive, resident surveys have indicated there is potential to improve the quality of pavements and walkways in Frodsham, which could be implemented as part of the planning process.

Key headline issues

10.17 The key issues are as follows:

- The Neighbourhood Plan area is well served by the highway network, and benefits from good railway and bus connectivity. However, development could potentially lead to increased traffic and improve the viability of public transport.
- The majority of residents are likely to travel to work by car/ van, but it is likely that trends could change as a result of the Covid 19 Pandemic, and the changing role of town centres, indicated by a relatively high proportion of residents who choose to work from home.
- Accessibility by PRoWs in the Plan area is good, and plan making offers the opportunity to improve existing pathways to increase access to key services in Frodsham.

⁴⁹ Active Cheshire (2018): 'Active Design Summary' [online] available at: [http://frodshamplan.org.uk/images/docsandreps/Active%20Design%20Ready%20Assessment%20Summary%20Frodsham%2017.5.18%20\(1\)DRAFT.pdf](http://frodshamplan.org.uk/images/docsandreps/Active%20Design%20Ready%20Assessment%20Summary%20Frodsham%2017.5.18%20(1)DRAFT.pdf)

Scoping outcome

10.18 Whilst the level of growth proposed is unlikely to produce transport infrastructure improvements, the FNP can potentially have effects, positive or negative, on the level of traffic in the NP area. With this in mind the SEA topic 'Transportation' has been **SCOPED IN** of the SEA.

What are the SEA objectives and appraisal questions for the Transportation SEA theme?

10.19 The SEA topic 'Transportation' has been scoped in to the SEA. Table 10-3 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

Table 10-3: SEA Framework of objectives and assessment questions: Transportation

SEA Objective	Supporting Questions
Promote sustainable transport use and reduce the need to travel.	Will the option/proposal help to: • Encourage more use of sustainable transport modes? • Encourage the uptake of active travel opportunities? • Extend or improve active travel networks? • Enable sustainable transport infrastructure improvements? • Ensure sufficient road capacity to accommodate new development? • Facilitate on-going high levels of home and remote working? • Improve road safety? • Reduce impacts on residents from the road network? • Improve parking facilities?

11. The SEA Framework and Methodologies

The SEA Framework

- 11.1 The SEA framework has been established through the identification of key issues as part of the scoping exercise. This draws upon the baseline position and policy context that has been prepared for a range of SEA topics (as set out in Chapters 2-10).
- 11.2 The framework consists of a set of headline objectives and ancillary questions, which will be used to appraise the environmental effects of the draft Development Plan Document (and any reasonable alternatives).
- 11.3 Table 11.1 below outlines the full SEA Framework, which brings together the objectives and questions that have been set out at the end of each SEA topic chapter. The Framework focuses on those issues that have been identified as the most important to consider in the preparation of the Plan; but acknowledging the limited influence that the Plan can have in some areas.

Table 11-1 The SEA Framework

SEA Objective	Supporting questions (will the option/ proposal help to...?)
Improve air quality within and surrounding the Neighbourhood Plan area and minimise all sources of environmental pollution	• Promote and encourage more sustainable transport options? • Enable sustainable transport infrastructure enhancements? • Encourage development which reduces the need to travel outside of the Neighbourhood Plan area? • Locate and design development so that current and future residents will not regularly be exposed to poor air quality? • Implement measures (such as appropriate planting and provision of green infrastructure) which will help support good air quality in an around the Neighbourhood Plan area? • Ensure development connects to the existing road network, promoting ease of access and suitably mitigating any potential increases in local congestion?
Protect, maintain and enhance biodiversity habitats and species; achieving a net environmental gain and stronger ecological networks.	• Support connections between habitats in the Plan area? • Avoid significant impacts on designated sites within the NP area including; the Mersey Estuary SPA/Ramsar/SSSI, Beechmill wood and pasture, Frodsham Railway and Road Cuttings and Dunsdale Hollow SSSIs? • Avoid significant impacts from air pollution, urban water drainage and surface water runoff, on the designated biodiversity sites and areas forming part of the North West Marine Plan. • Support continued improvements to the designated sites in the Neighbourhood Plan area? • Achieve a net gain in biodiversity? • Support access to, interpretation and understanding of biodiversity? • Increase the resilience of biodiversity in the Neighbourhood Plan area to the effects of climate change?
Avoid and manage flood risk and support the resilience of the Frodsham Neighbourhood Plan area to the potential effects of climate change.	• Improve green infrastructure networks in the plan area to support adaptation to the potential effects of climate change? • Ensure flood risk and erosion is not increased and where possible reduced

	• Sustainably manage surface water run-off, ensuring that the risk of flooding is not increased (either within the plan area or downstream) and where possible reduce flood risk? • Ensure the potential risks associated with climate change are considered through new development in the plan area? • Avoid placing development in areas that are at the greatest risk of flooding?
Protect, enhance and manage the integrity, distinctive character and setting of heritage assets and the wider historic environment.	• Conserve, better reveal the significance, and enhance heritage assets, their setting and the wider historic environment? • Contribute to better management of heritage assets? • Identify and protect / enhance features of local importance? • Support access to, interpretation and understanding of the historic environment? • Consider the impact on setting in a manner proportionate to the significance of the heritage asset affected. • Promote heritage-led regeneration? • Lead to the repair and adaptive re-use of a heritage asset and encourage high quality design?
Protect, enhance and manage the distinctive character and appearance of landscapes.	• Conserve, better reveal the significance and enhance landscape assets? • Contribute to better management of landscape assets? • Identify and protect/enhance features of local importance? • Support access to, interpretation and understanding of the surrounding landscape? • Improve linkages to open space and the countryside? • Preserve and enhance the North Cheshire Green Belt?
Provide everyone with the opportunity to live in good quality, affordable housing which meets the needs of occupants throughout their life.	• Support the provision of a range of house types and sizes targeted at aligning the housing stock with local needs? • Provide everyone with the opportunity to live in good quality and affordable housing? • Create sustainable communities with good access to a range of local services and facilities?
Improve the health and wellbeing of residents within the FNP area.	• Promote accessibility to a range of leisure, health and community facilities, for all age groups?

	• Provide and enhance community access to open green spaces? • Promote the use of healthier modes of travel, including active travel networks? • Improve access to the countryside for recreational use? • Avoid negative impacts to the quality and/ or extent of existing recreational assets, including formal and informal footpaths? • Contribute to reducing social isolation?
Promote sustainable transport use and reduce the need to travel.	• Encourage more use of sustainable transport modes? • Encourage the uptake of active travel opportunities? • Extend or improve active travel networks? • Enable sustainable transport infrastructure improvements? • Ensure sufficient road capacity to accommodate new development? • Facilitate on-going high levels of home and remote working? • Improve road safety? • Reduce impacts on residents from the road network? • Improve parking facilities?

12. Next Steps

Subsequent stages for the SEA process

12.1 Scoping (the current stage) is the second stage in a six-stage SEA process:

- Screening (NPPG Stage A)
- Scoping (NPPG Stage B)
- Assess reasonable alternatives, with a view to informing preparation of the draft plan (NPPG Stage C)
- Assess the draft plan and prepare the Environmental Report with a view to informing consultation and plan finalisation (NPPG Stage D/E)
- Publish a 'statement' at the time of plan adoption in order to 'tell the story' of plan-making/SEA (and present 'measures decided concerning monitoring') (NPPG Stage F)

12.1.1 The next stage will involve establishing and appraising reasonable alternatives for the Plan. This will involve consideration of strategic issues such as the growth and distribution of housing, and site options. The findings of the appraisal of these alternatives will be fed back so that they can be considered when preparing the draft plan.

Consultation on the Scoping Report

12.1.2 Involvement through consultation is a key element of the SEA process. At this scoping stage, the SEA Regulations require consultation with statutory consultation bodies. The statutory consultation bodies are the Environment Agency, Historic England and Natural England. The Scoping Report has been released to these three statutory consultees.

12.1.3 Consultees are invited to comment on the content of this Scoping Report, in particular the evidence base for the SEA, the identified key issues and the proposed SEA Framework.

12.1.4 Comments on the Scoping Report should be sent to the below contacts;

	AECOM	
	Frodsham NP Group	frodshamplan@gmail.com

12.1.5 All comments received on the Scoping Report will be reviewed and will influence the development of the SEA where appropriate.

13. Glossary

Agricultural Land - Agricultural land is classified into five grades. Grade one is best quality and grade five is poorest quality. A number of consistent criteria are used for assessment which include climate (temperature, rainfall, aspect, exposure, frost risk), site (gradient, micro-relief, flood risk) and soil (depth, texture, stoniness).

Index of Multiple Deprivation (IMD) – This is a measure of deprivation in England, for every local authority and super output area seven domains of deprivation are measured: (Income, Employment, Health deprivation and Disability, Education Skills and Training, Barriers to Housing and Services, Crime the Living Environment). This allows all 32,482 SOAs to be ranked according to how deprived they are relative to each other. This information is then brought together into one overall Index of Multiple Deprivation 2004.

LNR – Local Nature Reserves (LNRs) are for both people and wildlife. They are places with wildlife or geological features that are of special interest locally. They offer people special opportunities to study or learn about nature or simply to enjoy it.

NNR - Many of the finest sites in England for wildlife and geology are National Nature Reserves (NNR). There are currently 224 across the country and almost all are accessible and provide great opportunities for people to experience nature.

Objective – A statement of what is intended, specifying the desired direction of change in trends Option For the purposes of this guidance option is synonymous with 'alternative' in the SEA Directive Plan For the purposes of the SEA Directive this is used to refer to all of the documents to which this guidance applies, including Development Plan Documents. Supplementary Planning Documents are not part of the statutory Development Plan but are required to have a sustainability appraisal.

RAMSAR – Ramsar sites are wetlands of international importance designated under the Ramsar Convention.

Locally Important Geological Sites – LIGs are designated by locally developed criteria and are currently the most important designated sites for geology and geomorphology outside statutorily protected areas such as SSSIs.

SAC – Special Areas of Conservation (SACs) are strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive

Scheduled Monument - A 'nationally important' archaeological site or historic building, which is given protection against unauthorised change.

Scoping – The process of deciding the scope and level of detail of a Sustainability Appraisal.

Screening – The process of deciding whether a document requires a SA.

SEA Directive – European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment

SEA Regulations – The Environmental Assessment of Plans and Programmes Regulations 2004 (which transposed the SEA Directive into law).

SPA – Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

SSSI – SSSIs are the country's very best wildlife and geological sites. They include some of our most spectacular and beautiful habitats - large wetlands teeming with waders and waterfowl, winding chalk rivers, gorse and heather-clad heathlands, flower-rich meadows, windswept shingle beaches and remote uplands moorland and peat bog.

Super Output Area (SOA) – SOAs are a new geographic hierarchy designed to improve the reporting of small area statistics in England and Wales. Three layers of SOA have been devised: Lower Layer - Minimum population 1000; mean 1500. Built from groups of SOAs (typically 4 to 6) and constrained by the boundaries of the Standard Table (ST) wards used for 2001 Census outputs. Middle Layer - Minimum population 5000; mean 7200. Built from groups of Lower Layer SOAs and constrained by the 2003 local authority boundaries used for 2001 Census outputs. Upper Layer - To be determined; minimum size c.25, 000.

Strategic Environmental Assessment (SEA) – Generic term used internationally to describe environmental assessment as applied to policies, plans and programmes. In the UK, SEA is increasingly used to refer to an environmental assessment in compliance with the 'SEA Directive'

Sustainability Appraisal (SA) – Generic term used to describe a form of assessment which considers the economic, social and environmental effects of an initiative. SA, as applied to Local Development Documents, incorporates the requirements of the SEA Directive.

Sustainability Issues – The full cross-section of sustainability issues, including social, environmental and economic factors.

Appendix A Site Assessment Framework

Context

Is the site:	Greenfield
Greenfield: land (farmland, or open space, that has not previously been developed)	Brownfield
Brownfield: Previously developed land which is or was occupied by a permanent structure, including the curtilage of the developed land and any associated infrastructure.	Mixture
	Unknown
Biodiversity Considerations	Yes, Significant negative effects
Is the site within or adjacent to the following policy or environmental designations? What impact would development have on the site's habitats and biodiversity? :	Yes, Potential for negative effects
- Green Belt - Area of Outstanding Natural Beauty (AONB) - National Park - European nature site - SSSI Impact Risk Zone - Site of Importance for Nature - Conservation - Site of Geological Importance	No/ Neutral effects
Climatic Factors	Yes, Significant overlap
Is the site within or adjacent to	Yes, partial overlap
Flood Zones 2 or 3	No/ Neutral effects
Ecological value?	Yes
Could the site be home to protected species such as bats, great crested newts, badgers etc.?	Unknown
	No

Context

Landscape	High sensitivity
Is the site low, medium or high sensitivity in terms of landscape?	Medium sensitivity
Low sensitivity: site not visible or less visible, existing landscape is poor quality, existing features could be retained	Low sensitivity
Medium sensitivity: Development would have only moderate impact on landscape character	
High sensitivity: Development would significantly detract from the landscape and important features unlikely to be retained- mitigation not possible	
Agricultural Land	Significant loss
Loss of high quality agricultural land (Grades 1,2 or 3a)	Moderate loss
	No loss
Historic Environment	
Is the site within or adjacent to, or likely to have significant effects on, the setting of heritage assets, associated one or more of the following heritage designations or assets?	Yes; Potential for significant negative effects
- Conservation area - Scheduled monument - Registered Park and Garden - Registered Battlefield - Listed building - Known archaeology - Locally listed building	Yes; Potential for minor negative effects Limited or no impact or no requirement for mitigation
Health and Wellbeing	Poorly located
Is the site, in general terms, close/accessible to local amenities such as (but not limited to): Town centre/local centre/shop	Moderately located
- Employment location - Public transport - School(s) - Open space/recreation/ leisure facilities - Health facilities - Cycle route(s)	Favourably located
Where a site is poorly located if > 800m, moderately located if 400m to 800m, and favourably located < 400m from services.	

Context

Other key considerations

Yes

Are there any Tree preservation Orders on site?

Unknown

Public Right of Way

No

Existing social of community value

Appendix B Post Consultation modifications

The initial draft of the SEA scoping report was sent to the Statutory Consultees⁵⁰ and CWCC on the 3rd of August 2021. Following a 5 week consultation period, several representations/ comments were received. These are addressed in this revised scoping report. The revisions/ modifications are summarised in (Table B-1).

Table AB1 – Summary of consultation responses and revisions made.

Consultee responses	Response
Natural England provided a formal response to the consultation requesting that: The impacts of air quality on biodiversity be included in the assessment and, <i>‘the Strategic Environmental Assessment has not referred to the need for a HRA screening. Natural England advise that the HRA is carried out at an early stage along-side the SEA.’</i>	• Air quality is now scoped into the SEA • The impacts of air pollution on biodiversity now specifically mentioned in the SEA framework (Table 3-4 third bullet). • An HRA has been undertaken in parallel to the SEA. This is now discussed in paragraph 3.6.
The Environment Agency Provided a formal response. It requested that: Effects to habitats and biodiversity of key water features, such as ponds, ditches and water courses be considered (e.g. the River Weaver) by adding a supporting question to Table 3-4 to address this. The response also highlighted the need for all new development to ensure 10% biodiversity net gain (BNG) from c 2023. The EA suggested reference should be made to other flood related plan such as Flood Risk Management Plans (currently being updated), surface Water Management Plans. Adding that any sites allocated to development in flood risk zones 2 and 3 should be subject to the sequential test. And except test (where necessary). Flood risk assessments should use the up to date sources for flood risk tests. <i>‘If development not already allocated through the Local Plan is identified for location in flood zone 2 and/or</i>	• Additional bullet added to Table 3-4 regarding ‘protection and improvement of key water features’ • BNG is discussed in chapter 3 and included in the supporting questions in Table 3.4 • Updated section 4.3 to include other flood risk management plan. • Added bullet (2) to the supporting questions in Table 4-7

⁵⁰ The Environment Agency, Natural England and Historic England.

3, then a requirement for the Neighbourhood Plan to look in to updating the Strategic Flood Risk Assessment outputs that cover the Neighbourhood Plan area or individual site specific flood risk assessment(s) might be required.'

The EA suggested the inclusion of an additional supporting question in Table 4-7 to ensure flood risk from all sources is addressed.

Historic England	
Provided a formal response. It pointed to advise notes HEAN3 and HEAN8 as these provide guidance for the assessment. The response goes on to highlight the importance of addressing the historic environment's significance, condition, sensitivity and capacity to accommodate change and likely effects o alternatives.	
HE noted that the Heritage at Risk register does not include Grade II listed buildings outside London requesting this be clarified in para. 5.7	• HEAN3 and HEAN8 are referenced in the Historic Environment chapter. The guidance and the response comments will be taken into consideration when appraising alternatives in the SEA environmental report. • Amended para. 5.7 to clarify this issue.
HE recommended that the Site Assessment Framework in Appendix A should fully acknowledge the setting of heritage assets.	• Historic environment section of the Site Assessment Framework has now been expanded to include explicit reference to effects on the setting of heritage assets.
CWCC	
CWCC provided a detailed response which is summarised below	
Air quality should be scoped in.	
Relevant policies from the North West Marine Plan should be referred to in the report.	• Air quality has been scoped into the scope of the SEA • NWMP policies are now discussed in greater detail with reference made to the relevant policies.
HRA- to be mentioned in report clarifying that this is a separate process to SEA.	• This is now clarified in para. 3.6
Chapter 6 (Landscape) should mention the fact that the Sandstone ridge is being considered as a future AONB. Also Design Code to be referenced in this chapter.	• The proposal to designate the Sandstone Ridge as an AONB is now mentioned in para. 6.7 • Design Code is now discussed under para.6.3

Water resources –impacts of development on water resources should be scoped in.

Population and housing (Ch.8) – Clarification required as to what is meant by ‘responsive range of housing etc.’ in the SEA framework section (Table 8.5).

Ch.9 Health and Wellbeing, specifically Open Space should be scoped into the SEA.

Ch.10 Transportation to be scoped into the SEA.

- This and the EA response have been considered. Clarification as to why water resources has been scoped out is now included in further detail in chapter 7 under the scoping outcome section. The effects of the NP on quality of water bodies (in terms of biodiversity) is included in the SEA framework section for biodiversity (Ch.2).
- Table 8.5 amended to provide more clarity.
- The Health and Wellbeing topic (including Open Space) is now scoped into the SEA.
- Transportation is now scoped into the SEA

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APPENDIX 3 (ExAQ2)

Date: 22 August 2025
Our ref: 518118
Your ref: Cheshire West and Chester Local Plan (Regulation 18)



Planning Policy
Cheshire West and Chester Council

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

BY EMAIL ONLY

planningpolicy@cheshirewestandchester.gov.uk

Dear Cheshire West and Chester Council

Planning consultation: Cheshire West and Chester Local Plan (Regulation 18) – July 2025

Thank you for your consultation on the above dated and received by Natural England on 04 July 2025.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

For clarity, we have reviewed the following documents:

Habitats Regulation Assessment Initial Screening – June 2025
Issues and Options (Regulation 18) - July 2025
Sustainability Appraisal – June 2025

Natural England outline our comments below:

Habitats Regulation Assessment Initial Screening – June 2025

Natural England notes that the Habitats Regulations Assessment (HRA) has not been produced by your authority, but by AECOM. As competent authority, it is your responsibility to produce the HRA and be accountable for its conclusions. We provide the advice enclosed on the assumption that your authority intends to adopt this HRA to fulfil your duty as competent authority.

On the basis of information provided, Natural England advises that there is currently not enough information to rule out the likelihood of significant effects. Natural England therefore advises that your screening is repeated in light of the matters below and an Appropriate Assessment is undertaken, to assess the implications on European sites, in view of the site conservation objectives. Natural England is a statutory consultee at the Appropriate Assessment stage of the HRA process. We recommend that Natural Resources Wales are also consulted due to cross-boundary designations.

3. Background to Impact Pathways: Table 3.1 Possible Impact Pathways

Water Quality

Natural England would encourage that all possible impact pathways follow the same naming pattern. Natural England note the following headings which all relate to the same matter but each use differing headings: Water Quality, Eutrophication (Water Quality), Water Pollution (Water Quality), Pollution to Groundwater (Water Quality), Presence of Pollution (Water Quality), Pollution – Pesticides/Agricultural Runoff (Water Quality).

Many of English designated sites relating to meres and mosses have potential groundwater and surface water pathways which has not been identified within the table. Eutrophication and contamination are also relevant to these sites.

Hydrological changes (Water Quantity, Level and Flow)

We advise the naming convention is consistent throughout the table, noting that the following headings have been utilised for the same issue: Hydrological changes (water quantity, level and flow), Water Quantity, Drainage (Water Quantity, Level and Flow), Human Induced Changes in Hydraulic Conditions (Water Quantity, Level and Flow), Inappropriate Water Levels (Water Quantity, Level and Flow), Water Depth (Water Quantity, Level and Flow), Hydrological Changes, Drainage/Reclamation for Agriculture.

The meres and mosses designated sites are vulnerable to changes in hydraulic conditions. A severance in water supply may see the loss of notified features. This potential impact has not been listed within the table.

Recreational Pressure

Similarly, we advise the naming convention is consistent throughout.

During the identification of impact pathways, Natural England recommend recreational pressure is identified as a possible impact pathway at Liverpool Bay SPA and Sefton Coast SAC.

Functionally Linked Land

The table would benefit from clearly specifying whether *disturbance* and *urbanisation* relates to Functionally Linked Land.

Air Pollution

It is noted that air pollution as a possible impact pathway is only considered for atmospheric nitrogen deposition and consequently, we advise amendment in alignment with paragraph 3.3 and due to wider low carbon fuel and carbon capture technology associated emissions.

River Dee and Bala Lake SAC

Qualifying features of the designated site include: Water courses of plain to montane levels with floating water plantain (also note the geological element), sea lamprey, brook lamprey, river lamprey, Atlantic salmon, bullhead and otter. Therefore, consideration of hydrological changes (water quantity, level and flow) and wider supporting habitat should be included within the table.

Rostherne Mere Ramsar

Notified features include Open water transition fen ('mere') with birds listed as noteworthy fauna within the [Information Sheet on Ramsar Wetlands](#) only.

Renewable Energy

Natural England note that the table does not consider the effects of renewable energy at designated sites. This can include on and off-shore wind turbines, hydroelectricity, solar and tidal energy, alongside low carbon fuel and carbon capture technologies.

Marine

We also advise that the table does not consider effects to the marine environment. Natural England recommend reference is also made to [Marine Protected Areas: Conservation Advice Packages](#). Wider potential impacts which may require consideration include: noise, seabed disturbance, collision risk, deoxygenation, emergence regime changes, habitat structure changes, enrichment, disturbance to strata below the seabed, salinity changes, temperature changes, vibration, visual disturbance, water flow and wave changes.

3. Background to Impact Pathways: Commentary

Natural England advise the commentary on impact pathways is largely generic and not bespoke to the issues and opportunities within the Borough.

3.3 Background to Atmospheric Pollution

We wish to highlight there are further impact pathways associated to low carbon fuel and carbon capture technologies which would benefit further assessment. Examples of low carbon fuel and carbon capture technologies include: electric arc furnaces, blue hydrogen (created from natural gas and required to include carbon capture and storage), green hydrogen (created by splitting water into hydrogen and oxygen), hydrogen storage, carbon capture and storage (CCS), sustainable aviation fuel plants, other industries utilising hydrogen resource and carbon capture plants, lithium battery plants and small modular nuclear reactors.

Natural England is committed to helping to deliver more renewable and low carbon energy in a sustainable manner which avoids adverse impacts on the natural environment, but highlight these technologies have an evidence gap which should be identified due to the limited evidence base surrounding natural environment impacts. This can be further compounded by the lack of published and agreed Environmental Quality Standards for new chemicals or pollutants.

We would wish to see policies relating to these technologies to progress to Appropriate Assessment due to the uncertainties involved. This includes: EP1 Ellesmere Port, EP2 Origin – Stanlow and Thornton Science Park, EP3 Origin – Protos and EN 5 Low Carbon Fuel and Carbon Capture.

3.9 Background to Loss of Functionally Linked Habitat

Natural England advise this section refers to background resources such as Identification of Functionally Linked Land supporting Special Protection Areas (SPAs) waterbirds in the North West of England ([NECR361](#)), NECR483 Edition 1 Identification of Functionally Linked Land in the North West of England – Phase 2 ([NECR483](#)) and our SSSI Impact Risk Zones GIS dataset accessible from the data.gov.uk website should also be used to initially inform areas of Functionally Linked Land, alongside best available evidence at the time of your Local Plan preparation.

It is also possible to undertake detailed bird counts as indicated by [Portsmouth Local Plan](#), but we also signpost the [Local Plan by East Riding](#) who approached a 'tier system' for Functionally Linked Land and recreational disturbance.

3.14 Background to Recreational Pressure

We advise reference should be made to evidence collected by Footprint Ecology which is being utilised to inform a Recreational Mitigation Strategy within the Liverpool City Region Combined Authority to ensure tailored information informs the background evidence.

Natural England note under Section 3.27 there is reference to avoidance and mitigation techniques which is typically reserved for the conclusions of the HRA screening stage. Natural England support locating new development away of sensitive designated sites and associated Functionally Linked Land. However, we have concerns with the mitigation measures listed which is discussed in more detail within Section 4. *Test of Likely Significant Effects*.

3.32 Background to Water Quality

We welcome reference to the potential risks associated to Wastewater Treatment Works (WwTWs) within the plan area.

As part of the background information to water quality, Natural England would expect consideration of nutrient neutrality. There must be an initial assessment of the impacts associated to nutrient

loading to establish if there will be a likely significant effect within nutrient neutrality catchments. If this cannot be excluded, assessment should progress to Appropriate Assessment. This stage will consider if the nutrient load needs to be mitigated in order to remove the adverse effects to the European sites.

It is our advice to local planning authorities to take a precautionary approach in line with existing legislation and case law when addressing uncertainty and calculating nutrient budgets. This relates to West Midlands Mosses Special Area of Conservation (SAC) and Oak Mere SAC.

3.34 Background to Water Quantity, Level and Flow

In relation to paragraph 3.37, water levels at designated sites are influenced by a complex range of factors beyond abstraction and impermeable surfaces. Physical interventions such as puncturing the soil profile through piling or deep excavation can significantly alter subsurface hydrology. This can create hydraulic gradients, drawn down of water and unintended to ground water flow pathways. Therefore, we advise this section is amended to consider all potential impact pathways.

4. Test of Likely Significant Effects

In light of the above comments, Table 4.1 requires amendment, and we offer our broad initial comments below:

Table 4-1. Impact pathway parameters for considering the interaction between growth areas and Habitats sites

Atmospheric Pollution

We advise low carbon fuel and carbon capture technologies are considered as an impact pathway. We note the uncertainties regarding rail transport and do not agree that as a consequence this potential impact can be screened out from further assessment.

Functionally Linked Land

Natural England notes the precautionary distance of 20km to be screened within assessment. We advise reference to resources and signposting in Section 3.9 Background to Loss of Functionally Linked Habitat to inform Local Plan preparation.

We advise bats are referred to elsewhere to assist the clarity of the HRA which should focus on notified species of the designated sites listed. On this occasion, bats do not form part of the notified species of the European designated sites. Natural England has produced [Protected species and development: advice for local planning authorities - GOV.UK](#) standing advice to help planning authorities understand the impact of particular developments on protected species.

Recreational Pressure

Natural England welcome the reference to the study commissioned by Merseyside Environmental Advisory Service (MEAS) through Footprint Ecology which identified the percentage contribution that each Local Planning Authority (LPA) should make towards mitigating recreational disturbance through developer contributions based on the location that visitors are coming from.

We welcome the approach to screen recreational pressure within 5.5km of a growth area as a consequence of the study, but we raise concern with the approach to mitigate impacts. Recreational disturbance impacts generated by the Local Plan are unlikely to be sufficiently addressed by measures proposed within this document alone (Section 3.27). The provision of alternate recreational space may act as positive avoidance measure, but it would be difficult to quantify that users would also not be visiting the coastal areas alongside this provision. As a result, impacts to coastal designated sites are likely to still occur.

In addition, habitat management would not be sufficient to address concerns as this would likely infer compensation and be a requirement of the IROPI opinion (Imperative Reasons of Public

Interest) in which the appropriate stages of the HRA must be progressed to. We advise that the avoidance - mitigation - compensation hierarchy is firstly followed.

Natural England signpost the approach taken by Liverpool City Region Combined Authority in which we would strongly encourage your authority to collaborate with neighbouring authorities on the Recreational Mitigation Strategy to ensure the soundness of your Local Plan preparation.

Water Quality

We welcome the approach to consider Wastewater Treatment Works within the same growth areas. It would be beneficial to secure assurances from treatment providers to ensure any additional discharge can be adequately handled.

Natural England advise that our SSSI Impact Risk Zones GIS dataset accessible from the data.gov.uk website should also be utilised to inform impacts arising from surface water and to inform presence/absence of a nutrient neutrality catchment. We advise potential allocations CUD03 and CUD04 may have the potential to be situated within a nutrient neutrality catchment dependent upon foul and surface water arrangements which would benefit from further consideration.

Water Quantity, Level and Flow

Whilst we support the recognition of Wastewater Treatment Works and the need to understand their capacity restraints. These systems do not address all potential impacts. In some cases, surface water may not connect to the mains system in certain contexts, and they cannot mitigate the effects of physical severance of water supply to a designated site. Therefore, we advise that our SSSI Impact Risk Zones GIS dataset accessible from the data.gov.uk website are fully considered to ensure wider impacts are fully assessed.

4.13 Initial Screening of Potential Growth Options

Table 4.2 requires amendment in light of the above comments, but we offer our initial comments below and provide a full list of our screening exercise in Annex A.

Cuddington and Sandiway

The full name of the designated site should be provided: Midland Meres and Mosses Phase II Ramsar.

Farndon

Natural England advise the situation of allocations FA01, FA02 and FA03 would require further consideration of urbanisation and potentially recreational disturbance through increased water sports or boating craft due to the immediate proximity to the River Dee and Bala Lake SAC.

Neston and Parkgate

Urbanisation effects should be considered at The Dee Estuary SPA / SAC /Ramsar.

Chester, Malpas, Tattenhall and Farndon

The above growth areas would benefit from an understanding of current Wastewater Treatment Works (WwTWs) capacity.

4.15 Test of Likely Significant Effects (ToLSE) for Growth Option

The tables contained within this section may require updating in light of the above comments. We outline our broad comments below:

Atmospheric Pollution

We advise further consideration of allocations and policies which will contribute to industrial emissions or provide emissions from low carbon fuel and carbon capture technology sources, not just emissions associated with traffic.

Water Quality

We advise this section is bespoke to water quality issues, rather than a repeat of water quantity, level and flow comments.

5. Summary of Screening

Whilst generally supportive of the approach taken to screen potential impact pathways, there remain areas which require further assessment which include atmospheric pollution from a wider range of emission sources, renewable energy, water quality (specifically surface water run-off and nutrient neutrality considerations), hydrological changes and assessment of geological & species notified features pertinent to River Dee and Bala Lake SAC.

We also highlight that further details regarding the in-combination assessment would also be required as part of the HRA screening. Natural England notes the methodology considers neighbouring authorities' key plans, but no further details are provided (paragraphs 2.12 and 4.2).

Natural England would be pleased to offer our comments on the Appropriate Assessment once further certainty in the development allocations are presented.

Issues and Options (Regulation 18) - July 2025

1 Introduction

Evidence Base

Natural England has not reviewed the plans listed. However, we advise that the following types of plans relating to the natural environment should be considered where applicable to the plan area:

- Green and Blue infrastructure strategies
- Local Nature Recovery Strategies (LNRS)
- Biodiversity plans and strategies
- Rights of Way Improvement Plans
- River basin management plans
- National Landscape and National Park management plans
- Relevant landscape plans and strategies

2 Vision and 3 Objectives

The Plan should include the natural environment in its long-term vision and objectives for the plan area. These should be based on local characteristics and circumstances and include locally specific goals for nature recovery and enhancement, supported by policies and proposals in the plan in accordance to National Planning Policy Framework (NPPF) paragraphs 8(c), 20(d), 123 and 181.

Option A Take Forward The Current Local Plan Objectives

Should Option A be the preferred means of taking forward objectives, Natural England highlight that there is limited consideration of biodiversity assets including designated sites and deep restorable peat. Objectives are largely focussed upon on climate change resilience and green infrastructure.

Option B Use the Sustainability Appraisal objectives

Natural England highlight that these objectives are tailored to the plan area and consider a wider range of biodiversity assets which can shape sustainable development.

5 Spatial Strategy

In setting an overall strategy to guide development and allocate land the Plan should:

- Conserve and enhance the natural environment, including landscapes and green infrastructure (GI)
- Make as much use as possible of previously developed or 'brownfield' land
- Allocate land with the least environmental or amenity value

It should be recognised that some previously developed land is important for biodiversity as it can contain open mosaic habitats ([dataset](#)), a priority habitat. Further information on designated sites is at [Designated Sites View](#) (<https://designatedsites.naturalengland.org.uk/>). Natural England's Impact Risk Zones (IRZ) on [MAGIC](#) maps (www.magic.defra.gov.uk) identify potential development impacts.

5.1 Potential Growth Areas

Once further work develops on which sites will be taken forward for allocation, please consult Natural England so we can offer advice on their suitability with regard to impacts on and opportunities for the natural environment. Any additional growth may also need to be considered in the in-combination assessment.

Therefore, we offer the broad comments on information we have available in Annex A. Natural England identify that numerous allocations have the potential to impact a variety of designated sites, priority habitats, irreplaceable habitats and adjacent irreplaceable assets such as peat.

The Habitats Regulations Assessment prepared as part of the Local Plan will be required to assess development allocations whereby there is a potential to affect a habitat site (see [Habitats regulations assessments: protecting a European site - GOV.UK](#) (www.gov.uk) and Natural England must be consulted on 'appropriate assessments' (see [Appropriate assessment - GOV.UK](#) (www.gov.uk) for more information for planning authorities).

Bird Species and Assemblages

Natural England advise progression to Appropriate Assessment within your Habitats Regulations Assessment (HRA), for your coastal development allocations. This is in terms of the impact pathway of Functionally Linked Land (FLL). We are of the opinion that these allocations will require project level desk-based assessments and habitat suitability assessments.

These assessments should include more detailed bird surveys. As the designated sites also contain species notified during passage, detailed surveys would be required to be conducted back-to-back in a two-year period covering passage and winter periods.

We also have specific concerns with allocation EP04 (Option B). This location is utilised by significant numbers of notified bird species and serves as the last open area along the Estuary. Natural England are aware from development surrounding the Mersey Estuary area such as Protos, Hynet, Frodsham Wind and Solar farm, that this area is a key area of undeveloped land. Natural England urge you to consider appropriate mitigation for this area, including whether mitigation would function to the benefit of the bird species. If not, you may need to consider the derogation tests of the Habitats Regulations, if you want to continue to allocate development to this area.

Alongside the above known projects, we are aware of a proposed solar farm at Rake Lane which may cause wider in-combination effects to allocation EP01 (Options B and C). Your assessment must be able to conclude that impacts to FLL can be suitably avoided and mitigated.

Water

Numerous allocations are sited in areas which may have the potential to affect water sensitive notified features. Designated sites include: River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid Special Area of Conservation (SAC) and a variety of coastal and meres & mosses designations which will require further assessment as the HRA progresses.

Allocations located within Chester, Malpas, Tattenhall and Farndon would benefit from an understanding of current Wastewater Treatment Works (WwTWs) capacity and their ability to handle further discharges as part of the HRA process. We advise Welsh Water is consulted to assist with your decision-making.

In addition, allocations CUD03 and CUD04 within Options B and C at Cuddington and Sandiway may have the potential to be situated within a nutrient neutrality catchment associated to West Midlands Mosses SAC (specifically Abbots Moss SSSI) dependent upon foul and surface water arrangements. We advise due to the uncertainties in design of the schemes at this stage, nutrient neutrality is progressed to Appropriate Assessment.

Air Quality

We advise that all development allocations must consider aerial pollutants arising from traffic emissions during construction and operational phases may have the potential to harm designated sites. We consider that the designated sites at risk from local impacts are those within 200m of a road with increased traffic, which feature habitats that are vulnerable to nitrogen deposition/acidification.

[APIS](#) provides a searchable database and information on pollutants and their impacts on habitats and species. Natural England's approach to advising competent authorities on the assessment of road traffic emissions is attached within [NEA001](#).

In addition, should an employment allocation have the potential to release industrial emissions, a 10km screening distance for European designated sites which are vulnerable to air quality changes is also applied. A commonly used tool is the Simple Calculation of Atmospheric Impact Limits ([SCAIL](#)) model which is freely available. The results of this initial screening should inform the need for any further detailed assessment. Please be aware that within your area Natural England applies a Process Contribution (PC) of **1%** of Critical Level/ Critical Load as a significance threshold for SSSIs and European sites. The PC is the amount of emissions produced by the proposal that will be received at the edge of the receptor (i.e. Designated site). Where the Critical Level/ Critical Load is in exceedance or the scheme involves low carbon fuel and carbon capture technology, Natural England would expect progression to Appropriate Assessment within the HRA.

Priority Habitat and Irreplaceable Habitat

Thirty-three allocated sites may contain priority habitats with nine allocated sites containing or adjoining ancient and semi natural woodland.

Peat

Our initial mapping data indicates that no allocations contain peat as per the [England Peat Status Greenhouse Gas and Carbon Storage](#) layer. However, allocations CH01, CH04 and DEL01 are located adjacent to a potential deep peat mass. Therefore, it is important to note design should ensure works on, and off peat do not compromise the wider peat mass in terms of hydrology connectivity. In addition, policy writers should have regard to the LNRS priorities for peat and the associated actions, especially around creating buffer zones to protect existing peat.

Best and Most Versatile Agricultural Land

Development has an irreversible adverse impact on the finite national and local stock of Best and Most Versatile (BMV) land. Areas of poorer quality land (Agricultural Land Classification/ ALC grades 3b, 4, 5) should be preferred to areas of higher quality land (grades 1, 2 and 3a). There is a requirement for detailed ALC surveys to support plan allocations and for subsequent planning applications (for all sites larger than 5 ha). ALC surveys to support plan allocations and for subsequent planning applications for smaller sites (1 – 5 ha) would be welcomed. We note that seven allocated sites have the potential to contain BMV agricultural land.

7 Ellesmere Port

EP1 Ellesmere Port

EP2 Origin – Stanlow and Thornton Science Park

EP3 Origin – Protos

Due to evidence constraints which are discussed in more detail within EN 5 Low carbon fuel and carbon capture, Natural England advise it is difficult to provide substantive comments on these proposed policies.

As a minimum, Natural England recommend the policies include the following information in regard to coastal designated sites, water and air quality concerns: It is the responsibility of the applicant to provide sufficient information about their proposed project and evidence to support assessment conclusions on the environmental impacts, for your authority to assess the scale, extent, timing, duration, reversibility and likelihood of any potential or increased risk of effects on designated sites, and to consider any mitigation which may be needed to avoid or minimise any adverse effects. This assessment should consider both direct and indirect effects.

13 Green Belt and Countryside

GB1 Green Belt and Countryside

Plan policies and proposals should positively enhance land within the Green Belt. This should include compensatory improvements to environmental quality and accessibility of remaining Green Belt where land is removed from the Green Belt, also having regard to the relevant priorities and actions in the LNRS.

Green Belt land can often be degraded 'urban fringe' landscapes. Therefore, there will be opportunities to 'green' the Green Belt and deliver environmental benefits such as landscape enhancement, habitat creation and enhancement and improved access to nature.

14 Transport and Accessibility

TA 1 Transport and Accessibility

We advise the locations of any potential infrastructure allocations or development including upgrades and expansions to existing infrastructure fully assess impacts to biodiversity assets such as designated sites, peat, soil, priority species and habitats & other notable species, alongside any landscape considerations.

Transport proposals also offer opportunities such as new habitats/connect habitats, e.g., railway embankments and highway verges and should be recognised as an opportunity. The green infrastructure associated with the transport network can play an important role in ecological connectivity contributing to wildlife corridors and stepping stones as referred to in paragraph 185 of the National Planning Policy Framework (NPPF). Transport networks should be designed and managed to maximise ecological connectivity and reduce severance impacts.

The Plan should have policies to maintain and improve access to nature and enjoyment of the countryside. Policies should be in place to protect and enhance public rights of way, access land and national trails, including the England Coast Path. Policies should provide for better connections and address unequal access to nature to support health and well-being outcomes. The design of

new or improved routes should consider a range of modes of access including walking, cycling and horse riding, as well as a range of users including children and older people, different socio-economic groups and people with disabilities.

TA 2 Key Local Transport Infrastructure Priorities

The Plan should consider the implications of coastal change and opportunities for nature and improved access. The Shoreline Management Plan should be used to inform the evidence base for the Plan. You may wish to include the England Coast Path within DM 37 Recreational Routeways.

Coastal Change Management Areas should be identified with appropriate policies set out for development and to manage the change. Policies should reflect and enhance the character of the coast and maintain the route of the England Coast Path. Opportunities for enhancing biodiversity, landscapes and access to nature should also be secured.

15 Infrastructure and Developer Contributions

Strategic mitigation solutions are progressing within the vicinity of your authority and are desirable to address the cumulative impacts of development on designated sites e.g. recreational pressures. Details of the study commissioned by Merseyside Environmental Advisory Service (MEAS) and undertaken by Footprint Ecology identified the percentage contribution Local Planning authorities should make towards mitigating recreational disturbance through developer contributions as based upon the location visitors are travelling from. We advise further collaboration is required from Cheshire West and Chester Council with neighbouring Liverpool City Region Combined Authority on this specific element.

In addition, Natural England advise it would be beneficial to hold further discussions with Liverpool City Region Combined Authority, Cheshire East Council and Warrington Borough Council in relation to LNRS delivery through BNG.

18 Visitor Economy

VE 1 Visitor Economy

We acknowledge comments made under point 18.6 which states *It is anticipated that the development of new attractions, or extensions to existing facilities would continue to be assessed by other relevant policies of the plan.* You may wish to strengthen this policy to ensure matters surrounding recreational disturbance at designated sites is clearly reflected and/or signposted.

19 Housing

HO4 Essential Rural Workers Dwellings

Natural England understand it is proposed to remove any cross referencing to other planning requirements. Within the Rural Worker Dwellings – Advice Note, under the heading *Making a planning application*, we would strongly recommend details of foul and surface water are provided. Surface run-off, septic tank and package sewage treatment plant discharges can contribute to elevated nutrients and changes in water quality at water sensitive designated sites. Therefore, we would recommend these matters are clearly addressed by design of the scheme, specification & management of treatment facilities and mitigation, where required.

22 Open Space, Sport, Recreation and Community Facilities

OS 1 Open Space, Sport and Recreation

In assessing greenspace provision, consideration should be given to the quality and accessibility of space, as well as the various uses that may need separate provision such as children's play space, opportunities for connecting with nature, formal sports areas and facilities for groups with a variety of needs.

Open space provision can use [Natural England's Accessible Greenspace Standards](#) to determine needs based on size, proximity capacity and quality. The Plan should identify, designate and have policies to protect and enhance areas of Local Green Space that are of particular importance to local communities. Alignment can also be made to LNRS.

23 Flood risk and Water Management

FW 1 Flood Risk and Water Management

United Utilities have launched a Sustainable Water Fund for councils to offer the opportunity to deliver rainwater management solutions in collaboration with United Utilities and help build a stronger, more resilient North West ([Rainwater Management - United Utilities](#)).

DEFRA have launched a [shared standards for water efficiency for local plans](#). Though the standards only apply in East Anglia, they are complementary to the plan-led approach – our solution to water scarcity. As such, the shared standards are likely to form a model of how we can provide joint advice on water efficiency in other parts of the country where we have applied the plan-led approach. However, the shared standards approach is collaborative, and each collaboration may be different as it relies on water companies and the Environment Agency. In addition, the supporting evidence base contains location specific environmental impacts information.

In addition, LNRS offers priorities and actions that support collaborative approaches to flood and water management across the habitats and themes which would be beneficial to refer to.

LA 1 Landscape

In addition, the Plan should include a policy to reduce light pollution. Lighting can be harmful to wildlife and undermine enjoyment of the countryside or night sky, especially in intrinsically dark landscapes, such as protected landscapes and nature reserves. Where appropriate the Plan should identify areas of tranquillity and include policies to protect them.

25 Green Infrastructure, Biodiversity and Geodiversity

You may wish to consider if this planning policy should be divided into two separate planning policies such as Green Infrastructure (GI) and Biodiversity & Geodiversity.

GI 1 Green Infrastructure, Biodiversity and Geodiversity

Green Infrastructure

In relation to ENV 3 Green Infrastructure (GI), the 'type' should consider unequal access to natural green space and the needs of different user, age, and socio-economic groups.

We signpost the following resources: [Natural England's Green Infrastructure Framework](#) (GIF) to help prepare a GI evidence base that can support policies, site allocations and local design codes. Specific guidance for plan-makers is provided in the [GI Process Journeys](#). The [Green Infrastructure Map](#) can be used to identify inequalities in access to greenspace and plan for new GI. The [GI standards](#) can be applied locally in policies and design codes.

Biodiversity Net Gain

Natural England welcome reference to Biodiversity Net Gain (BNG). We support setting a percentage target level of provision of at least 10% net gain with higher targets supported by evidence. The Plan should also set out the BNG strategy including:

- Requirements for on-site and off-site provision

- Identifying priority opportunities of strategic significance (habitats and areas) for BNG, for instance through mapping ecological networks

- Advising on the metric to use to calculate gains, for example the most up to date version of [Defra's Biodiversity Metric](#)

The Plan should also aim to achieve wider environmental gains, going beyond BNG, to include wider natural capital benefits such as improved water and air quality and recreation. Natural England's [Environment Benefits from Nature tool can help identify opportunities](#).

Local Nature Recovery Strategies

Natural England recommend the policy includes specific reference to the Cheshire & Warrington Local Nature Recovery Strategy (LNRS). In alignment with the [planning guidance](#) on LNRS, the Council should have regard to the consultation draft Cheshire & Warrington LNRS documents and mapping until the final published version is available in November 2025: [Cheshire and Warrington Local Nature Recovery Strategy consultation | Participate Now](#).

LNRS contributes to the opportunity to prioritise the protection and restoration of habitats. Cheshire and Warrington LNRS highlight opportunity areas and actions in the Local Habitat Map, where wildlife corridors and stepping stone habitats can be created to facilitate species movement and dispersal across the LNRS area and beyond. Actions that are not mapped are applicable for consideration across the Borough wherever they are relevant. For example, where urban actions are not mapped, they are applicable in any relevant urban location and all habitat themes can be checked for relevance with regards to unmapped actions that can inform site layout and design.

Reflecting the opportunities for nature recovery identified in the LNRS priorities, actions and mapping will help to maximise benefits for nature, people and the economy in Cheshire West and Chester area. This includes informing investment and funding for nature recovery including Biodiversity Net Gain, where sites identified in the LNRS mapping achieve a 1.15% uplift within the Statutory Biodiversity Metric. Government has referenced that Environmental Land Management schemes are likely to take account of LNRS priorities and actions in decision making. Other funding and investment opportunities such as tree and woodland planting as well as the Peat Fund are also likely to favourably view applications that deliver LNRS.

We advise LNRS has an interlinked relationship with wider policies including sustainable drainage systems, nature-based solution, peat, light pollution and GI.

Priority Habitats

We advise point 3 also refers to priority habitats. This should include appropriate protection and restoration of deep and shallow peatlands, found in fen and bog priority habitats that are valuable for biodiversity and as a carbon store. Other priority habitats include upland and lowland heathland, traditional orchards, meadows, woodlands and coastal habitats. Details can be found on the Joint Nature Conservation Committee [website](#) and on [MAGIC](#) maps (www.magic.defra.gov.uk)

Designated Sites

In accordance with National Planning Policy Framework (NPPF) paragraphs 181, 186(a)(b)(c), 187, 188 and Glossary, the Plan should include policies and proposals to protect and enhance biodiversity, this includes designated nature conservation sites (internationally, nationally and locally designated sites of importance for biodiversity).

Natural England advise policy wording guides development, this includes the application of the mitigation hierarchy and the importance of addressing direct, indirect and cumulative impacts of development on designated sites. We signpost the approach taken to the *Conserving and enhancing biodiversity and geodiversity* section of the [East Riding's Local Plan](#) which you may wish to consider when formulating your policy wording. However, content must be tailored to the specific issues and opportunities within Cheshire West and Chester.

We would expect the policy to demonstrate key drivers, a summary of biodiversity assets including designated sites, a summary of example of impacts and opportunities which must include recreational pressure, Functionally Linked Land, air, water and marine. The policy and its supporting text must align with the HRA produced as part of the Local Plan preparation, as such any known or emerging mitigation must be supplied.

Peat

Natural England support the inclusion of peat within the proposed planning policy. The policy should also have regard to LNRS priorities and actions for peat. Development on peat leads to a permanent loss of an irreplaceable asset through extraction or sealing. The removal of peat on-site can cause implications to the natural drainage of wider peat assets, beyond the proposed schemes. This leaves areas of peat fragmented due to a severance of water supply and can cause localised draw down in the water table. Natural England wish to highlight that wider hydrological integrity is also needed for peat to function. The modification of the deep restorable peat renders the proposal area and wider peat landscape difficult, if not impossible to restore in the future. The sealing of peat with impermeable surfaces will also fundamentally change the nature of the underlying peat, as natural processes cannot continue.

We signpost the [England Peat Status Greenhouse Gas and Carbon Storage](#) dataset which indicates areas of deep peat. Natural England advise this evidence should be used as an initial tool to determine whether further hydrological and ground investigations are required. Additional sources of information include [The British Geological Survey maps portal](#) and existing borehole data from the [British Geological Survey](#).

Where mapping indicates a peat presence and a lack of historic borehole data, further detailed survey is required. A peat survey should be undertaken by a soils scientist and should determine the presence of peat, it's depth and the presence of any spoil/waste materials that would impact the restoration ability. Natural England advise that peat surveys should be carried out in line with the IUCN peatland programme [field protocol](#).

Agricultural Land

To assist in understanding agricultural land quality within the plan area and to safeguard BMV agricultural land in line with the NPPF, strategic scale ALC Maps are available. Natural England also has an archive of more detailed ALC surveys for selected locations. Both these types of data can be supplied digitally free of charge by contacting Natural England. Some of this data is also available on the [magic](#) website. The planning authority should ensure that sufficient site specific ALC survey data is available to inform decision making. For example, where no reliable or sufficiently detailed information is available, it would be reasonable to expect developers to commission a new ALC survey, for any sites they wish to put forward for consideration in the Local Plan. General mapped information on soil types is available as 'Soilscapes' on the [magic](#) website. Additional information regarding obtaining soil data can be found on the [LandIS](#).

Natural England advise that any development on BMV land (grades 1, 2 and 3a) should be informed by a detailed soil survey. Any development on BMV should have a soil handling plan and sustainable soil management strategy based on detailed soil surveys. In addition, for minerals and other temporary forms of development, plans for reinstatement, restoration and aftercare will normally be required to return to the former land quality (ALC grade).

Marine Environment

The Plan should also have policies in place to ensure effective alignment of the terrestrial and marine planning regimes, for instance in plan areas on estuaries or areas with tidal rivers. This should include reference to the relevant marine plan.

27 Design and Sustainable Construction

DS 2 Sustainable Construction

The Plan should have a policy for the protection of and sustainable management of soils on development sites. This should set out mitigation measures to minimise soil disturbance and retain as many ecosystem services as possible through careful soil management during the construction process and appropriate soil re-use. The Plan should recognise that development (soil sealing) has

a major and usually irreversible adverse impact on soils. The impact of all types of development on soils should be considered.

Healthy soils are not only important for agriculture, but soils with high environmental value (e.g. wetland carbon stores such as peatland and low nutrient soils) are also important to ecological connectivity. Development should be supported by soils surveys and management plans - see [Defra's Code of Practice for the sustainable use of soils on construction sites](#). We advise inclusion of this resource.

In light of Natural England's statutory purpose (see s.2 of the Natural Environment and Rural Communities Act 2006) and the [Environmental Improvement Plan 2023 - GOV.UK \(www.gov.uk\)](#) which states that *degraded lowland peat accounts for 3% of England's overall greenhouse gas emissions. Reducing these emissions, by rewetting our agricultural peat soils, is essential to meeting legally binding net zero targets*, Natural England do not support the principle of developing on restorable peat. Our comments coincide with those made under GI 1 Green Infrastructure, Biodiversity and Geodiversity.

DS 3 Climate Adaptation

The Plan should contain policies to mitigate and adapt to climate change impacts on the natural environment. You may wish to consider how this interacts with GI 1 Green Infrastructure, Biodiversity and Geodiversity.

The Plan should recognise that climate change mitigation and adaptation and biodiversity loss are interlinked. Many habitats provide essential ecosystem services to allow adaptation to climate change e.g. natural flood management, as well as mitigation e.g. through tree planting and retaining peat as a carbon store. Policies should set out appropriate nature-based solutions for climate mitigation and adaptation such as woodland or wetland creation or peatland restoration.

Policies should address water use, promoting the use of sustainable drainage systems (SuDS) and water sensitive design as part of a wider green infrastructure approach. This would also align with various priorities and actions in the LNRS. In areas of known water constraint, plans should include policies to manage available resources, such as water efficiency or water reuse measures.

Consideration also needs to be given to the likely impacts of climate change on protected sites, habitats and species. See the [Climate Change Adaptation Manual, Carbon Storage and Sequestration by Habitat](#) and [National biodiversity climate change vulnerability model](#).

28 Energy

EN 5 Low Carbon Fuel and Carbon Capture

Natural England's ability to advise on this draft planning policy has been constrained by the limited available evidence about the likely impacts of the proposed projects on designated sites. We note that this is at least in part due to the use low carbon fuel and carbon capture technologies and further compounded by the lack of published and agreed Environmental Quality Standards for new chemicals or pollutants.

Therefore, we strongly recommend planning policy covers the following information to ensure sensitivities surrounding designated sites, water and air quality are fully assessed for impacts: It is the responsibility of the applicant to provide sufficient information about their proposed project and evidence to support assessment conclusions on the environmental impacts, for your authority to assess the scale, extent, timing, duration, reversibility and likelihood of any potential or increased risk of effects on designated sites, and to consider any mitigation which may be needed to avoid or minimise any adverse effects. This assessment should consider both direct and indirect effects.

Local Plan Issues and Options Sustainability Appraisal – June 2025

Natural England have provided comment on previous version of the Sustainability Appraisal under references 505871 and 511398. We are satisfied that all matters have been resolved.

Please send further correspondence, marked for my attention, to
consultations@naturalengland.org.uk.

Yours faithfully



Sustainable Development Senior Officer
Cheshire to Lancashire Area Team
Natural England

Annex A – Initial Screening of Allocated Sites Within Cheshire West and Chester Council

The table below indicates allocations which have the potential to impact statutory designated sites, priority habitats, irreplaceable habitats and assets as informed by Natural England resources during a screening exercise which took place in August 2025.

However, please note the following information has not been included:

A 10km screening distance for European designated sites which are vulnerable to air quality changes as a result of industrial or agricultural related emissions

Designated sites at risk from local impacts are those within 200m of a road with increased traffic, which feature habitats that are vulnerable to nitrogen deposition/ acidification. This has n

Data from Natural Resources Wales in which we advise consultation in relation to cross-boundary designations and Functionally Linked Land

Information from [local records centre](#), wildlife trusts, or recording societies or resources such as [NBN Atlas](#) and [Wetland Bird Survey Data](#)

Allocation	Option	Designated Site	Functionally Linked Land	Provisional Priority Habitat or Ancient Woodland	Provisional Deep Peat	Provisional Best and Most Versatile Land
CH01	B and C			Deciduous woodland Coastal and floodplain grazing marsh	Adjacent	Proportion of Grade 2 and Grade 3
CH02	B and C	River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid SAC River Dee (England) SSSI Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI		Deciduous woodland		Proportion of Grade 3
CH03	B and C					Proportion of Grade 3
CH04	B and			Traditional	Adjacent	

	C			orchard		
EP01	B and C	Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI	Information could be informed by known projects in the vicinity such as Protos, Hynet and Frodsham Wind & Solar Farm	Deciduous woodland		
EP02	B and C	Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI		Deciduous woodland		
EP03	B and C	Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI New Ferry SSSI				
EP04	A and B	Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI		Coastal and floodplain grazing marsh		
ELT01	C	Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI				
NOR01	B and		Habitat	Deciduous		

	C		suitable for water birds	woodland		
NOR02	B and C	Witton Lime Beds SSSI				
NOR03	B and C	Witton Lime Beds SSSI				
NOR04	A, B and C					
NOR05	A, B and C					Proportion of Grade 3
NOR06	A, B and C			Deciduous woodland		
NOR07	A, B and C			Ancient & Semi-Natural Woodland (adjacent)		
NOR08	A, B and C			Good quality semi improved grassland Deciduous woodland Ancient & Semi-Natural Woodland		
NOR09	B and C		Habitat suitable for water birds			
NOR10	B and C					
NOR11	B and C			Traditional orchard		
NOR12	B and C			Ancient & Semi-Natural Woodland (adjacent)		
WIN01	A and B			Deciduous woodland		
WIN02A	A and B			Deciduous woodland		
WIN02B	A, B and C	Sandbach Flashes SSSI		Ancient & Semi-Natural Woodland		
WIN03	A and B	Wimboldsley Wood SSSI Sandbach		Deciduous woodland		

		Flashes SSSI				
WIN04	A and B			Deciduous woodland, Ancient & Semi-Natural Woodland		
WIN05	A and C	Wettenhall and Darnhall Woods SSSI Wimboldsley Wood SSSI		Deciduous woodland, Ancient & Semi-Natural Woodland		
WIN06	A and B					
WIN07	A, B and C			Traditional orchard		Proportion of Grade 2
CUD01	B and C			Deciduous woodland Traditional orchard		
CUD02	A, B and C	Midland Meres & Mosses - Phase 2 Ramsar West Midlands Mosses SAC		Ancient & Semi-Natural Woodland (adjacent)		Proportion of Grade 2
CUD03	A, B and C			Deciduous woodland		
CUD04	B and C	Abbots Moss SSSI *CUD03 and CUD04 may have the potential to be situated within a nutrient neutrality catchment dependent upon foul and surface water arrangements		Deciduous woodland		
CUD05	B and C			Good quality semi improved grassland Deciduous woodland		

FAR01	A, B and C	River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid SAC	Habitat suitable for water birds			
FAR02	A, B and C					
FAR03	A, B and C	River Dee (England) SSSI	Adjacent to moderate potential (River Dee-Holt) Habitat suitable for water birds			
FRO01	B and C	Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI Beechmill Wood & Pasture SSSI	Adjacent to moderate potential (Weaver Estuary to Catton Hall) Habitat suitable for water birds			
FRO02	B and C	Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI Beechmill Wood and Pasture SSSI	Habitat suitable for water birds			
FRO03	B and C	Mersey Estuary Ramsar				
HEL01	B and C					
HEL02	B and C	Mersey Estuary SPA				
HEL03	B and C	Mersey Estuary SSSI				
KEL01	A, B and C					

KEL02	B and C	Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI		Deciduous woodland		
MAL01	A, B and C	Taylor's Rough & Wellmeadow Wood SSSI				
MAL02	A, B and C					
MAL03	A, B and C					
MAL04	A, B and C	River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid SAC River Dee (England) SSSI Taylor's Rough & Wellmeadow Wood SSSI				
MAL05	A, B and C					
NEP01	B and C	Dee Estuary/ Aber Dyfrdwy SAC The Dee Estuary Ramsar The Dee Estuary SPA Dee Estuary SSSI	Low potential (Parkgate Fields) Habitat suitable for water birds	Good quality semi improved grassland		
NEP02	B and C	Dee Estuary/ Aber Dyfrdwy SAC The Dee Estuary Ramsar The Dee Estuary SPA Dee Estuary SSSI	Low to moderate potential (including Parkgate Fields) Habitat suitable for water birds	Deciduous woodland		

		Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI New Ferry SSSI Dibbinsdale SSSI				
NEP03	B and C	Dee Estuary/ Aber Dyfrdwy SAC The Dee Estuary Ramsar	Low to moderate potential Habitat suitable for water birds			
NEP04	B and C	The Dee Estuary SPA		Deciduous woodland		
NEP05	B and C	Dee Estuary SSSI	Habitat suitable for water birds			
NEP06	B and C		Adjacent to high potential Habitat suitable for water birds			
TARP01	A, B and C	Wettenhall and Darnhall Woods SSSI				
TARP02	A, B and C			Deciduous woodland		
TARP03	A, B and C					
TARP04	A, B and C					
TARP05	A, B and C					
TARV01	B and C					
TARV02	A, B and C					
TARV03	B and C			Deciduous woodland		
TAT01	A, B and C	River Dee and Bala Lake /				

TAT02	A, B and C	Afon Dyfrdwy a Llyn Tegid SAC River Dee (England) SSSI		Deciduous woodland		
TAT03	A, B and C					
TAT04	A, B and C					
TAT05	A, B and C					
TAT06	A, B and C					
TAT07	A, B and C					
ACB01	C			Traditional orchard		
ACB02	C					
ACB03	C					
ACB04	C			Traditional orchard		
ACB05	C					
CAP01	C	Mersey Estuary Ramsar	Habitat suitable for water birds	Deciduous woodland		
CAP02	C	Mersey Estuary SPA Mersey Estuary SSSI				
DEL01	C				Adjacent	
ELT01	C	Mersey Estuary Ramsar Mersey Estuary SPA Mersey Estuary SSSI	Information could be informed by known projects in the vicinity such as Protos, Hynet and Frodsham Wind & Solar Farm			
ELT02	C			Deciduous woodland		
ELT03	C			Coastal and floodplain grazing marsh (adjacent)		Proportion of Grade 3
ELT04	C					
HOO01	C	Mersey Estuary Ramsar				
HOO02	C					
HOO03	C			Deciduous woodland		

		Mersey Estuary SPA				
		Mersey Estuary SSSI				
		Dibbinsdale SSSI				
HOO04	C	Mersey Estuary Ramsar		Deciduous woodland		
		Mersey Estuary SPA				
		Mersey Estuary SSSI				
		New Ferry SSSI				
LOS01	C	Plumley Lime Beds SSSI		Ancient & Semi-Natural Woodland (adjacent)		
		Witton Lime Beds SSSI				
LOS02	C					
LOS03	C	Witton Lime Beds SSSI				
MOU01	C	Mersey Estuary Ramsar				
MOU02	C					
MOU03	C	Mersey Estuary SPA		Ancient & Semi-Natural Woodland (adjacent)		
		Mersey Estuary SSSI				



The Cheshire Sandstone Ridge Visitor Survey 2024 Final Report



University of
Chester

North Cheshire
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Executive Summary

The Cheshire Sandstone Ridge is a significant natural and cultural landscape, known for its striking geological features, rich biodiversity, and historical landmarks. To better understand visitor demographics, experiences, and expectations, a comprehensive visitor survey was conducted in the summer of 2024, which comprised an on-site visitor survey and an online visitor survey, and which was designed to update and supplement the 2017 visitor survey. The findings provide insights that will guide future infrastructure improvements, promotion of the Cheshire Sandstone Ridge, tourism development, and management strategies.

The primary objectives of the survey were to:

1. Continue to identify the profile and origin of visitors
2. Capture demographic data of the visitors (not captured in 2017)
3. Identify reasons and motivations for visiting the Cheshire Sandstone Ridge
4. Assess the levels of visitor satisfaction
5. Examine the barriers to visiting the Cheshire Sandstone Ridge

The survey was conducted over a four-month period and a total of 874 respondents participated, representing a diverse mix of visitors, including local residents, domestic tourists, and even international travellers. Data collection focused on frequency of visits, motivations, preferred activities and locations, and perceptions of the Ridge's amenities and services, as well as exploring any barriers to visiting the Ridge.

Key Findings

1. Visitor profile - the majority of visitors were domestic tourists from Cheshire and across the North West, and this profile has not altered since 2017. Most visitors were aged between 40-70+ years, with groups, couples, and families making up the largest segments.
2. Popular activities - walking and dog walking were the most favoured activities.
3. Satisfaction levels - over 95% of respondents reported high satisfaction with their visit, citing the Ridge's scenic beauty and tranquillity as key highlights. However, many visitors expressed concerns regarding parking availability, quality of roads, and parking costs, as well as issues with dogs and dog waste, signage, and maintenance and accessibility of some trails.
4. Economic impact - the volume of visitors to the Ridge plays a key role in supporting the local economy, particularly through spending on parking, food, and accommodation. Many visitors expressed a willingness to pay for improved services, such as parking, if it helped to support the maintenance and access of the Ridge.
5. Accessibility and inclusivity - while the Ridge is generally accessible, feedback indicated a need for better facilities to aid access to the Ridge (including for individuals with disabilities), with enhanced public transport links (such as a seasonal hop-on/hop-off Ridge bus) outlined as an issue, as well as clearer signposting, and maintenance of trails.

Executive Summary

From the wide range of findings, there are a number of recommendations to be considered. These include:

1. Infrastructure improvements - invest in maintaining local roads and repairing potholes and uneven surfaces, improved parking facilities, provide better signage, and undertake trail maintenance to enhance the visitor experience.
2. Marketing strategies –review and develop promotional activities in partnership with key stakeholders to attract a wider audience, including international visitors and underrepresented groups.
3. Enhanced resources –develop digital and interactive resources, such as mobile route apps or downloadable interactive guides, to enrich the visitor experience and exploration across the Cheshire Sandstone Ridge.
4. Improved transport links –investigate the potential to develop seasonal public transport links via train and bus across the Ridge, thereby increasing accessibility and reducing parking congestion.

The Cheshire Sandstone Ridge continues to be a treasured natural and cultural asset. Insights from this survey highlight the importance of balancing conservation with tourism growth, whilst ensuring a sustainable and enjoyable experience for all. By implementing strategic improvements and fostering responsible tourism, the Ridge can remain a cherished destination for generations to come.



Introduction

Introduction and Acknowledgements

The Cheshire Sandstone Ridge Visitor Survey was undertaken across the summer of 2024 and was designed to complement and build upon a previous visitor survey undertaken in 2017. The 2017 visitor survey was one component of a larger 24-month project, which also incorporated a community consultation, stakeholder interviews, Town and Parish Council workshops, as well as a secondary data review of key policy documents.

The 2024 visitor survey was tasked with examining the overall visitor experience of the Cheshire Sandstone Ridge and was designed specifically to gather a raft of information examining visitor profiles, usage, behaviour, and satisfaction levels.

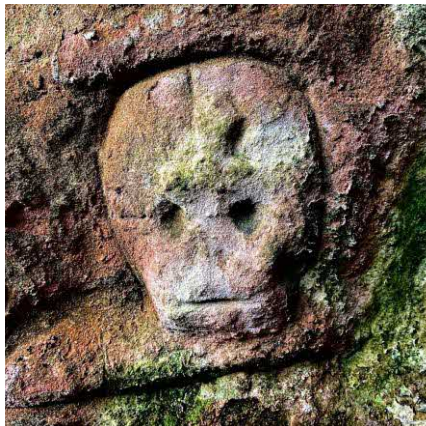
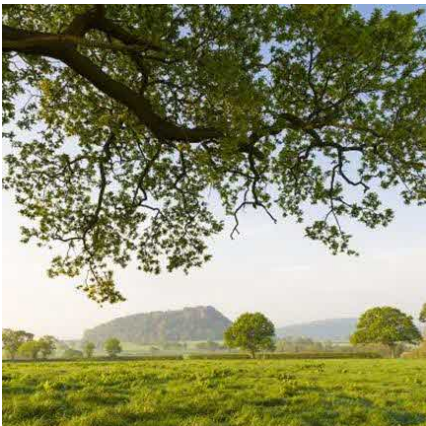
The data and findings will be used to inform management strategies, partnerships, and projects undertaken by the Sandstone Ridge Trust and other key stakeholders, which will enhance the visitor offer and experience, and identify opportunities for improving infrastructure, creating additional events and activities, as well as engaging with new markets.

Acknowledgements

This project was funded by the UK Government through the UK Shared Prosperity Fund (UKSPF).

The project was also supported by a number of key stakeholders which included:

- The Sandstone Ridge Trust, their executive committee, and volunteers.
- University of Chester, the survey project team and student surveyors.
- North Cheshire Community Rail team, Garfield Southall and Marina Farey.
- Marketing Cheshire.
- The staff at Delamere Forest, Beeston Castle (English Heritage), and National Trust.
- The visitors who kindly gave their time to support the project.



About the Cheshire Sandstone Ridge

Standing prominently above the surrounding plain, the Cheshire Sandstone Ridge is one of county's most distinctive landscapes, covering 230 square kilometres of rolling hills and sandstone escarpments stretching between the Mersey Valley and the county boundary with Shropshire.

The Cheshire Sandstone Ridge is a vibrant and diverse rural landscape and is home to more than 36,000 people who live in the area, providing a living for over 400 farmers and landowners. In addition, over 1,000 businesses are located on the Ridge. More than 1 million visitors a year are attracted to the Cheshire Sandstone Ridge from across Cheshire and the surrounding conurbations of Greater Manchester, Merseyside, North Wales and the Midlands (Sandstone Ridge, 2018), providing a significant positive impact to the local rural economy and supporting the numerous attractions, businesses, towns and villages across the region.

At the time of writing (April 2025) the Cheshire Sandstone Ridge is being considered by Natural England as a potential Area of Outstanding Natural Beauty.

It also provides the region with many of the essentials of life, such as, clean air and water, food, timber and raw materials. Furthermore, it helps to regulate the local climate, stores flood waters, filters pollution, and provides opportunities for the public to improve health and wellbeing.

The Ridge has many special qualities that define its sense of place and distinctiveness, and make it highly cherished (Sandstone Ridge, n.d.):

- Breath-taking and panoramic views to Merseyside, the Shropshire Hills, Peak District and Welsh Hills
- 250-million-year-old Triassic sandstone outcrops and cliffs –the backbone of Cheshire
- A refuge for wildlife and habitats including internationally important meres and mosses, and the most extensive remnants of lowland heath and sessile oakwood in Cheshire
- Over six thousand years of human occupation, with six prehistoric hill forts, a medieval royal forest and two castles
- Great opportunities for outdoor recreation and learning experiences, including the 55km long Sandstone Trail
- Picturesque market towns, villages and hamlets, with half-timbered black-and-white and sandstone manor houses, farms and historic inns
- Communities with real pride in their area
- A tranquil landscape shaped by centuries of farming, forestry and utilisation of natural resources, including ancient springs, wells and water sources, and an industrial heritage of copper mining and sandstone quarrying
- A source of inspiration, folklore and legend

Methodology

In order to capture a wide array of data examining the visitor experience and barriers to visiting the Cheshire Sandstone Ridge, two visitor surveys were conducted between July and October 2024. The first survey was an 'on-site' survey at a number of locations on and across the Cheshire Sandstone Ridge. The second survey was an 'online' survey which was promoted across the wider Cheshire region, to gather additional insights as well as exploring barriers to accessing the Cheshire Sandstone Ridge.

In total 328 on-site visitor surveys were completed, and 546 online visitor survey responses were received (874 responses in total).

The on-site survey research data was gathered using face-to-face interviews across several locations, with the data recorded onto Jisc Online Survey. Surveying was carried out before, during and after the peak school holiday season on weekdays and at weekends. A random selection of people was approached and interviewed (no quotas set), with each survey taking approximately 15 minutes to complete.

Both sample sizes of 328 and 546 provide a confidence level of 95%, with a confidence interval/margin of error of 5%.

It should be recognised that the results reported refer to actual responses received. Not all the questions were mandatory and therefore the number of respondents for some questions are less than the total responses, for example for overnight visitors and their accommodation choices. Similarly for some questions respondents were able to select multiple answers, for example the reasons for visiting the Cheshire Sandstone Ridge, meaning the total number of responses for these questions was higher. Where these differences occur this has been noted within the findings.

Methodology

Building specifically on the 2017 visitor survey, the 2024 visitor survey was designed to the following principles (adapted from the 2017 guidance):

- Gather comprehensive data on visitor usage of the Cheshire Sandstone Ridge
- Highlight the Ridge's strengths and weaknesses of the Ridge as a visitor destination
- Highlight areas requiring improvement and potential opportunities for the Ridge
- Gather a wide range of views and opinions of visitors and non-visitors to aid in future strategies for the Ridge
- Inform the development of appropriate branding, marketing, and events for the Ridge to increase visitor numbers
- Provide guidance on the provision and possible improvement of the current visitor offer/facilities, and how this has evolved since 2017
- Provide information to inform future partnership and funding work in the area
- Continue to build upon the baseline data set to inform future visitor surveys

In order to achieve these principles and appropriately build upon the 2017 data set, it was important to replicate many of the core questions from the 2017 survey, whilst adding appropriate variations.

Therefore, the 2024 visitor survey was designed to:

1. Continue to identify the profile and origin of visitors
2. Capture demographic data of the visitors (not captured in 2017)
3. Identify reasons and motivations for visiting the Cheshire Sandstone Ridge
4. Assess the levels of visitor satisfaction
5. Examine the barriers to visiting the Cheshire Sandstone Ridge

Methodology

The on-site visitor surveys were conducted by a team from the University of Chester, led by Dr Tim Brown and Dr Gozde Turkutarhan, as well as additional surveys conducted by volunteers from the Sandstone Ridge Trust.

The surveys were undertaken between July and October 2024 at a number of locations on and across the Cheshire Sandstone Ridge. The days and times were varied to attempt to capture different perspectives and profiles of visitors.

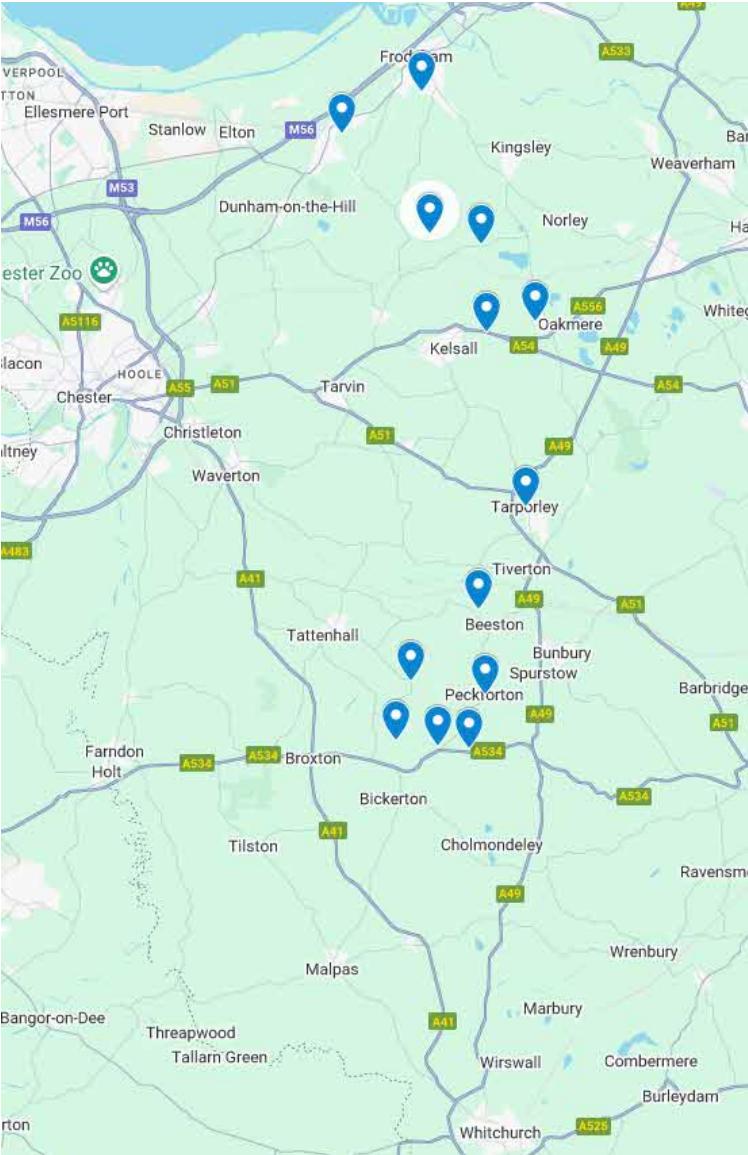
The locations are indicated on the map (right) which pins the thirteen different locations used for the survey. The table (below) outlines in more detail the different locations, the number of surveys completed at each location, the number of visits to that location between July and October, and the percentage of total responses gathered at each location. The table highlights that both Delamere Forest and Bickerton Hill received the highest number of responses which is due to each location being surveyed three times across the summer (due to the high visitor numbers at these locations). The other locations were all visited once, and as well as those listed in the table, other sites included Burwardsley, Tarporley, Peckforton, Helsby Hill, and Eddisbury.

As with all research, there are elements of unavoidable bias within the on-site survey which are important to recognise:

- The number of surveys collected in each location significantly varied (due to time of day, day of week, weather, etc).
- Those who were surveyed had chosen to visit the Cheshire Sandstone Ridge, generally in visitor ‘hotspots’ and are therefore likely to already have a positive attitude towards the Ridge, particularly if they had visited before.

Location	No of surveys	Percentage	No of visits to location
Delamere Forest	118	36.0%	3
Bickerton Hill	106	32.3%	3
Beeston	28	8.5%	1
Gresty’s Waste	22	6.7%	1
Frodsham Hill	17	5.2%	1
Other	37	11.3%	1 at each location (8)
Total	328	100.0%	17

Map of survey locations



Part 1 – On-site Visitor Survey

On-site Survey

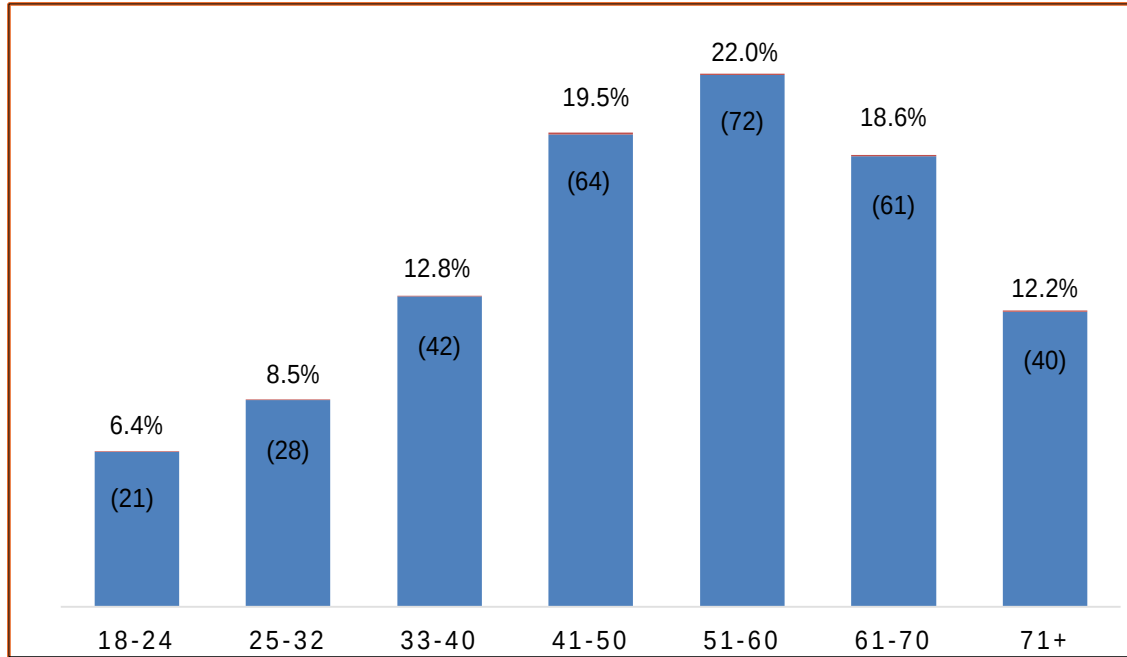
The on-site visitor survey was conducted between July and October 2024 at a number of locations on and across the Cheshire Sandstone Ridge. In total 328 on-site visitor surveys were completed using face-to-face interviews, with the responses captured within the Jisc Online Survey application.

The on-site visitor survey findings are presented in the following order:

- Visitor demographics
- Home location of visitors
- Overnight visitors
- Travel to and from the Cheshire Sandstone Ridge
- Exploring the Cheshire Sandstone Ridge
- Reasons for visiting the Cheshire Sandstone Ridge
- Frequency of visits to the Cheshire Sandstone Ridge
- Dwell time at the Cheshire Sandstone Ridge
- Awareness of the Cheshire Sandstone Ridge
- Visitor spend
- Visitor satisfaction
- Improving the visit

Visitor Demographics

Age profile of respondents

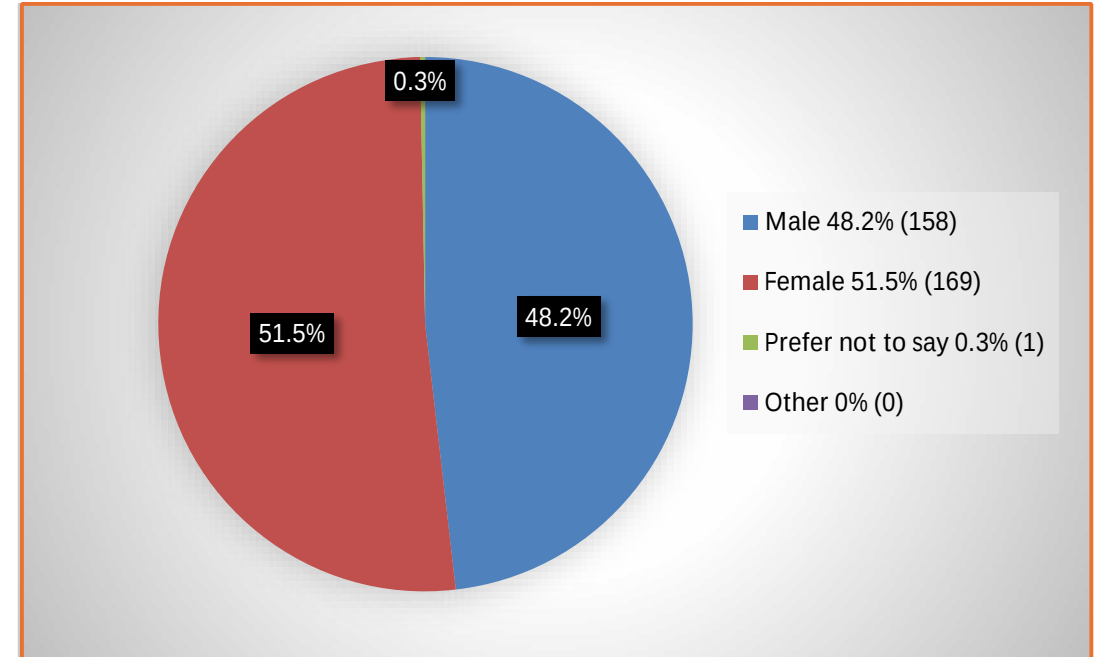


The age profile of respondents visiting the Cheshire Sandstone Ridge varied, with the highest proportion aged between 51 and 60 years old (22%), with 41 to 50 years being the second highest (19.5%), closely followed by those aged 61 to 70 (18.6%). Overall, the data highlighted that the main proportion of visitors ranged between 41-70 (60.1%) indicating that the Ridge attracts an older demographic of visitors.

Furthermore, according to the data, only 14.9% of visitors are aged between 18 and 32, highlighting a potential gap in attracting a younger audience to the Ridge.

The age demographics and distribution recorded are similar to the Cheshire and North West Census Data 2021 (ONS, 2023).

Gender of respondents

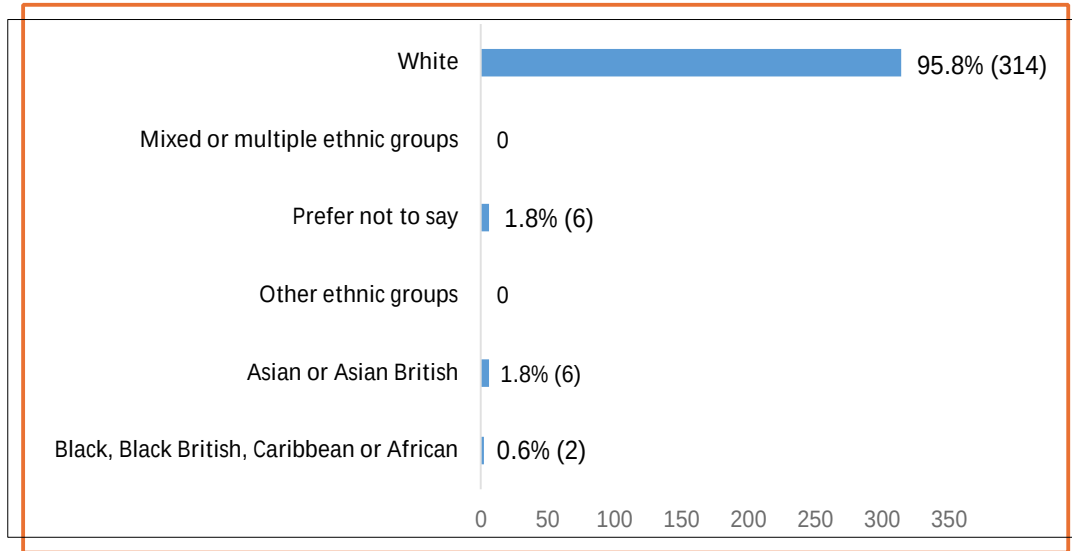


The gender profile of respondents is a nearly even split with 51.5% female and 48.2% male, with one respondent indicating that they 'prefer not to say'.

This data also aligned with the North West and Cheshire Census Data (Varbes, 2024a), which highlights that the region is 51% female and 49% male.

Visitor Demographics

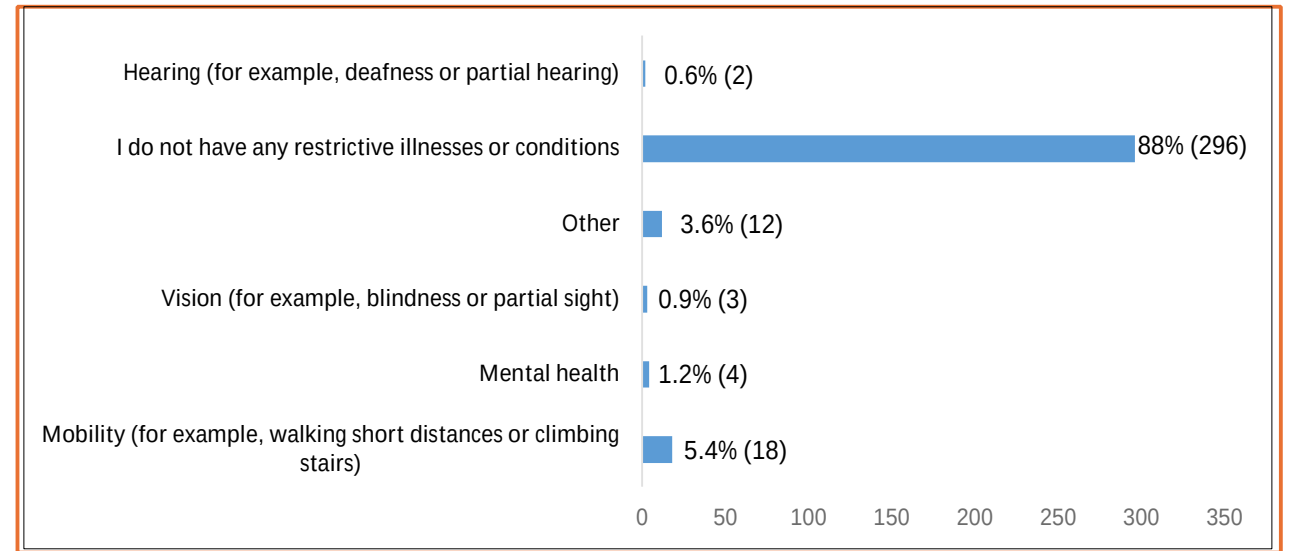
Ethnicity of respondents



The profile of respondents highlighted that 95.8% identified as being white, with 2.4% belonging to a different ethnic group, and with a further 1.8% not wishing to provide a response to this question. This data is higher than the North West which is 86% white, and England and Wales which is 82% white, but is in keeping with Cheshire Census Data where the average is 94.5% white (Varbes, 2024a).

One potential consideration from these findings is to review the marketing for the Cheshire Sandstone Ridge in order to attract a more diverse visitor profile from across the UK, as well as internationally.

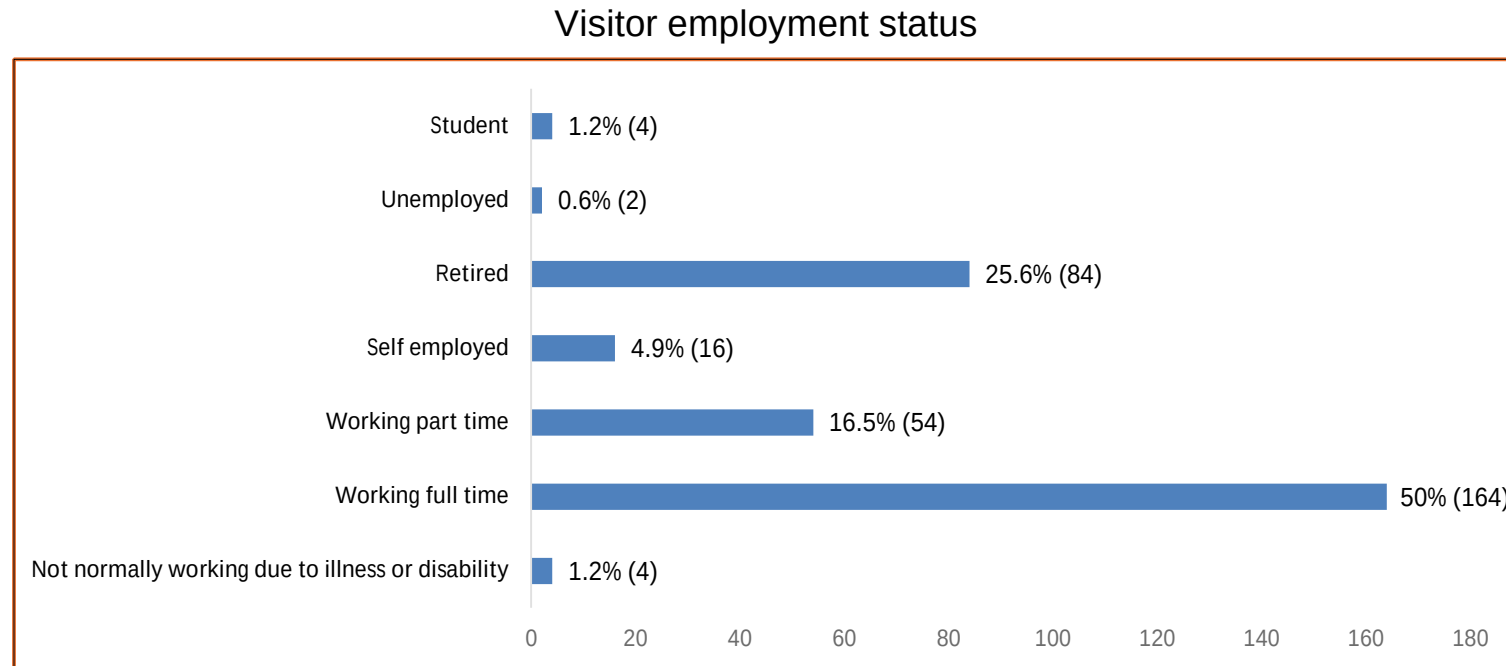
Disability/long-term health conditions



The profile of respondents highlighted that 88% do not have any restrictive illness or condition, but that 12% of respondents do, with a small number identifying as having more than one long term condition. Of those with a restrictive illness or condition, 5.4% identified mobility issues, which is also highlighted within the 'other' category with 3.6% of respondents noting "limited stamina" or "chronic fatigue" as examples of the underlying health conditions. Hearing (0.6%), vision (0.9%), and mental health (1.2%), accounted for the other results.

This data is lower than the national average where 17.7% of the population have a disability that limits their ability to undertake some day to day activities (such as visiting destinations) (ONS, 2023). This data is useful as it indicates that regionally and nationally health considerations need to be factored into visiting destinations, and whilst the rural nature of the Ridge is a key part of its appeal, ensuring that parts of the Ridge are accessible will be important in attracting more visitors.

Visitor Demographics



The profile of respondents highlighted that 50% of visitors were working full-time, 25.6% were retired, and 16.5% worked part-time. This data differs from both the National and North West data, where 76% of people were working full-time, and 24% were working part-time (Gov.uk, 2023), and 16% of the population were retired (ONS, 2024).

Of the remaining visitor respondents, 4.9% outlined that they were self employed, which is slightly lower than the North West average of 9.6% (Varbes, 2024b). The unemployed status (0.6%), is considerably lower than the North West average of 4.2% (Nomis, 2024), but the student status (1.2%) and those not working due to illness/disability (1.2%) are both in keeping with the North West and National average which is 1% (Nomis, 2024).

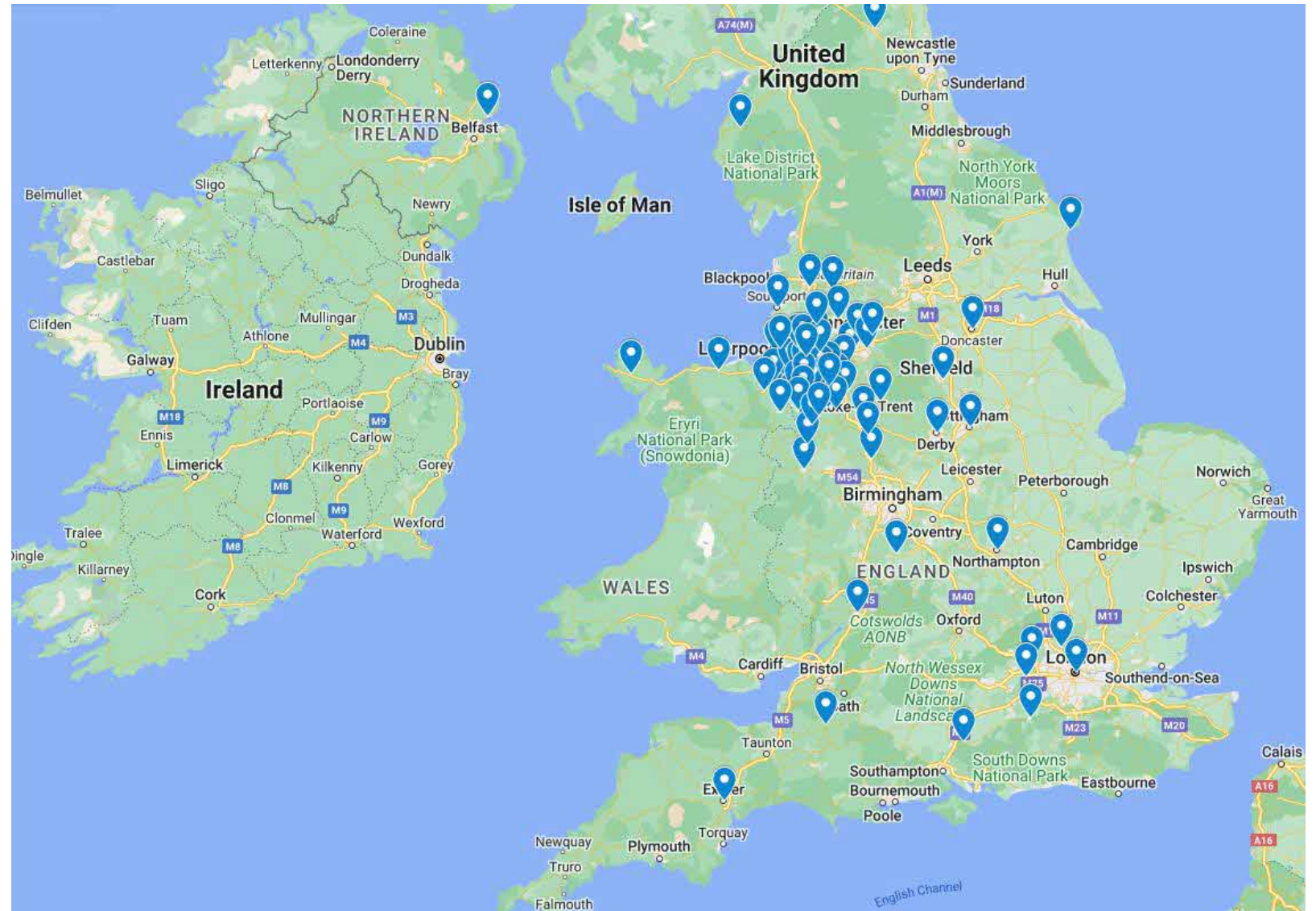
The variations in data captured for full-time, part-time and retired visitors, is likely attributed to the days, times, and locations of the surveys undertaken whereby more retired visitors were most likely surveyed during week days, compared to those who were working, therefore resulting in some of data being out of sync with National and North West data trends.

Home Location of Visitors

Map showing the home location of visitors

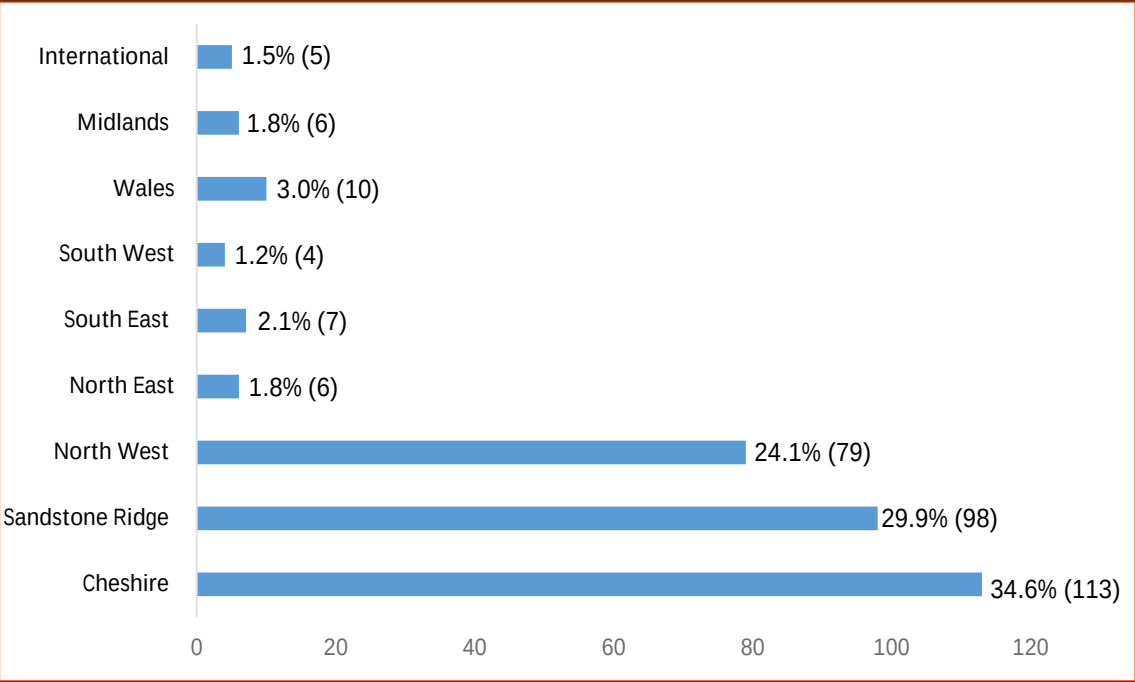
As outlined in the map (right) the geographic profile of respondents' home location was overwhelmingly from across Cheshire (34.5%) and the North West (24%), or living in towns or villages on the Cheshire Sandstone Ridge (30%). A further 3% of visitors were from North Wales and all were in relatively close proximity to the Ridge.

The remaining 7.5% of visitors came from across the UK and Northern Ireland (as demonstrated in the map). Finally an additional 1% were international visitors from Malta, The Netherlands, USA, and Australia.

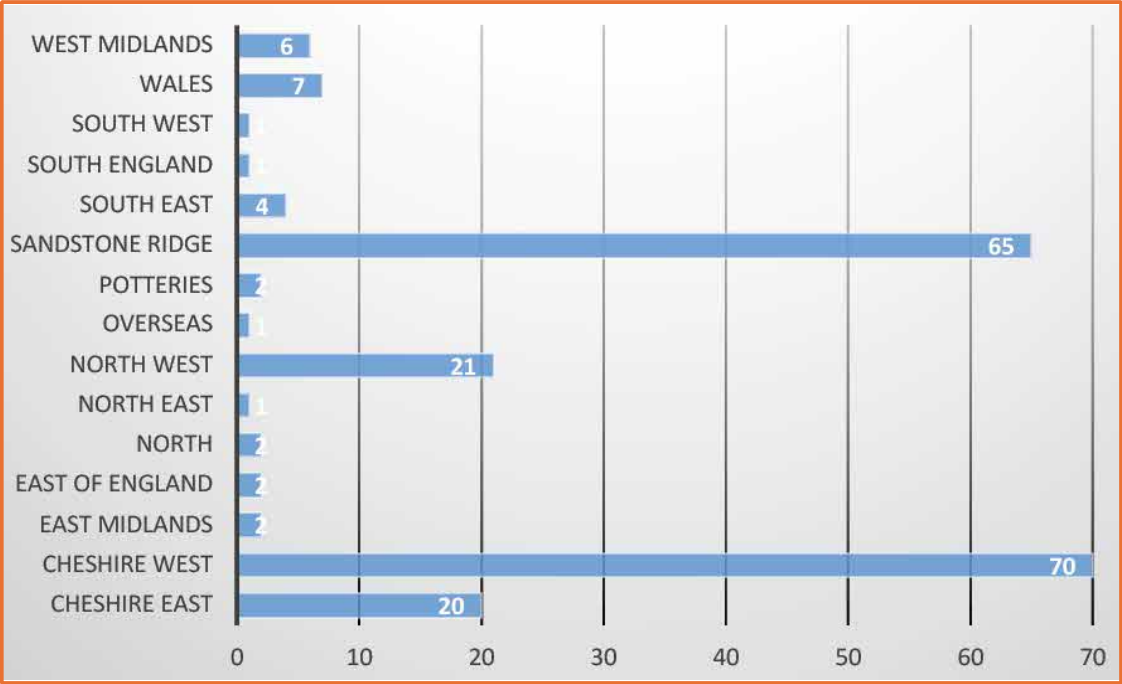


Home Location of Visitors

Home location of visitors 2024



Home location of visitors 2017

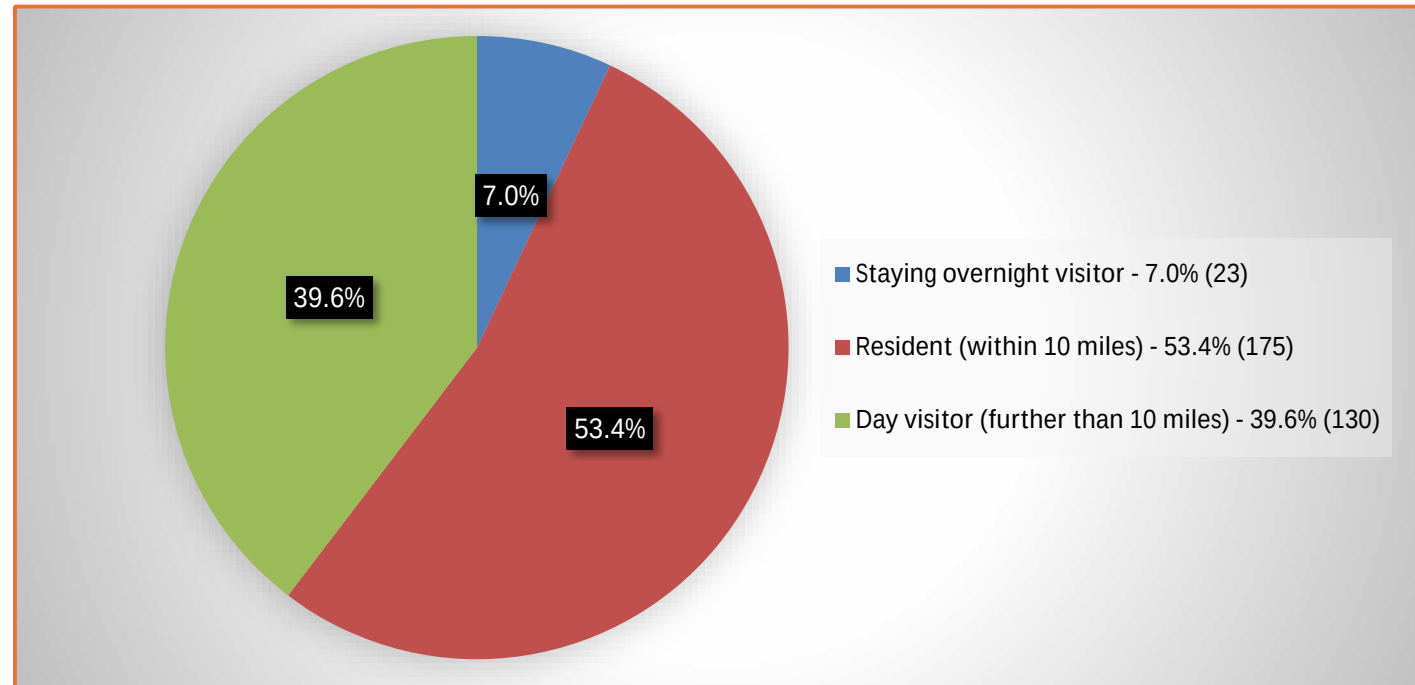


As highlighted on the map previously, the home location of visitors to the Cheshire Sandstone Ridge is predominantly from across Cheshire and the North West, with only a smaller proportion currently visiting from the rest of the UK or internationally (above left).

This profile is very similar to the visitor home locations from the 2017 survey (above right). This highlights that the majority of visitors and their home location profile has changed little in the last 8 years. There is therefore a potential need to review and develop new marketing materials and campaigns to aid in attracting a wider number of visitors from across the North West and UK as a whole, particularly if the Ridge is designated as a an Area of Outstanding Natural Beauty by Natural England, as well as managing the Ridge for future generations.

Home Location of Visitors

Proximity of visitors to the Cheshire Sandstone Ridge



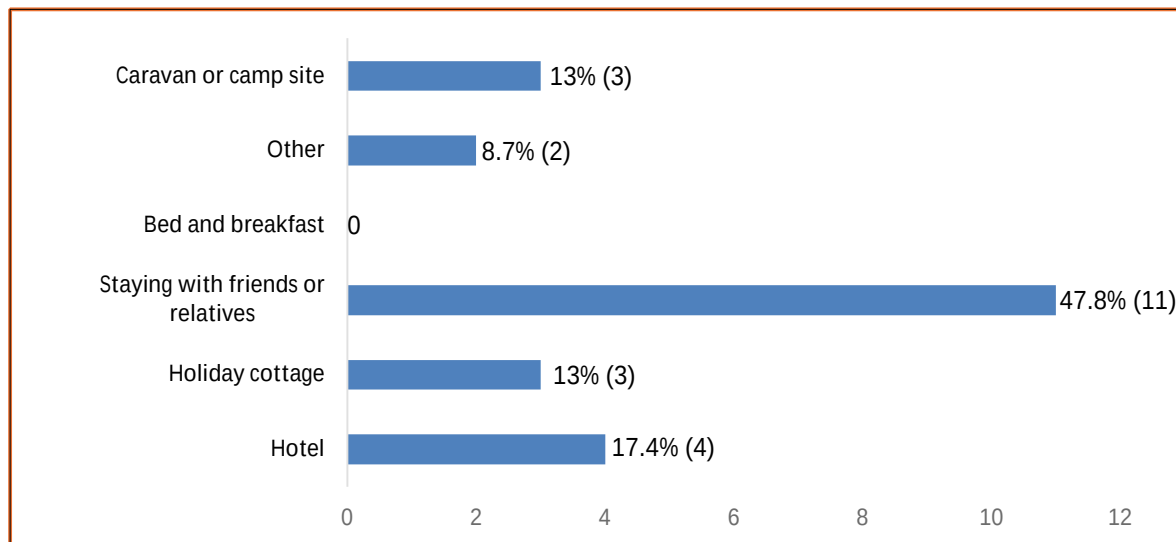
Visitors were asked to indicate their proximity to the Cheshire Sandstone Ridge to aid in profiling the types of visitors that use the Ridge. Some 53.4% indicated that they lived within less than 10 miles of the Ridge, which were therefore classed as being 'resident'. An additional 39.6% outlined that they were a 'day visitor' having travelled further than 10 miles to access the Ridge, and the final 7% were 'overnight visitors'.

From a visitor economy perspective the 7% who were 'overnight visitors' have added some additional insights as to how and where they were staying and therefore contributing to the region's visitor economy. The value of the regional visitor economy is now estimated to be over £3.9 billion annually, with over 56 million visitors across Cheshire and Warrington each year (Enterprise Cheshire and Warrington, 2024).

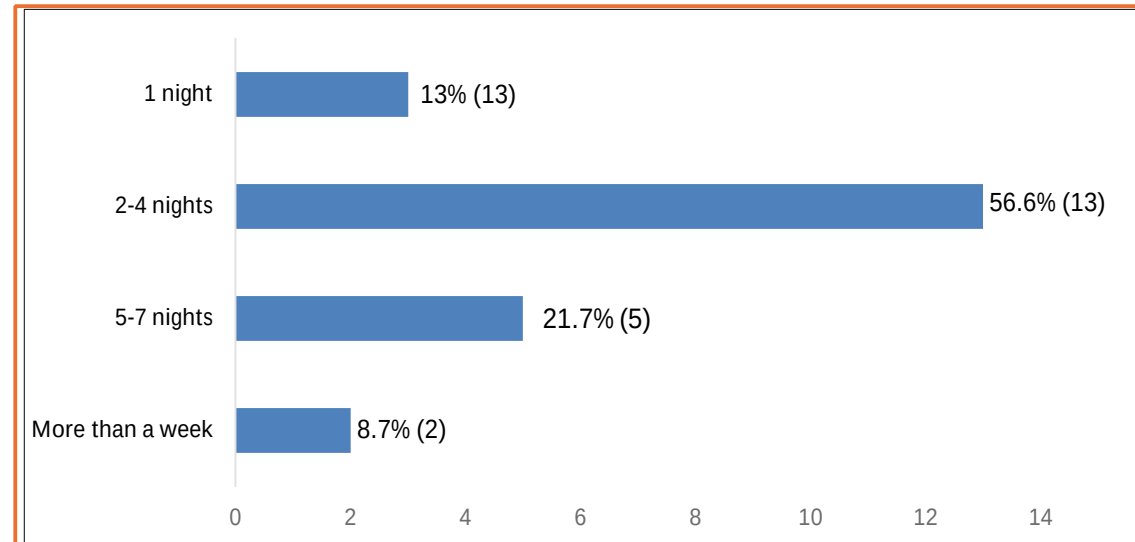
As outlined by the Sandstone Ridge Trust it is estimated that the Cheshire Sandstone Ridge attracts over one million visitors per year, and if the Ridge achieves Area of Outstanding Natural Beauty status, this will likely have a positive impact on visitor numbers. This will need to be balanced with conservation and management of the Ridge, ensuring that appropriate visitor infrastructure is developed.

Overnight Visitors

Accommodation of overnight visitors to the Cheshire Sandstone Ridge



Duration of visit



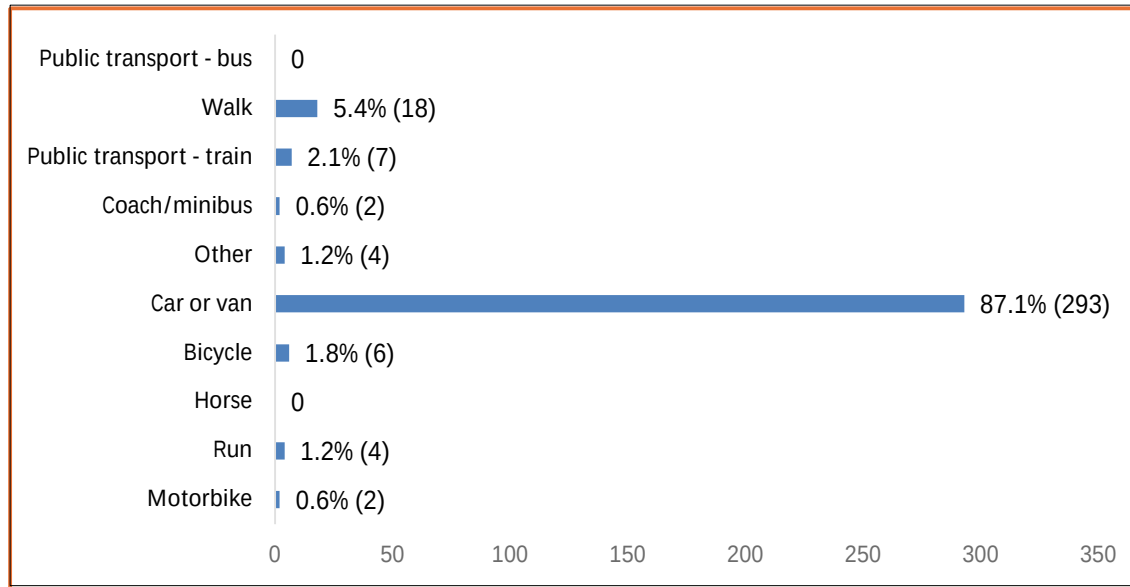
The 7% of visitors who indicated that they were an 'overnight visitor' were asked supplementary questions to help provide further insights into visitor behaviours and motivations. The visitor data emerging on where people were staying (above left) demonstrated that many opted to stay with friends or relatives (47.8%). The remaining 52.2% outlined that they were staying in a range of local accommodation, such as hotels, holiday cottages, camp sites, and narrow boats, in Chester, Liverpool, Warrington, and villages across the Cheshire Sandstone Ridge.

Additionally, 87% of the overnight visitors stated that they were staying for multiple nights (above right), with the majority staying for between two and four nights (56.6%). Whilst this data appears modest, if the 7% overnight rate (see page 16) is applied to the estimated 1 million annual visitor figure, this translates to at least 70,000 overnight stays, demonstrating the potential positive economic impact for the local visitor economy.

The quality and variety of the hospitality and accommodation on offer across the Ridge can also be used within any future marketing campaigns.

Travel to and from the Cheshire Sandstone Ridge

Transport used to access the Ridge

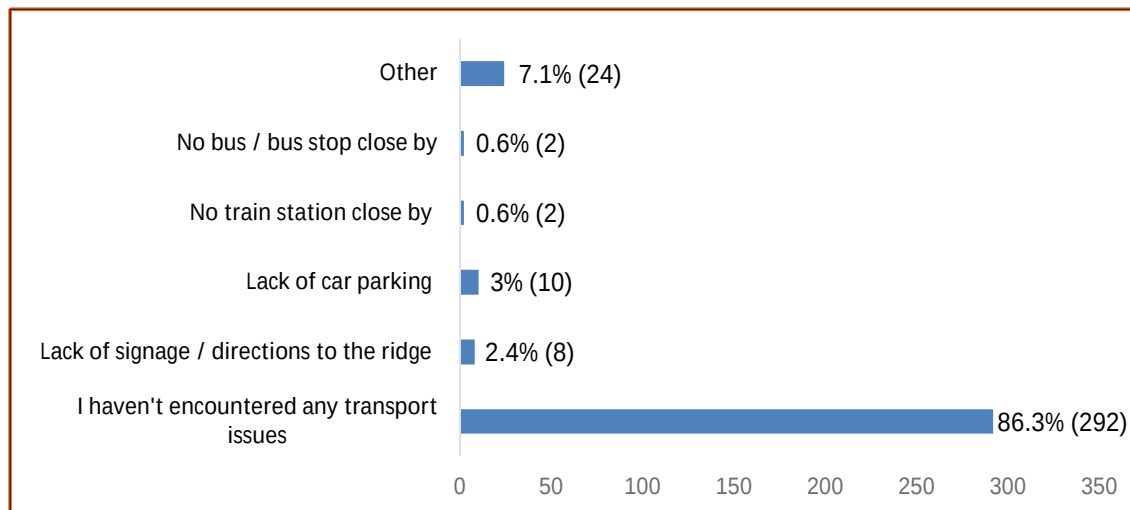


The data on how visitors travelled to and from the Ridge (top left) highlighted that overwhelmingly the majority (88.3%) used a private motor vehicle (car, motorbike, or coach/minibus) as their mode of transport. Of the remaining visitors, a small proportion walked (5.4%), ran (1.2%), or cycled (1.8%).

Only 2.1% accessed the Ridge via public transport (train) demonstrating a potential lack of accessible public transport links across many parts of the Ridge. Furthermore, a small number of visitors (1.2% 'other') outlined that the lack of a train or bus stop was a transport barrier that they had encountered.

This data also aligns to the 2017 results where 90% of visitors outlined that they had travelled by car to visit the Cheshire Sandstone Ridge, and no visitors recording the use of public transport. There is, therefore, a consistent theme emerging concerning how visitors access the Cheshire Sandstone Ridge and in identifying potential opportunities for developing some of the infrastructure, particularly around public transport links.

Transport issues encountered in accessing the Ridge



The data also demonstrated (bottom left) that whilst the majority of visitors encountered no transport issues accessing the Ridge (86.3%), the identified barriers included a lack of car parking (3%), lack of signage (2.4%), and concerns regarding the quality of some of the rural roads ('other' 7.1%).

It should also be noted that a small proportion selected more than one response to this question, for example using public transport and walking, or specific transport issues such as poor quality of local roads. This resulted in more than 328 responses being recorded for both questions, where visitors added additional information to the 'other' option.

Travel to and from the Cheshire Sandstone Ridge

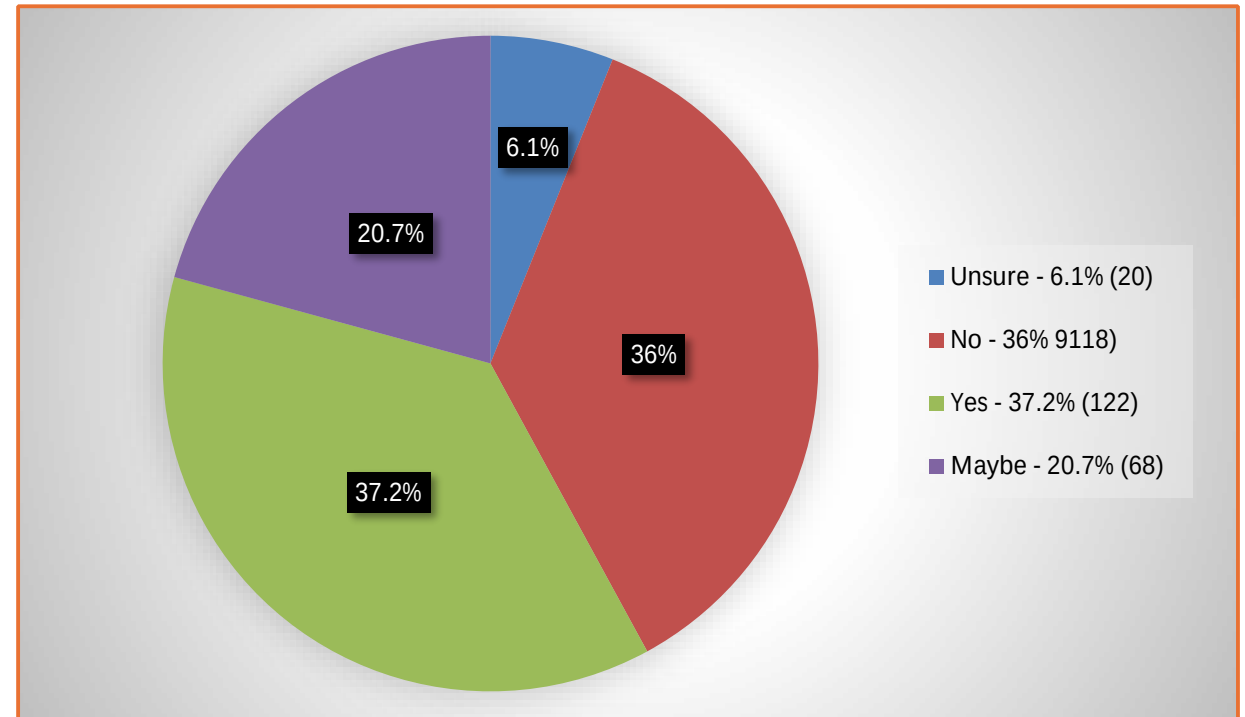
Visitors were asked their perspective about a 'Ridge bus' that would provide a hop-on/hop-off service to enable visitors to access different parts of the Ridge, as well as local transport links, such as train stations or bus stops.

A small majority supported the concept (37.2%), with an additional 20.7% who might support such a service, and 6.1% unsure.

Surprisingly, 36% of visitors did not support such a service. Given some of the barriers and issues raised within the on-site visitor survey, such as a lack of public transport services, the high cost of parking or limited parking, this warrants potential further investigation to capture why visitors would oppose such a service (as no additional narrative was captured at the time of the survey to provide additional insights).

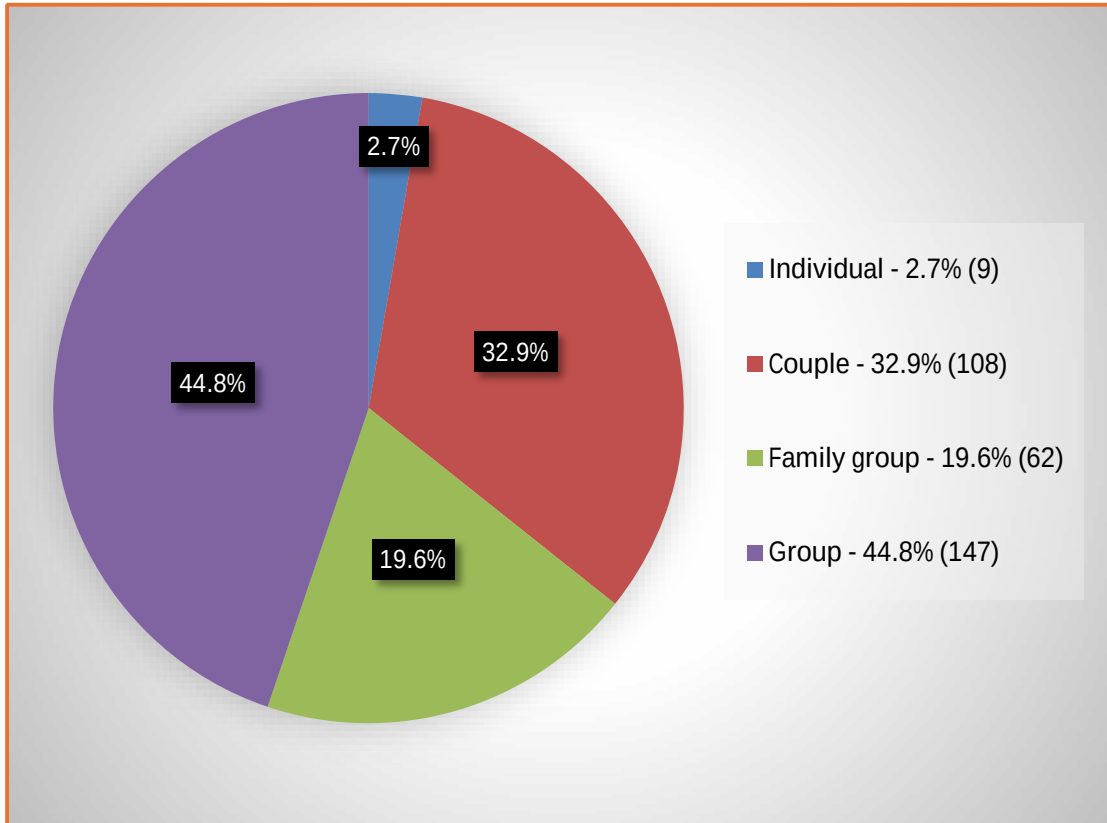
A potential opportunity could be to explore the feasibility of a seasonal Ridge bus service to increase accessibility to parts of the Ridge to encourage more sustainable transport methods.

'Ridge bus' (hop-on/hop-off) service for visitors



Exploring the Cheshire Sandstone Ridge

Visitor profiles



Visitor data was also captured to help provide an overview of Visitors Profiles

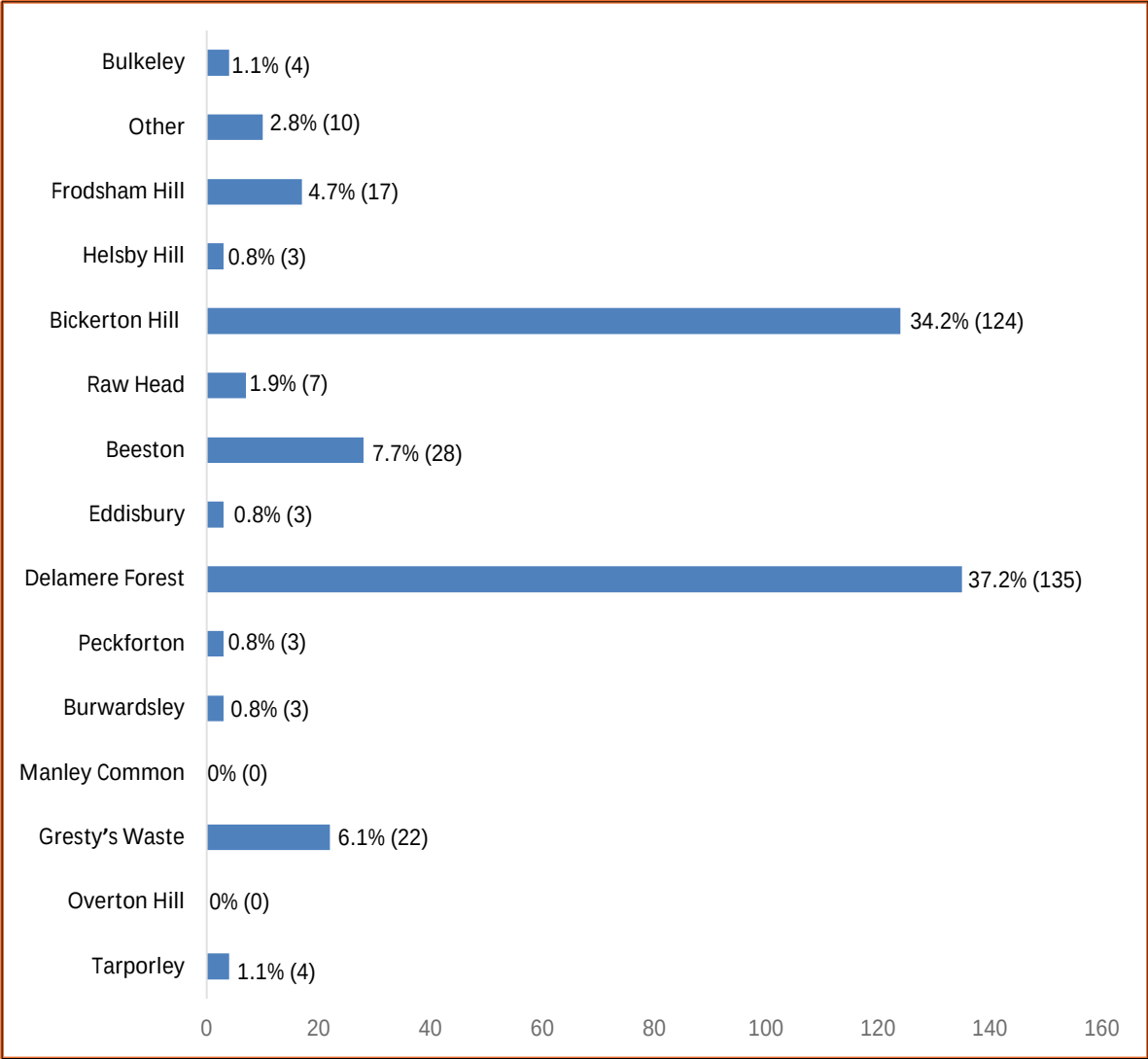
The data revealed that only a very small proportion (2.7%) visited alone, although all of these visitors did have at least one dog with them as part of their visit. Couples visiting the Ridge made up 32.9%, whilst visiting as part of a group were recorded as the highest overall at 64.4% in total. The groups were classified into two different categories, 'Groups' (such as friends or walking groups) equated to 44.8% of visitors, and 'Family Groups' (where visitors including under 16 year olds in their group) made up 19.6% of visitors.

Additional visitor profile data also recorded that there were: 213 dogs, 19 bicycles, and 3 horses.

This data is useful as it demonstrates that the core of the visitors are groups or couples (97%+), and that infrastructure projects and marketing campaigns can be developed in line with this.

Exploring the Cheshire Sandstone Ridge

Location(s) visited on the Cheshire Sandstone Ridge



Visitors to the Cheshire Sandstone Ridge were asked to outline where on the Ridge they had visited that day. As the data highlights the majority of people were visiting either Delamere Forest (37.2%) or Bickerton Hill (34.2%). A much smaller proportion were visiting Beeston (7.7%), Gresty's Waste (6.1%), or Frodsham Hill (4.7%). The remaining visitors were spread across a wide range of locations across the Ridge.

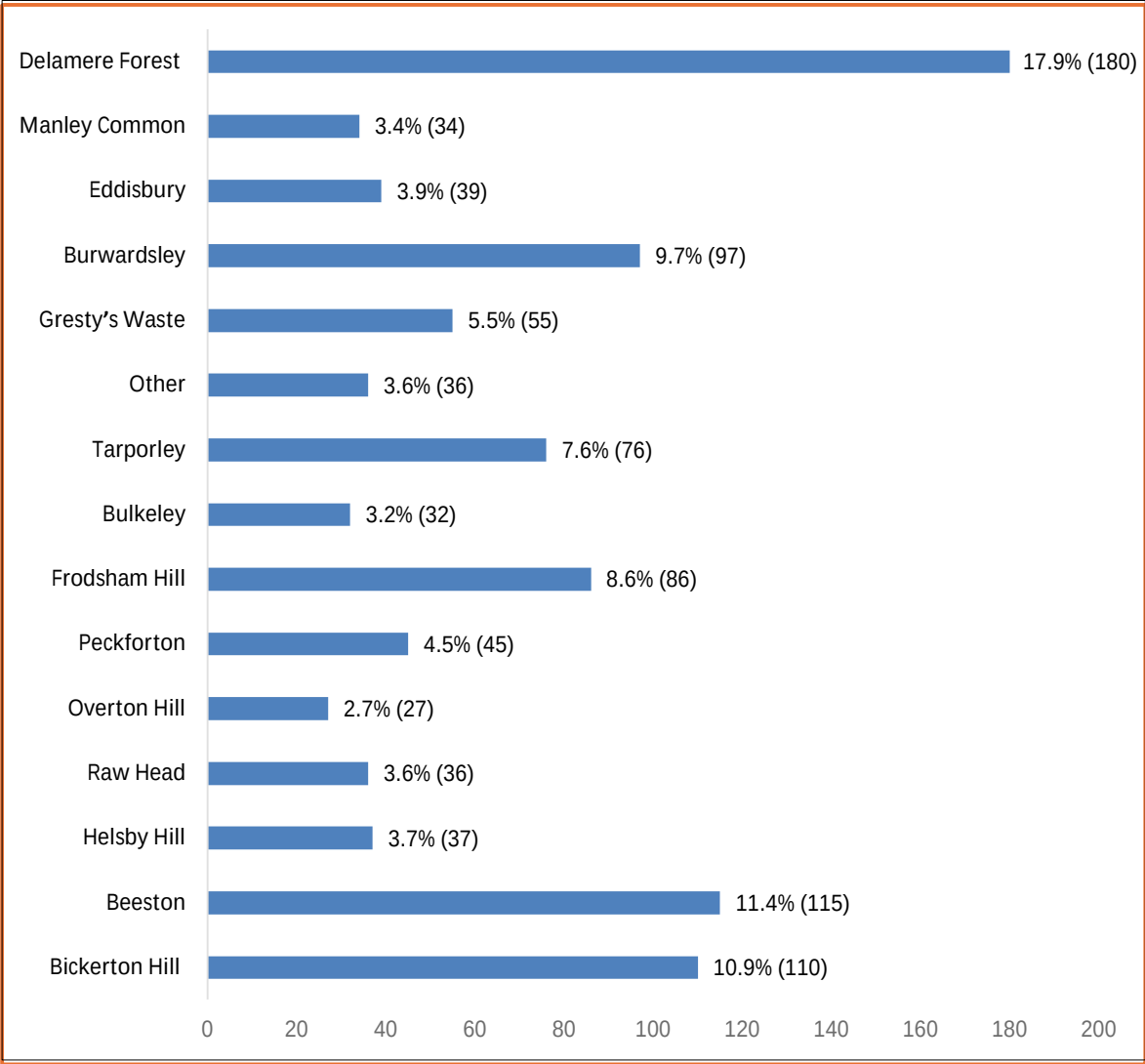
There were 363 responses in total to this question as visitors were able to indicate multiple sites that they had visited that day. This helps to highlight that visitors were accessing and visiting multiple sites across the Cheshire Sandstone Ridge as parts of their visit, with a number commenting under 'other' the different parts of the Ridge they had visited.

With 368 km of public rights of way, walking the Cheshire Sandstone Ridge is a very popular activity, especially in the spring and summer months. Whilst there are some marketing activities to promote the routes and options there is a potential to develop this more commercially with key stakeholders, including hospitality providers, to create a specific offer to walkers who wish to complete the entire trail. This could also be linked to charitable organisations who look for different challenge fundraising events (e.g. three peak challenge) as an alternative offer.

It should also be noted that this data correlates with where the majority of surveys were undertaken.

Exploring the Cheshire Sandstone Ridge

Locations visited or to be visited on the Cheshire Sandstone Ridge



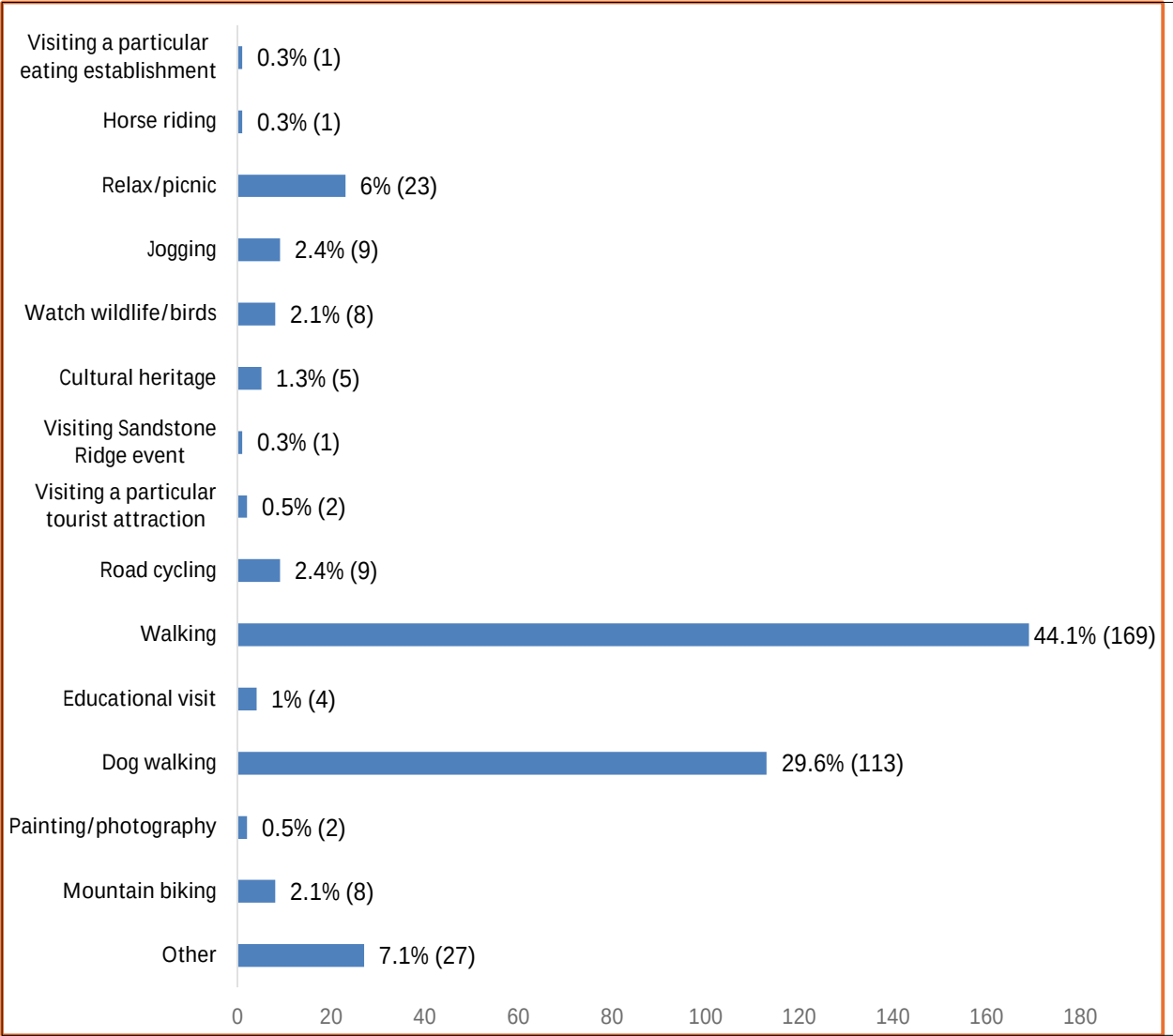
Visitors to the Cheshire Sandstone Ridge were asked to outline which parts of the Ridge they had visited in the past six months or potentially might visit in the next six months. The data show's locations across the Cheshire Sandstone Ridge which have been or will be visited, with locations such as Delamere Forest (17.9%), Beeston (11.4%), Bickerton Hill (10.9%), Burwardsley (9.7%), Frodsham Hill (8.6%), and Tarporley (7.6%), receiving the highest proportion of visitors. For those selecting 'other' (3.6%) the locations included Primrose Hill, Woodhouse Hill, Frodsham Marsh, Frodsham woods, Whitegate, and Wrenbury .

There were 1005 responses to this question as visitors were able to indicate multiple sites that they had visited or intended to visit. The percentages shown indicate the popularity of the multiple selections made by visitors, as well as the actual number of responses recorded for each location.

This data is very useful in highlighting the most visited sites across the Cheshire Sandstone Ridge, and therefore where any infrastructure projects, activities or events, and improvements could be prioritised. Whilst Delamere Forest and Beeston have invested in recent years into their infrastructure, other popular sites, such as Bickerton Hill, Frodsham Hill, and Burwardsley (among others), could benefit from additional infrastructure or investment, such as improved parking, repair of rural roads, or toilet provision.

Reasons for Visiting the Cheshire Sandstone Ridge

Reasons for visiting the Cheshire Sandstone Ridge



Visitors to the Cheshire Sandstone Ridge were asked to outline the reason(s) for visiting the Ridge. Overwhelmingly the reasons for visiting the Cheshire Sandstone Ridge were to walk (44.1% walking with family and friends) or for dog walking (29.6%).

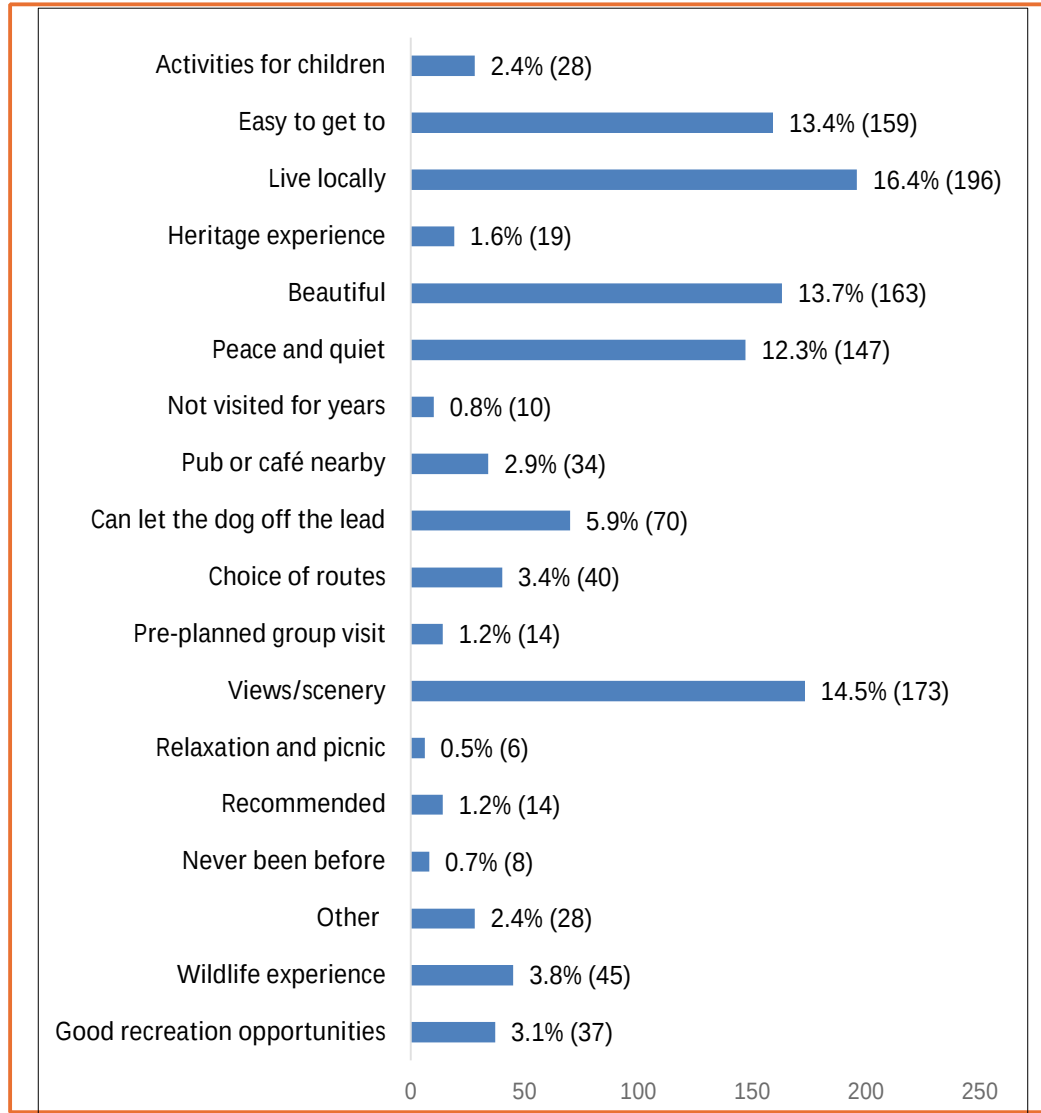
The visitors also outlined a wide array of recreational activities, including jogging (2.4%), cycling (2.4%) or mountain biking (2.1%), watching wildlife or birds (2.1%), or to relax/have a picnic (6%).

Of the 7.1% who noted 'other' reasons for visiting the Ridge, these included aiding mental health, volunteering, supporting activities such as Duke of Edinburgh expeditions, fitness groups, as well as to visit sites associated with family and friends who had passed away. The overall findings demonstrate the versatility of how and why people visit the Ridge.

There were 382 responses in total to this question as visitors were able to indicate multiple reasons for visiting that day.

Reasons for Visiting the Cheshire Sandstone Ridge

Reasons for visiting the Cheshire Sandstone Ridge rather than another area of countryside



Visitors were asked to indicate their reasons for visiting the Cheshire Sandstone Ridge rather than another area of countryside. Visitors could record multiple reasons for their visit, resulting in 1191 responses from the 328 interviews. The percentages shown indicate the popularity of the selections made by visitors, as well as the actual number of responses recorded for each option.

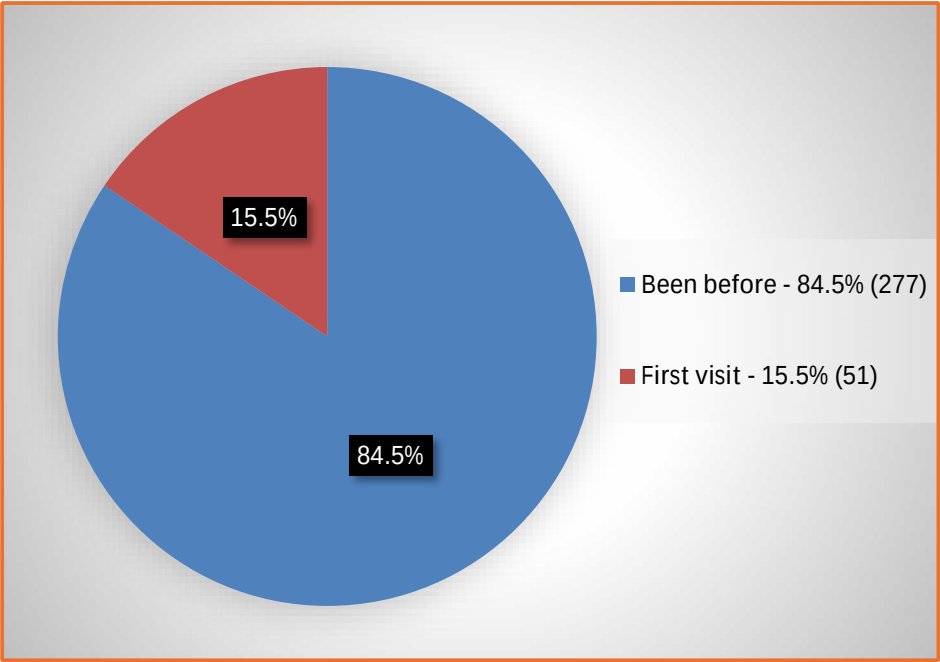
The main reasons that were expressed highlighted that visitors lived locally (16.4%) to the Cheshire Sandstone Ridge, that it was easy to get to and access (13.4%), and most importantly it was the landscape of the Ridge that attracted people to visit. For example, many of the visitors noted they visited the Ridge for its beauty (13.5%), its peace and quiet (12.3%), and its views and scenery (14.5%).

Other reasons noted for visiting the Ridge included the recreational opportunities (3.1%), activities for children (2.4%), the wildlife (3.8%), the choice of routes (3.4%), and from a dog walking perspective the ability to let the dog off the lead (5.9%).

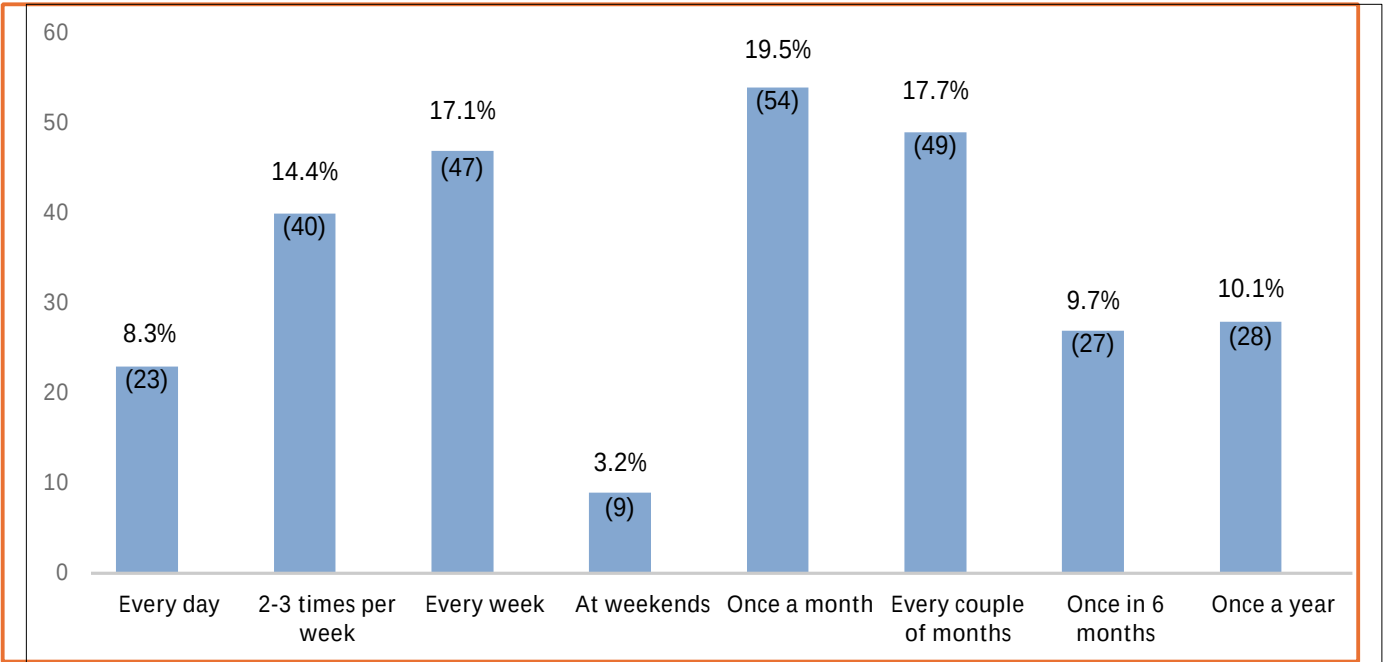
The data highlights that the ease of access and variety of activities offered on and across the Ridge, provide a very strong draw to potential visitors. This versatility should be reflected in future marketing campaigns for the Cheshire Sandstone Ridge, as well as in any future events or activities for specific parts of the Ridge.

Frequency of Visits to the Cheshire Sandstone Ridge

New or returning visitor



Frequency of visits to the Cheshire Sandstone Ridge



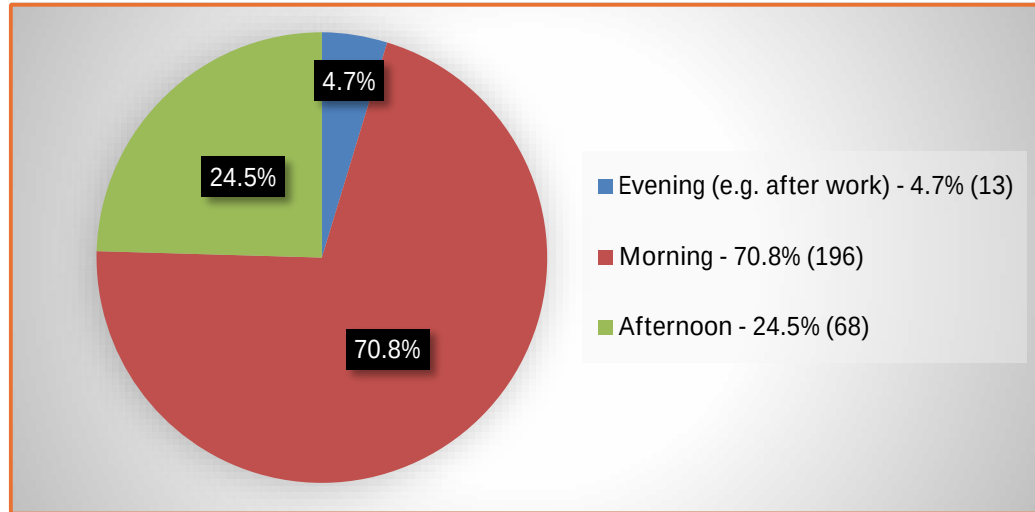
Visitors were asked to indicate if they have visited the Ridge before, and if they had, the frequency of visiting the Ridge. As outlined (above left) 84.5% of visitors had visited the Cheshire Sandstone Ridge, with only a small percentage of visitors (15.5%) indicating that this was their first visit to the Ridge.

Of the 277 who had visited previously they were asked the frequency of visiting the Cheshire Sandstone Ridge (above right). A small proportion of the visitors (8.3%) indicated that they visited the Ridge every day, and a further 31.5% outlined that they visited the Ridge at least once a week (17.1%), if not two to three times a week (14.4%). Of the remaining visitors 37.2% indicated that they visited at least once a month (19.5%), or once every couple of months (17.7%). Finally, nearly 20% indicated that they visited less frequently either once every six months (9.7%), or once per year (10.1%).

The overall findings demonstrate that 80% are visiting the Cheshire Sandstone Ridge on a regular basis of at least once every couple of months, if not more regularly. This data establishes the popularity of the Ridge as a place to visit, but as previously outlined certain sites are more popular than others (page 22). In order to maintain and protect the Ridge consideration for investment and infrastructure will need to focus on these popular areas, as well as marketing campaigns to highlight alternative sites to visit.

Dwell Time at the Cheshire Sandstone Ridge

Time of day preference for visiting the Cheshire Sandstone Ridge

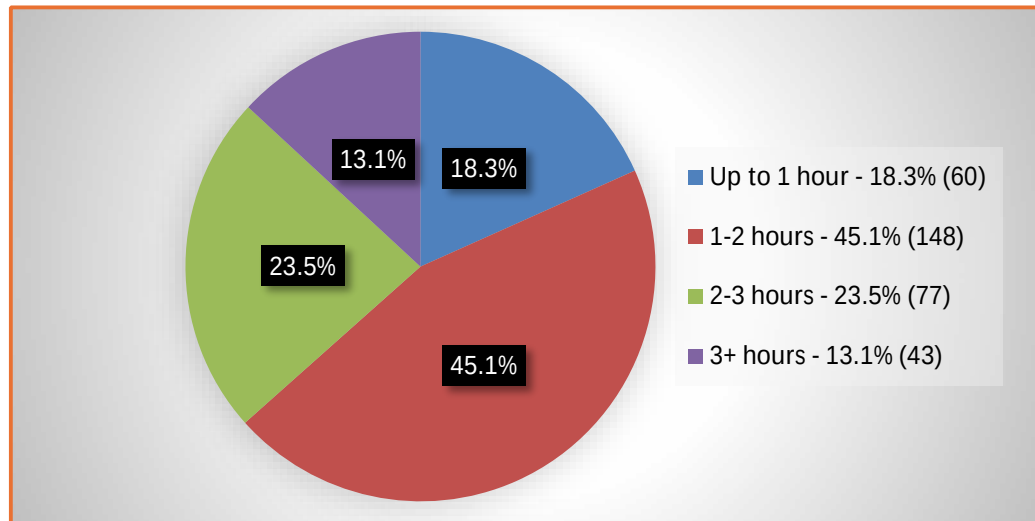


Visitors were asked to express their preference in terms of when they liked to visit the Cheshire Sandstone Ridge (top right). The visitors responded that they predominately preferred to visit in the morning (70.8%), with only 24.5% indicating that they prefer to visit in the afternoon, and 4.7% preferring an evening visit.

Furthermore, the visitors were asked how long they planned to visit the Ridge (bottom left). The majority (45.1%) indicated that they would spend between one and two hours at the Ridge, with a further 23.5% indicating they would spend between two and three hours at the Ridge.

This data is useful as it helps to indicate the overall dwell time on and across the Ridge which is between one and three hours in total. Given the previous data on the locations most visited across the Ridge (page 22), this will help to determine where additional infrastructure or resources may be needed to support the visitors and provide appropriate facilities for their visit, or where additional events or activities could be hosted.

Duration of visit to the Cheshire Sandstone Ridge

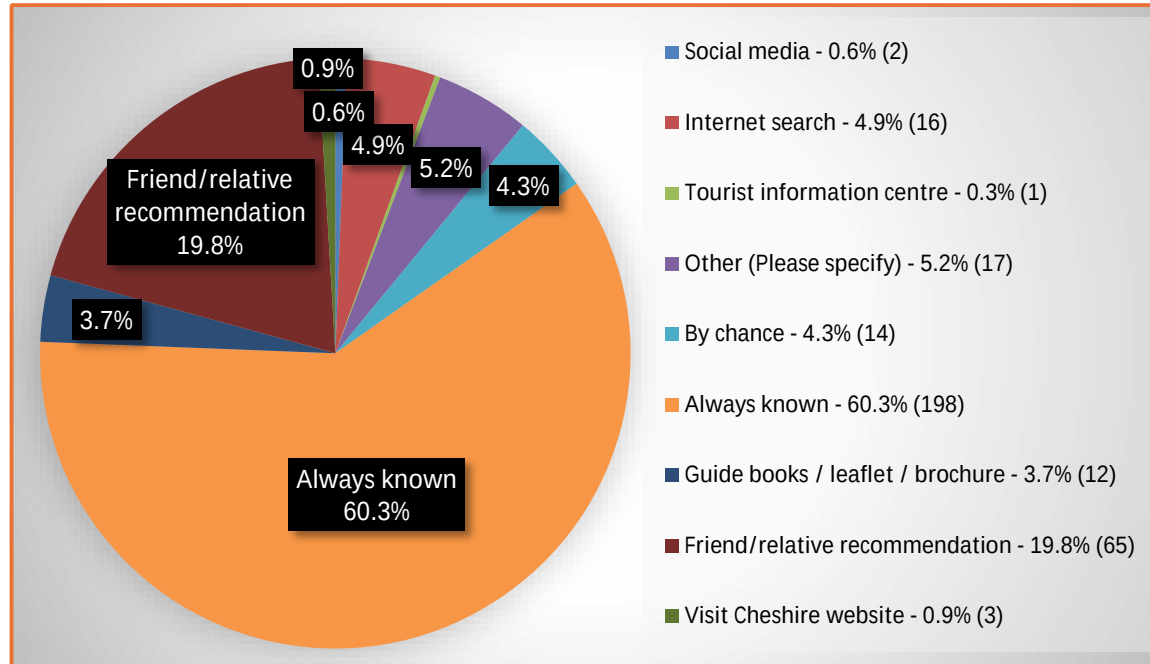


The overall visitor survey data highlights that the core of the visitors were groups or couples (97%+) (page 20), out for a short day visit of between 1 and 3 hours, with walking and dog walking given as the main reasons for visiting (page 23).

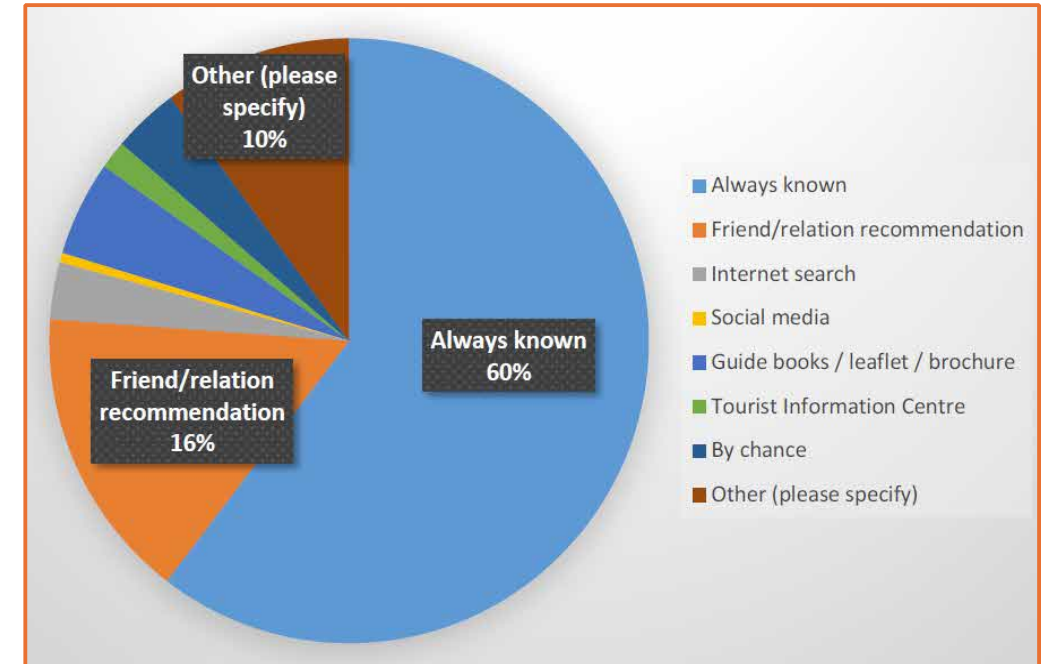
This is very similar to the 2017 survey, which showed that more than 70% of visitors were also groups or couples, coming out for short day visits (less than 3 hours), who were also predominately walking or dog walking as the main reasons for visiting (Sandstone Ridge, 2018).

Awareness of the Cheshire Sandstone Ridge

Awareness of the Cheshire Sandstone Ridge (2024)



Awareness of the Cheshire Sandstone Ridge (2017)



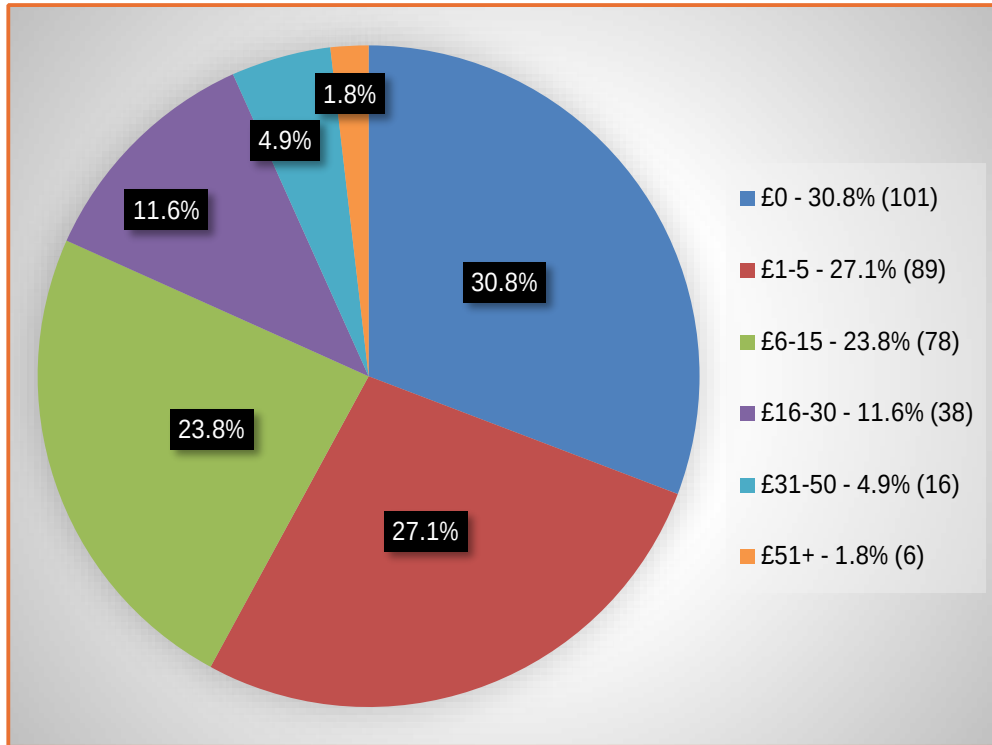
Visitors were asked to outline how they first found out about the Cheshire Sandstone Ridge (above left). This question was a repeat of the question asked in 2017 (above right) to again establish how and why visitors became aware of the Cheshire Sandstone Ridge, and therefore how the Sandstone Ridge Trust and stakeholders, can evolve their marketing.

What is interesting to note is that 60.3% of visitors commented that they had 'always known' which is nearly identical to the data emerging in 2017 where 60% of visitors commented that they had also 'always known' about the Cheshire Sandstone Ridge. Similarly, 19.8% of visitors in 2024 noted that a friend or relative had recommended visiting the Ridge, which is a slight increase on the 16% of visitors in 2017 being recommended to visit the Ridge by a friend or relative.

As per the 2017 findings the data again highlights that the low marketing visibility (internet searches, websites, leaflets, Tourist Information Centres, etc) continues to explain why the visitor profile is so local. The data can be used to develop new marketing campaigns to target more national visitors to the Ridge, as well as to review existing marketing collateral, particularly digital marketing promotions.

Visitor Spend at Cheshire Sandstone Ridge

Average visitor spend



Visitors were asked to comment on how much they had spent on their visit that day to the Ridge. 30.8% of visitors commented that they had spent nothing as part of their visit, whilst the majority of visitors (69.2%) had spent anywhere between £1 and +£51.

Overall, visitors spent between £6 and £30 (35.4%) and these results correlate to specific sites on the Ridge, such as Delamere Forest, and Beeston (Castle), where there are costs associated with the visit (such as car parking, food, and entry fees).

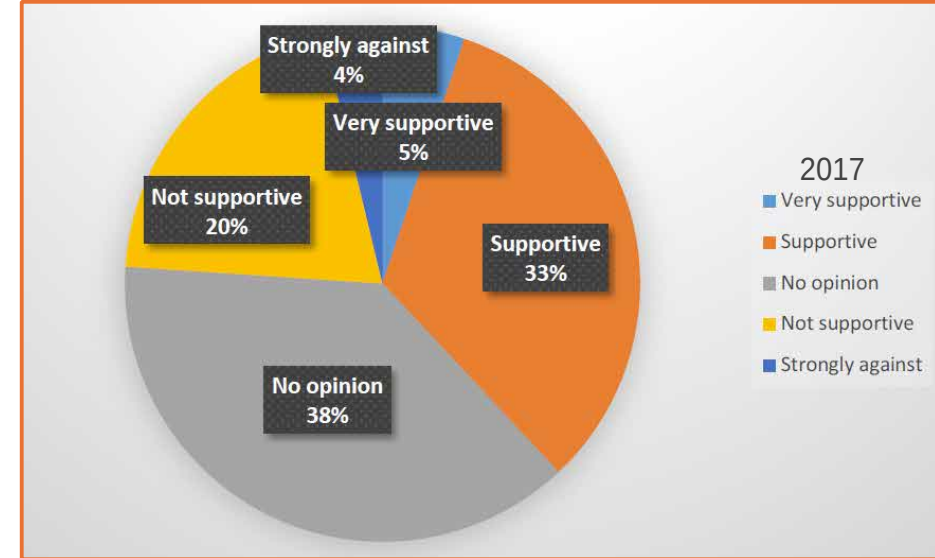
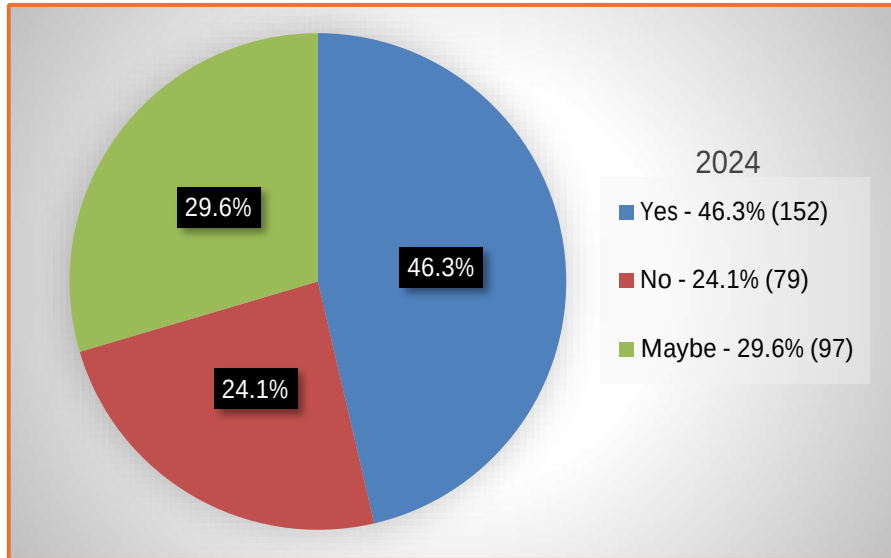
The data demonstrates that visitors are willing to spend as a part of the visit and that this will contribute to supporting the local economy across the Cheshire Sandstone Ridge.

Feedback received from visitors indicated that whilst they were willing to spend money on the visit there were some concerns at some of the parking costs at some sites, such as Delamere Forest, regarded by visitors as being very high. There is an opportunity for sites where there are associated costs (such as car parking), to highlight how the money is used to maintain the landscape and invest for future generations to enjoy.

As much of the Cheshire Sandstone Ridge is managed by a range of different organisations such as Forestry England, English Heritage, National Trust and the Cheshire Wildlife Trust, there is a need to market more clearly the work they undertake and the importance of the fundraising activities, for example parking and entrance fees, and how this money is used to maintain the Ridge.

Visitor Spend at Cheshire Sandstone Ridge

Visitors support for financial contribution to help fund the Cheshire Sandstone Ridge 2024 and 2017



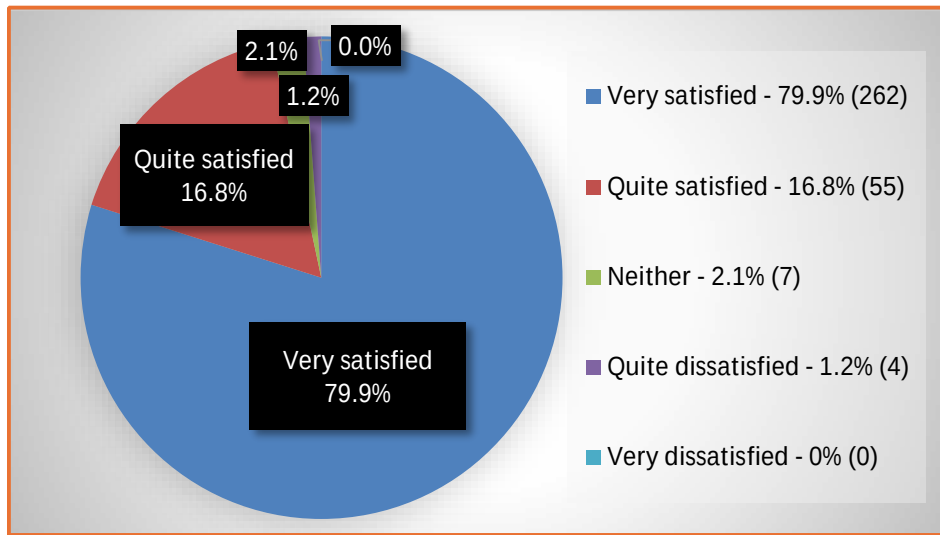
Visitors were asked to consider if they would support spending more as part of their visit, if the monies raised via parking, catering, events, activities (etc), were invested in maintaining the Cheshire Sandstone Ridge.

This question was similar in design to a question asked in 2017 to establish if visitors would be willing to financially support projects across the Ridge. The most recent 2024 results would suggest that visitors are more willing to support the Ridge financially, with 46.3% supporting spending more, compared to 38% in 2017. Similarly, 24.1% commented they would not be willing to spend more, which is near identical to the 24% in 2017, whilst 29.6% commented that they 'maybe' supportive, compared to 38% in 2017 who had no opinion (a slight difference in term but a useful insight nonetheless).

The 2017 survey report noted that “ *The need for new, and innovative, investment is a recurring observation, and a number of opportunities for income generation have been put forward. These include voluntary donations from visitors through automated contactless devices at countryside locations and attractions, a voluntary bed tax from those staying in hotels within the area, adopt a footpath schemes, a penny levy on each pint sold in the area, the sale of Sandstone Ridge merchandise, the introduction of car park charges, corporate partnerships, product sponsorship, and raising a parish council precept. Any incomes generated could be ring-fenced to a Sustainable Conservation Fund dedicated for conservation, access and educational projects on the Ridge*” (Sandstone Ridge, 2018, p. 36). Whilst car parking charges are in place in a few locations many of the suggestions made in 2017 have not yet been fully implemented and warrant being reviewed and, where appropriate, adopted.

Visitor Satisfaction

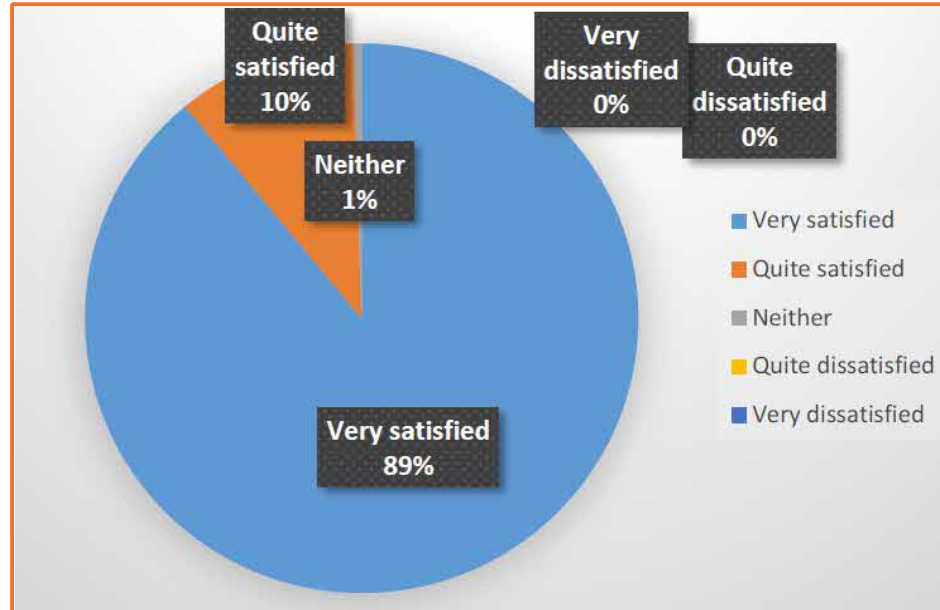
Visitor satisfaction 2024



Another really important question that was repeated in the 2024 survey was regarding visitor satisfaction. Visitors were asked to rate how satisfied they were with their visit that day.

The results (top left) were highly positive with 79.9% recording that they were 'very satisfied' and that 16.8% were 'quite satisfied'. Only a small proportion, 1.2%, indicated that they were 'quite dissatisfied' with their visit that day, with 2.1% responding 'neither'. No responses were recorded for 'very dissatisfied'.

Visitor satisfaction 2017

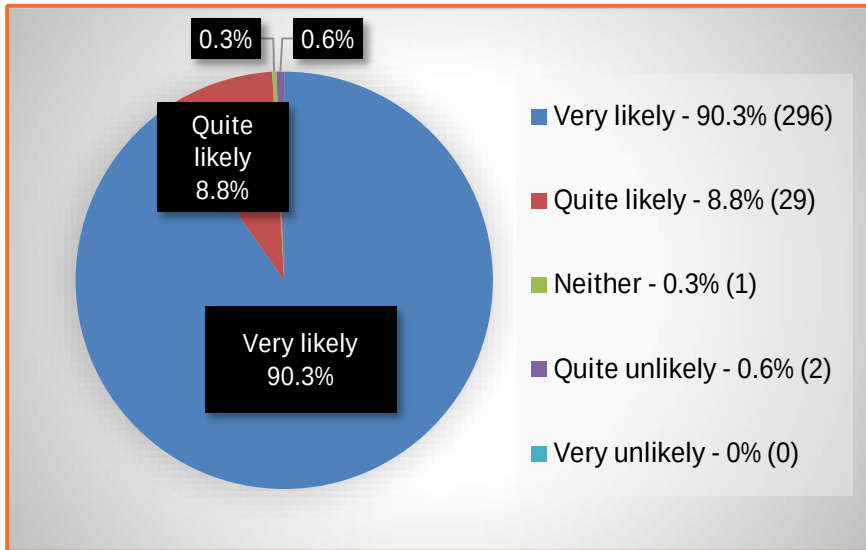


The 2024 survey results are in keeping with the 2017 survey findings and results (bottom left), whereby 89% for visitors were 'very satisfied' and 10% were 'quite satisfied'. The only difference noted in the 2024 findings was the small number (4 visitors or 1.2%) being quite dissatisfied with the visit.

This demonstrates overwhelmingly that the experience of visiting the Cheshire Sandstone Ridge is a popular and satisfying experience.

Visitor Satisfaction

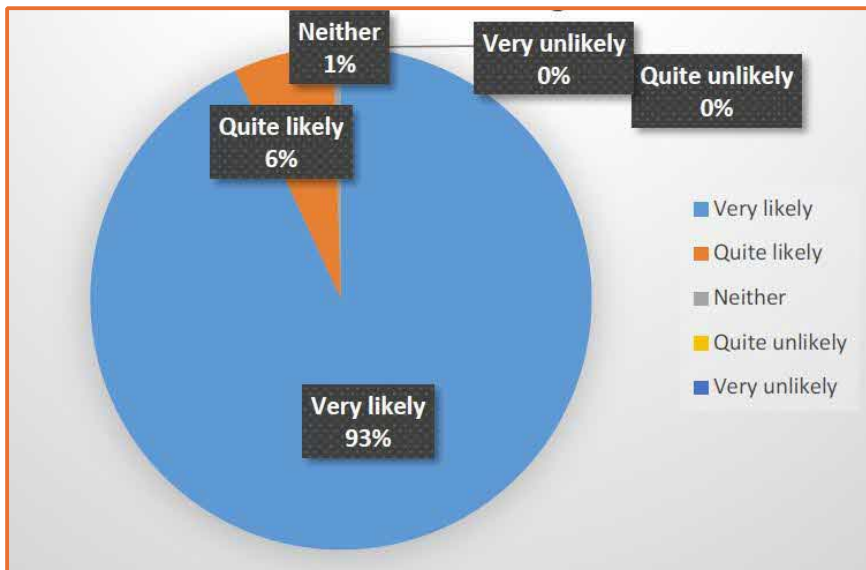
Likelihood for return visit 2024



In keeping with the visitor satisfaction questions, visitors were asked how likely they would be to return to the Cheshire Sandstone Ridge (top left). As with the highly positive satisfaction ratings, this correlates with the likelihood of repeat visits to the Ridge, with 90.3% 'very likely' to return, 8.8% 'quite likely' to return, and only 0.6% 'quite unlikely' to return.

The 2024 survey results are again very much in keeping with the 2017 survey findings and results (bottom left), whereby 93% of visitors were 'very likely' and 6% were 'quite likely' to return. The only difference noted in the 2024 findings was the small number (2 visitors or 0.6%) being unlikely to return, and these negative responses link directly to those who were dissatisfied with their visit (page 30).

Likelihood for return visit 2017

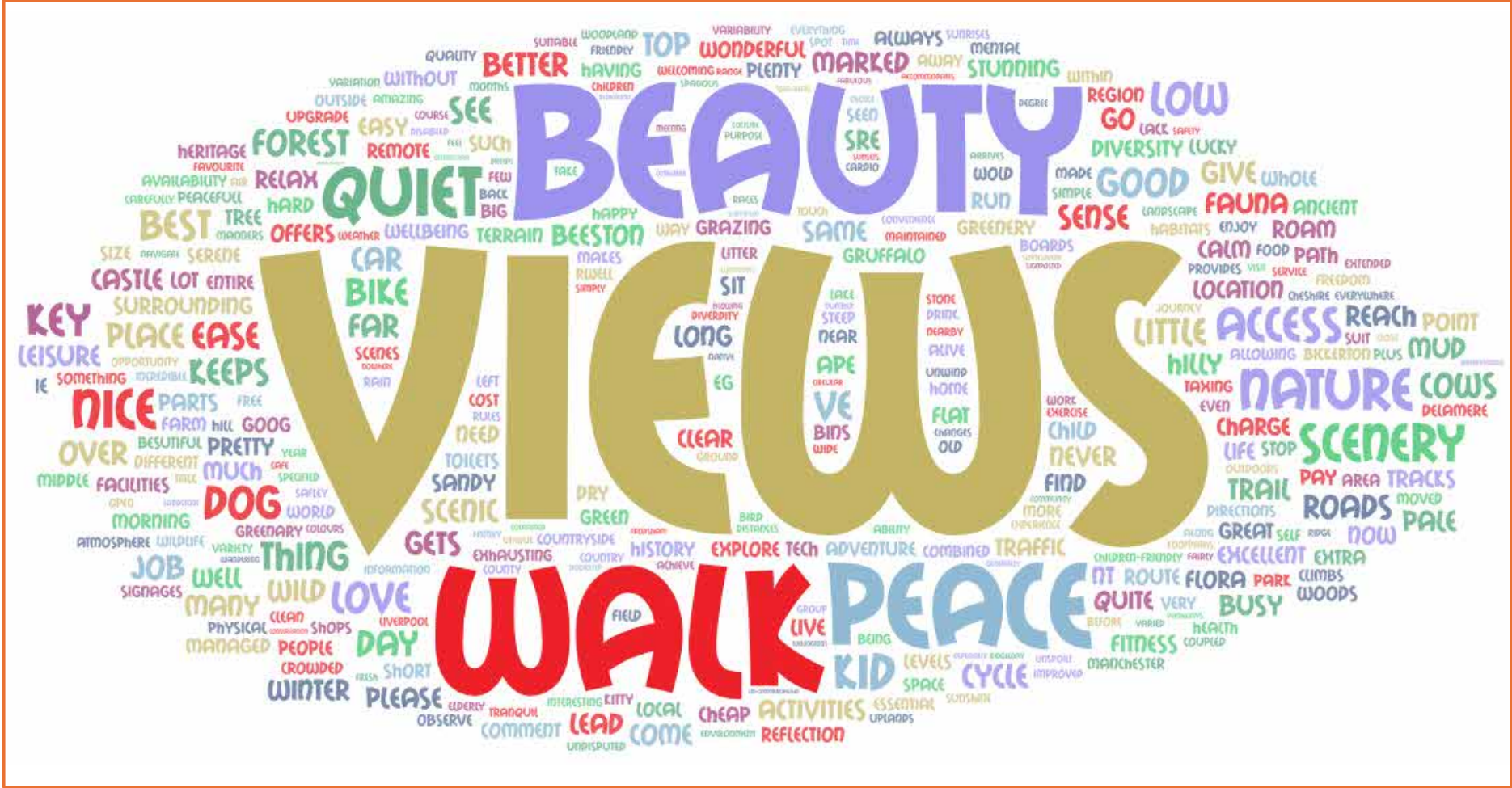


The findings demonstrate the appeal and quality of the visitor experience across the Cheshire Sandstone Ridge and that the vast majority of visitors will undertake repeat visits. This is supported by the previous data which demonstrated that 80% of visitors are visiting the Cheshire Sandstone Ridge on a regular basis of at least once every couple of months, if not more regularly (page 25). Therefore, any infrastructure projects or spend would be a beneficial investment due to the volume of visitors and regular visits to the Ridge.

Visitor Satisfaction

Visitors were asked to comment on what they felt the best thing about the Cheshire Sandstone Ridge was. The themes emerging highlighted the views, peace, tranquillity, beauty, and scenery, as well as the diversity of nature on offer, and the variety of activities available.

The word cloud to the right illustrates these findings.



Visitor Satisfaction

Below are selection of some of the comments received from visitors concerning the best thing about their visit to the Cheshire Sandstone Ridge:

“The beautiful views, the wandering cows and the undisputed peace”

“The views in all directions are simply stunning and the sunrises and sunsets breath-taking”

“Accessible walking and peaceful”

“Views, scenery, well marked trails”

“Accessible and beautiful”

“The beauty - views, peaceful, suitable for dogs, good for walking, the diversity of nature and terrain”

“A peaceful place which is different every day, I never walk the same route or see the same thing”

“Size and variety - accommodates lots of different activities”

“It has some of the best views in the country”

Visitor Satisfaction

Visitors were asked to comment on any aspect about the Cheshire Sandstone Ridge that they ***did not like***. The themes emerging highlighted some tensions across how the Ridge is used, with dogs, dog waste, parking, costs, and litter, being raised as key issues.

The word cloud to the right illustrates these findings.



Visitor Satisfaction

Below is a selection of some of the comments received by visitors about anything visitors did not like concerning the Cheshire Sandstone Ridge:

“Don't charge for parking. Everywhere is charging extra for everything.... It's exhausting... Please give us something free to do!”

“Lack of public transport”

“Out of control dogs off leads. No recall. Even when it is nesting time for ground birds”

“Sections of the path need better maintenance”

“Disruption caused by parkruns”

“The entitled people who let their dogs off the lead during the nesting period, the lack of total recall many have over their dogs and the amount of poo which is not picked up!”

“No dog poo bins so people leave bags hanging on trees, or don't pick it up”

“Needs better signposts”

“Too many people on some days”

Improving the Visit

The final question that visitors were asked concerned how the visitor experience could be improved and made more enjoyable. Visitors could select multiple responses to this question, as well as provide some text (for other) to provide additional information. In total 523 responses were recorded, with a range of suggestions captured.

As highlighted previously, dog waste bins were identified as the highest priority that visitors raised (26.4%), which was also reflected throughout the ‘other’ text responses recorded (17.8%).

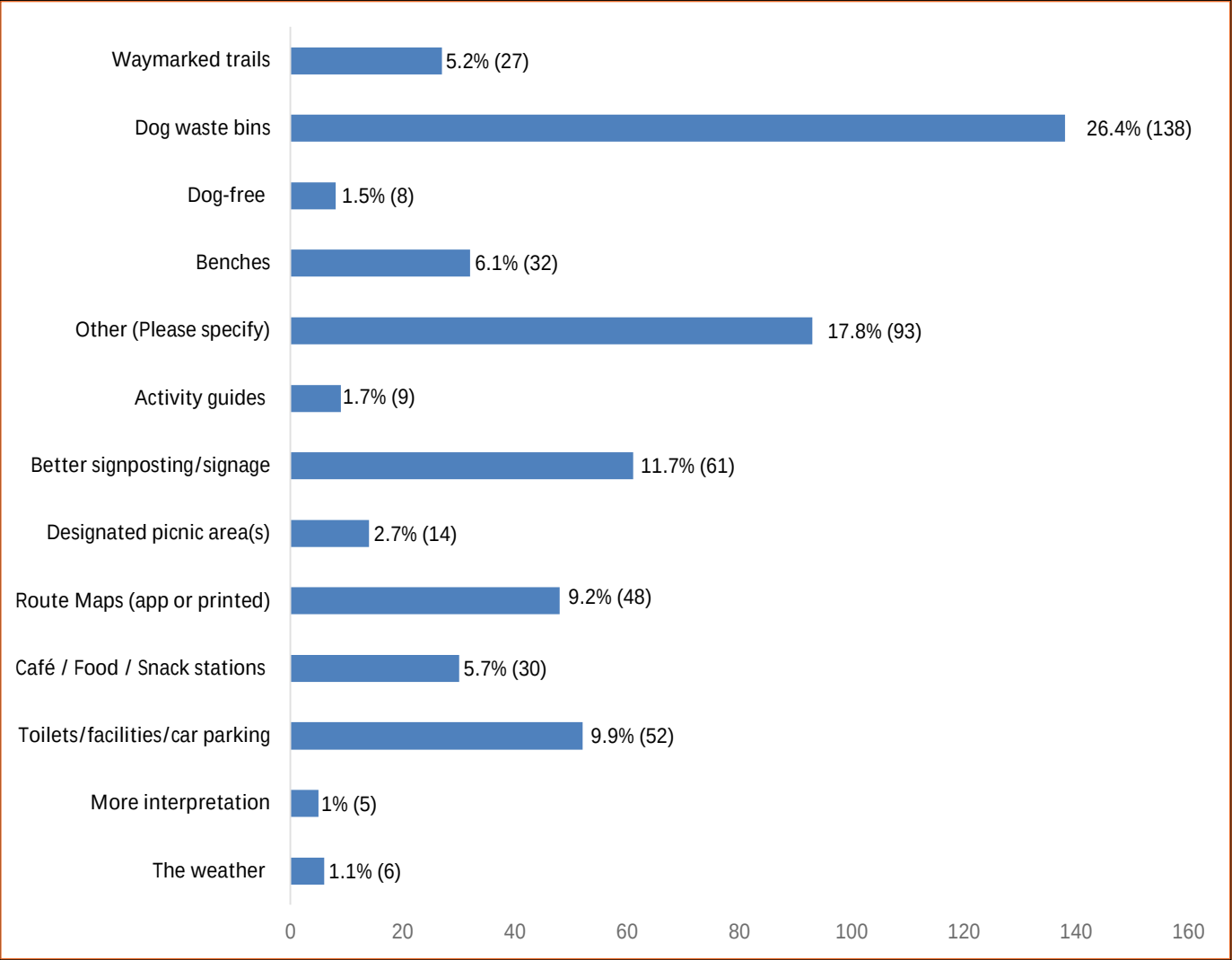
Other priorities for improving the visit included better signage (11.7%), clear waymarked trails (5.2%) and route maps (9.2%). Visitors also noted that better facilities were also required, such as toilets and better parking (9.9%), and more benches (6.1%).

The ‘other’ priorities (17.8%) also included improved path maintenance, better access and accessibility, and the reopening of some paths.

The 2024 survey results are very similar to the 2017 findings, where signage, access, path maintenance, and dog waste bins were also key priorities.

The findings continue to demonstrates the importance of investing in the infrastructure (new and existing) across the Cheshire Sandstone Ridge, in order to enhance the overall visitor experience.

Improving the visitor experience



Part 2 – Online Survey

Online Visitor Survey

To help generate additional data and insights, an online visitor survey was also conducted between July and October 2024. The questions were in keeping with the on-site visitor survey with some subtle additions to capture any barriers to visiting the Ridge, and the responses were also captured on the Jisc Online Survey application.

In order to promote the online visitor survey, the North Cheshire Community Rail team collaborated with the project and helped fund the distribution of a survey leaflet to approximately 100,000 homes within the Cheshire region. The locations targeted included Runcorn, Ellesmere Port, Northwich, Nantwich, and Whitchurch.

The online visitor survey was further supported via several stakeholders, such as Marketing Cheshire, who promoted the survey as a part of their regular direct email marketing campaigns.

The advantages of incorporating this additional online survey into the research strategy included:

- Gathering insights and data from a larger population area
- Reducing unconscious bias and providing increasing objectivity in responses
- Building a stronger understanding of the awareness of the Cheshire Sandstone Ridge
- Identifying insights that aid future strategies for marketing the Ridge
- Speed and cost effectiveness in undertaking this as an automated process
- Providing an opportunity to engage with key stakeholders to promote the survey

There were also some disadvantages which included:

- Response rates of online surveys are generally low
- Challenges in the promotion and engagement with the online survey
- Potential for some questions or surveys to not be fully completed

In total 546 responses were recorded, and whilst lower than anticipated, this response rate still provides an additional data set which will aid the Sandstone Ridge Trust and stakeholders in future projects, infrastructure, events and activities, and marketing campaigns.

Visitor Demographics

In keeping with the on-site visitor survey, the online visitor survey also captured a range of demographic data to help provide additional information on who was visiting the Ridge, and how this data might be used to inform future decisions on projects, infrastructure, and marketing campaigns.

The findings are similar for many of the demographic data points for both the online and on-site visitor surveys. The gender profile (below centre) of the online respondents is nearly identical to the on-site responses with 50.1% female and 48.2% male, with one respondent indicating ‘other’, and 1.5% opting that they ‘prefer not to say’.

The age profile (below left) of online respondents visiting the Cheshire Sandstone Ridge varied, with the majority of respondents being 51 years of age or older (77.1%), compared to the 60.1% surveyed on-site who were aged between 41 to 60 years of age. The highest proportion of respondents were aged 61 to 70 (31%), whilst those aged between 51 and 60 years old being the second highest (23.4%), with those aged 71+ (22.7%) being the third highest, and those aged between 41 to 50 years being the fourth highest (12.1%).

Furthermore, according to the data, only 4.4% of visitors were aged between 18 and 32 which is significantly lower than the 14.9% on-site survey but again reinforcing a potential gap in attracting a younger audience to the Ridge.

The variations in this data captured is most likely attributed to a disproportionate number of older and retired visitors being more willing to complete the online survey.

The ethnicity profile (below right) of the online respondents was very similar to the on-site responses, indicating that 96.9% identified as being white (compared to 95.8% on-site), with 1.1% belonging to a different ethnic group (compared to 2.4% on-site), with a final 2% not wishing to provide a response to this question (similar to the 1.8% on-site). This data is again in keeping with Cheshire Census Data where the average is 94.5% white (Varbes , 2024a) and highlighting an opportunity to potentially develop marketing campaigns to attract more diverse visitors.

Age Range	Response
18-24	1.3% (7)
25-32	3.1% (17)
33-40	6.4% (35)
41-50	12.1% (66)
51-60	23.4% (128)
61-70	31% (169)
71+	22.7% (124)

Gender	Response
Male	48.2% (263)
Female	50.1% (274)
Other	0.2% (1)
Prefer not to say	1.5% (8)

Ethnic Group	Response
White	96.9%(529)
Asian or Asian British	0.5% (3)
Black, Black British, Caribbean or African	0.2% (1)
Mixed or multiple ethnic groups	0.4% (2)
Other ethnic groups	0% (0)
Prefer not to say	2% (11)

Visitor Demographics

Aligned to the age profile of the online respondents, the employment status (below left) highlighted that only 31.5% of visitors were working full-time (compared to 50% on-site), and that 47.8% were retired (compared to 25.6%). For those working part time the data was relatively similar with 13.4% of online respondents noting that they worked part time (compared to 16.5%).

Of the remaining online visitor respondents, 3.8% outlined that they were self employed (compared to 4.9%). The unemployed 0.9% (compared to 0.6%), the student status 1.5% (compared to 1.2%), and those not working due to illness/disability 1.1% (compared to 1.2%) were very similar in profile to those surveyed on-site.

The profile of online respondents highlighted that 85.4% do not have any restrictive illness or condition (below right) which is similar to the 88% on-site, but that 14.8% of respondents do have a restrictive illness or condition, with a small number identify as having more than one long term condition (a theme that also emerged in the on-site data). Of those with a restrictive illness or condition, 7% identified mobility issues (compared to 5.4%), which is also highlighted within the 'other' category with 3.2% of respondents noting "recovering from surgery" or "fatigue" as examples of the underlying health conditions.

The main long-term condition noted was that of 'hearing' with 12.3% of online respondents recording this, which is significantly higher than the 0.6% from the on-site survey, but this is possibly linked to the older demographic of the online survey respondents. Conditions such as vision 0.7% (compared to 0.9%), and mental health 1.4% (compared to 1.2%) were very similar to the on-site data.

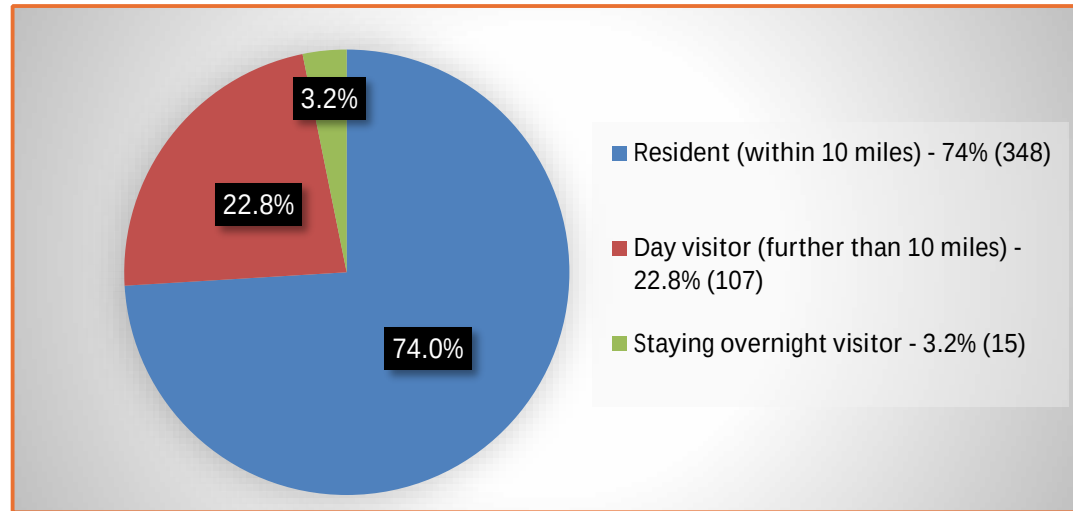
The data emerging from both the online and on-site surveys is still lower than the national average where 17.7% of the population have a disability that limits their ability to undertake some day-to-day activities (such as visiting destinations) (ONS, 2023). The overall data from both surveys is valuable as it indicates that regionally and nationally health considerations need to be factored into visiting destinations, and whilst the rural nature of the Ridge is a key part of its appeal, ensuring that parts of the Ridge are accessible will be important in attracting a more diverse array of visitors.

Employment status	Response
Working full time	31.5% (172)
Working part time	13.4% (73)
Unemployed	0.9% (5)
Retired	47.8% (261)
Student	1.5% (8)
Not normally working due to illness or disability	1.1% (6)
Self employed	3.8% (21)

Conditions or illness	Response
I do not have any restrictive illnesses or conditions	85.4% (472)
Vision (for example, blindness or partial sight)	0.7% (4)
Hearing (for example, deafness or partial hearing)	2.3% (13)
Mobility (for example, walking short distances or climbing stairs)	7% (39)
Mental health	1.4% (8)
Other	3.2% (18)

Home Location of Visitors

Proximity of visitors to the Cheshire Sandstone Ridge

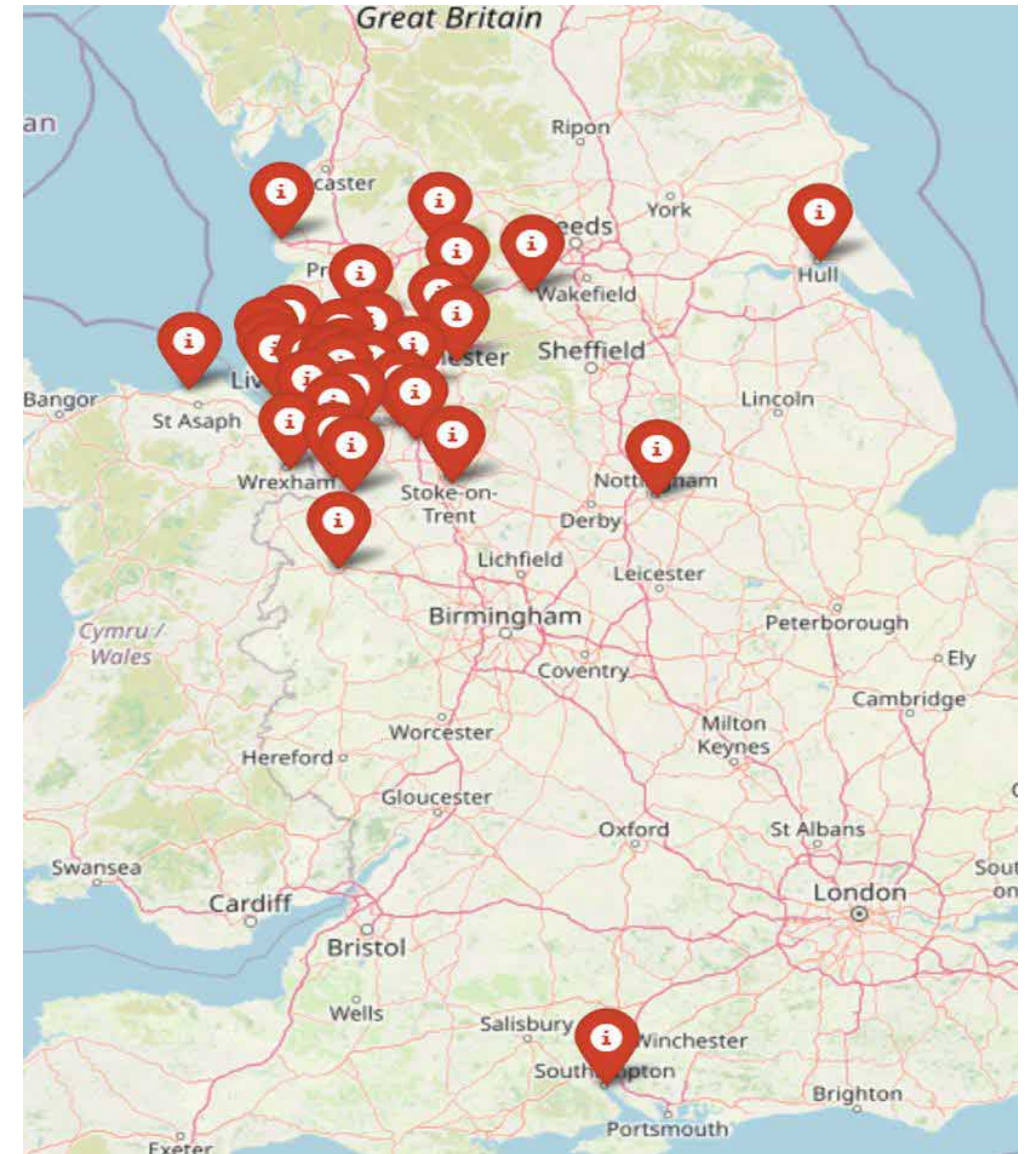


The data from the responses received, outlined that the overwhelming majority of visitors surveyed online (74%) lived close to the Cheshire Sandstone Ridge ('Resident' within 10 miles) compared to 53.4% who were surveyed on-site. The difference can most likely be attributed to the online visitor survey marketing campaign that specifically targeted people living in towns and villages across Cheshire, resulting in a natural bias in this data.

From a 'Day visitor' perspective, however, there is some useful data emerging, with 22.8% of visitors coming from various parts of the UK (as outlined in the map to the right). This helps to again demonstrate that the Cheshire Sandstone Ridge attracts visitors from across the UK and has a growing national appeal as a destination.

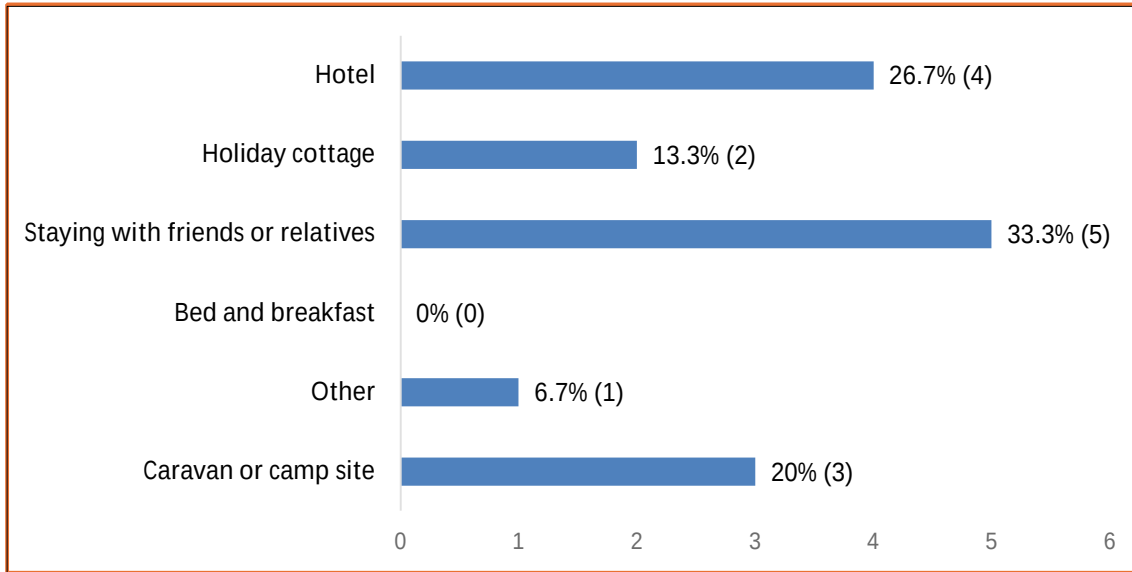
Whilst only a small number of these visitors (3.2%) stayed overnight there are again some useful insights emerging on where they opt to stay and the duration of their visit.

Map showing the home location of visitors

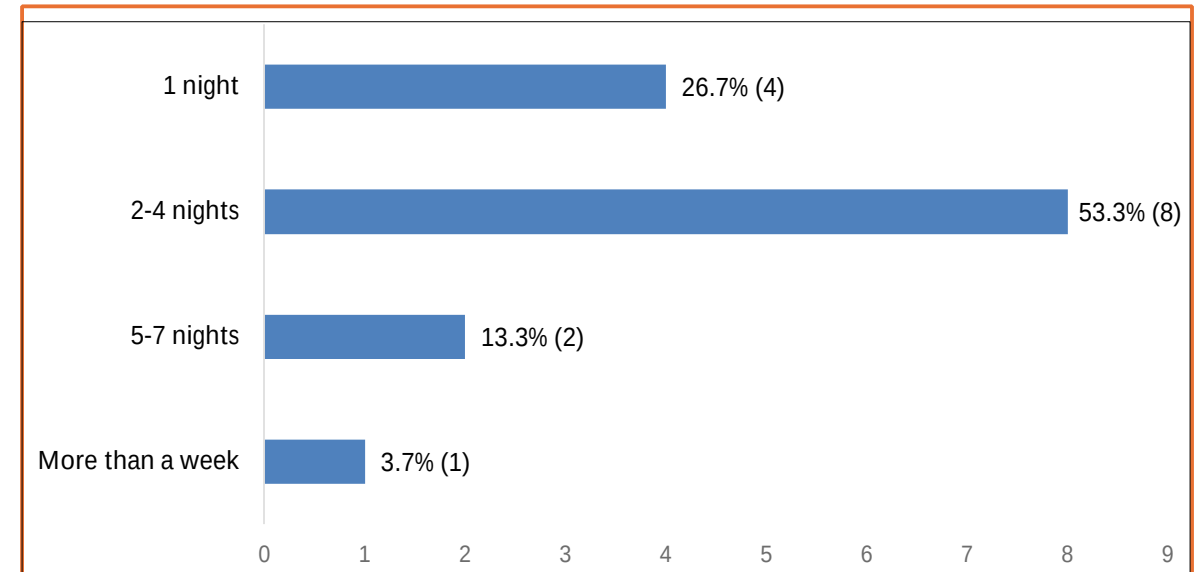


Overnight Visitors

Accommodation of overnight visitors to the Cheshire Sandstone Ridge



Duration of visit



The 3.2% of visitors who indicated that they were an 'overnight visitor' (page 41) were also asked supplementary questions to help provide further insights into visitor behaviours and motivations. The visitor data emerging on where people were staying (above left), as with the on-site visitor survey (page 17), demonstrated that opting to stay with friends or relatives (33.3%) was the most popular option (compared to 48% on-site). The remaining 66.7% outlined that they were staying in a range of local accommodation, such as hotels, holiday cottages, camp sites, and service apartments.

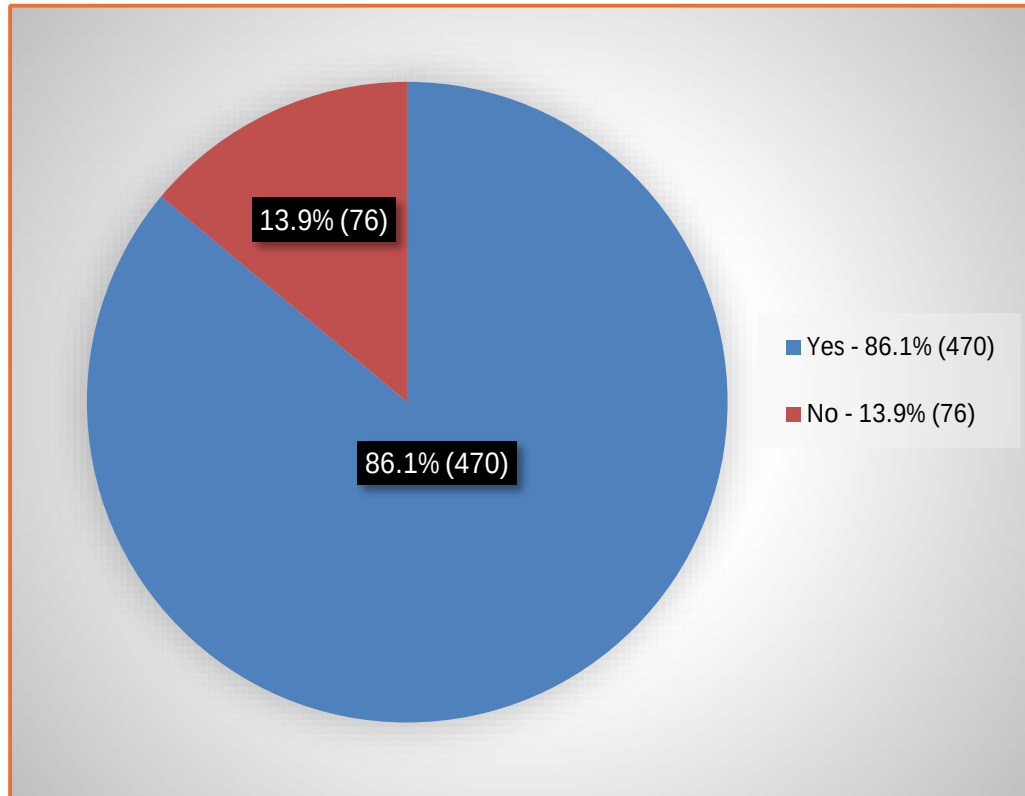
Similar findings also emerged concerning the length of stay (above right), with 70.3% (compared to 87% on-site) of the online visitors surveyed stating that were staying for multiple nights, with the majority again staying for between two and four nights (53.3%, compared to 56.6% on-site).

This overall distribution reflects diverse visitor preferences, with a notable reliance on personal networks for accommodation.

A data point of note is that in both the online and on-site surveys, no respondents were recorded as staying in a Bed and Breakfast (B&B) and given the variety of high-quality B&Bs available across Cheshire there is potentially some marketing opportunities to promote these options. Similarly, in the 'other' option, Airbnb was also conspicuous by its absence (although it is recognised that this is a small data set).

Visiting the Cheshire Sandstone Ridge

Have you visited the Cheshire Sandstone Ridge previously



A key question that was incorporated into the online visitor survey was to assess if visitors had visited the Cheshire Sandstone Ridge previously, and for those who had not, they were directed to a final alternative question to ascertain the potential reasons for this or barriers which existed to visiting the Ridge.

As the findings demonstrate, a significant majority of respondents (86.1%) had visited the Ridge before. This data was very similar to the 84% of on-site visitors who had visited the Cheshire Sandstone Ridge previously (page 25), indicating a high proportion of regular visitors.

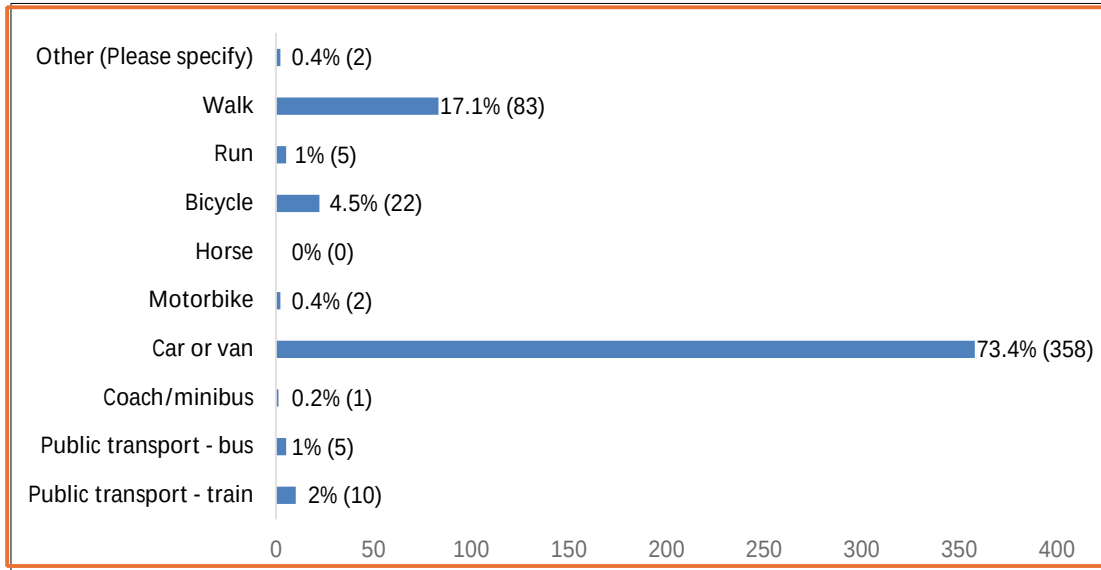
The remaining 13.9%, however, outlined that they had never visited the Ridge before, and given the high volume of online surveys completed from across Cheshire and the local regions, there is a potentially untapped visitor market.

This suggests potential opportunities for destination marketing strategies aimed at enhancing visitor retention and encouraging new and repeat visits.

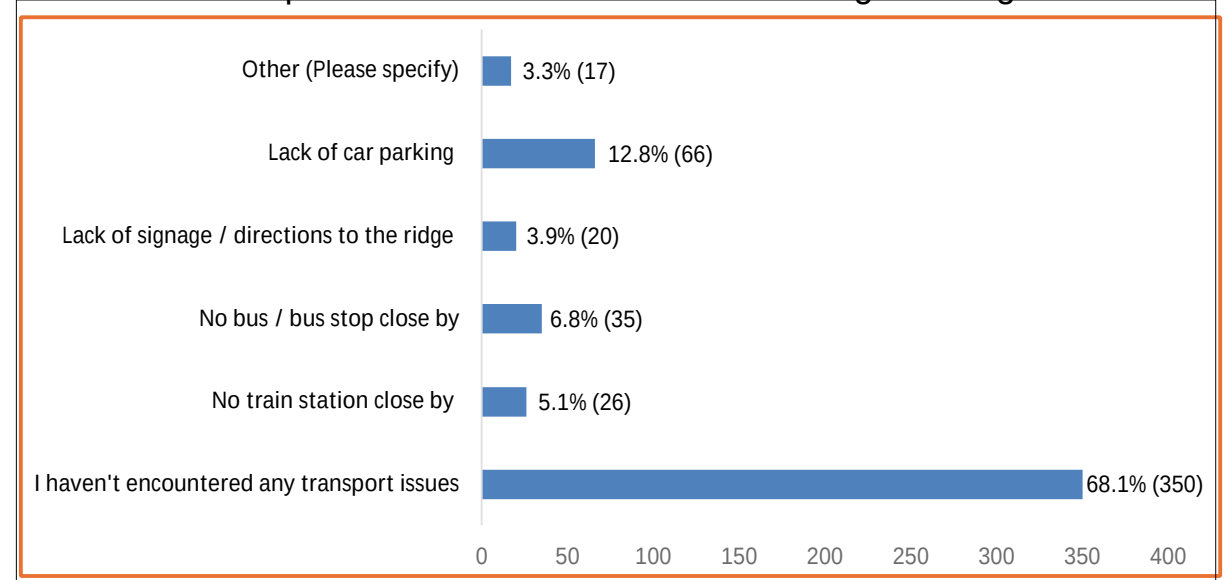
The following data (pages 44 to 58) does not include those who have never visited the Ridge before, as they were asked an alternative question to examine the reasons as to why they have never visited the Ridge (page 59). Therefore, the following sections will examine the responses from the 470 visitors who had previously visited the Ridge.

Travel to and from the Cheshire Sandstone Ridge

Transport used to access the Ridge



Transport issues encountered in accessing the Ridge



For those visitors who have been to the Cheshire Sandstone Ridge before, the data showed that the overwhelming majority (74%) used a motor vehicle (car, motorbike, or coach/minibus) as their mode of transport to access the Ridge (compared to 88.4% of those surveyed on-site) .

Of the remaining visitors, a surprisingly large proportion outlined that they walked (17.1%, compared to 5.4% of those surveyed on-site), ran (1%, which is similar to the 1.2% recorded on-site), or cycled (4.5%, compared to 1.8% of those surveyed on-site), but this data aligns with the majority of these visitors living within close proximity of the Ridge (less than 10 miles).

Only 3% of visitors outlined that they accessed the Ridge via public transport (train or bus) again demonstrating a potential lack of accessible public transport links across many aspects of the Ridge. This is further supported by 11.9% of visitors noting that the lack of a train or bus stop was a transport barrier that they had encountered in accessing the Ridge (compared to only 1.2% of those surveyed on-site). Similarly, a small number of visitors (3.3%) that noted 'other' also highlighted a lack of trains, poor train timetables, or limited bus routes as examples of transport barriers encountered.

Whilst the majority of visitors encountered no transport issues accessing the Ridge (68.1%, compared to 86.4% on-site), the barriers encountered included a lack of car parking (12.8%), lack of signage (3.9%), and concerns of the quality of some of the rural roads (other 3.3%).

It should be noted that a small proportion selected more than one response to this question, for example using public transport and walking, or more than one transport issue encountered, resulting in more than 470 responses being recorded for both questions.

Travel to and from the Cheshire Sandstone Ridge

In keeping with the on-site survey, the online visitor survey also asked their perspective about a 'Ridge bus' that would provide a hop on/hop off service to enable visitors to access different parts of the Ridge, as well as local transport links, such as train stations and/or bus stops.

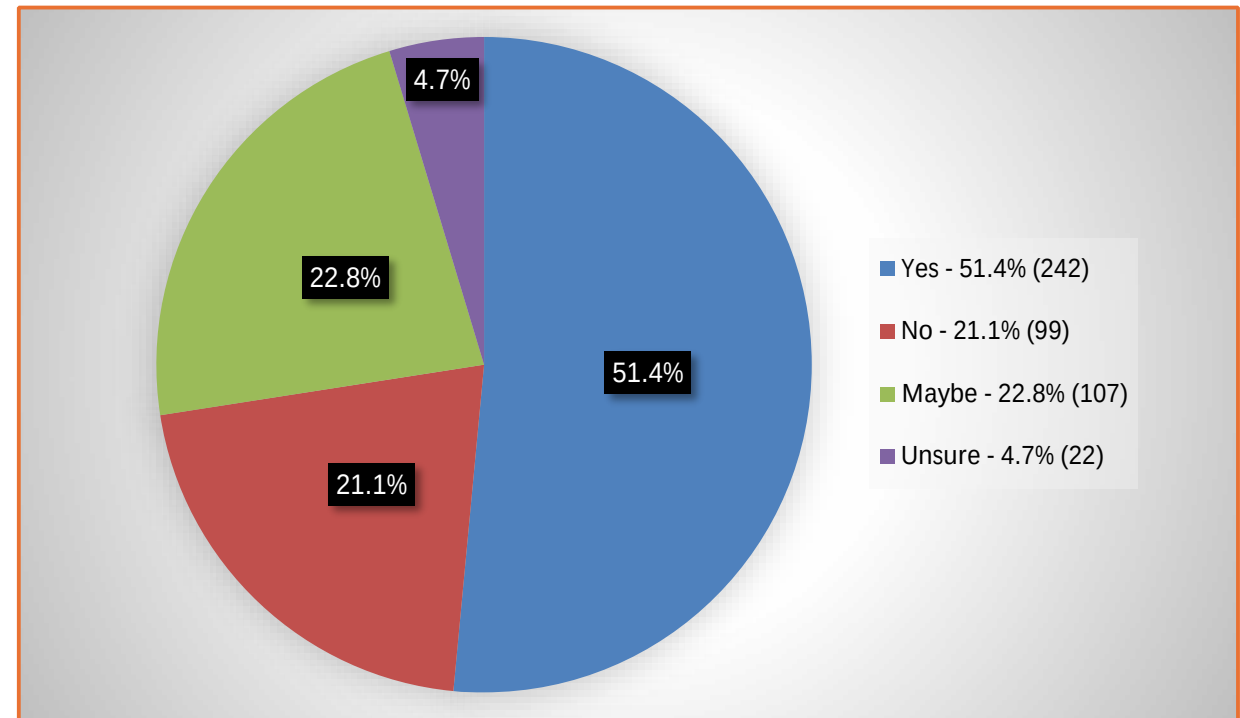
A larger majority supported the concept (51.4%, compared to only 37.2% on-site), with an additional 22.8% (similar to the 20.7% on-site) who may support such a service, and 4.7% unsure (similar to the 6.1% on-site).

In contrast to the on-site survey, the online data revealed that only 21.1% of visitors did not support such a service (compared to 36% on-site).

Given some of the barriers and issues raised within both the on-site and online survey, such as a lack of public services, the high cost of parking or limited parking, this warrants potential further investigation to capture why visitors would oppose such a service or how such a service could be made more appealing, such as a seasonal service.

Furthermore, as outlined previously (page 19), given the overall data captures, there is a potential opportunity to explore the feasibility of a seasonal Ridge bus service to increase accessibility to parts of the Ridge and to encourage more sustainable transport methods.

'Ridge bus' (hop on/hop off) service for visitors



Exploring the Cheshire Sandstone Ridge

Through the online survey, visitors to the Cheshire Sandstone Ridge where also asked to outline which parts of the Ridge they had visited in the past six months or potentially would visit in the next six months.

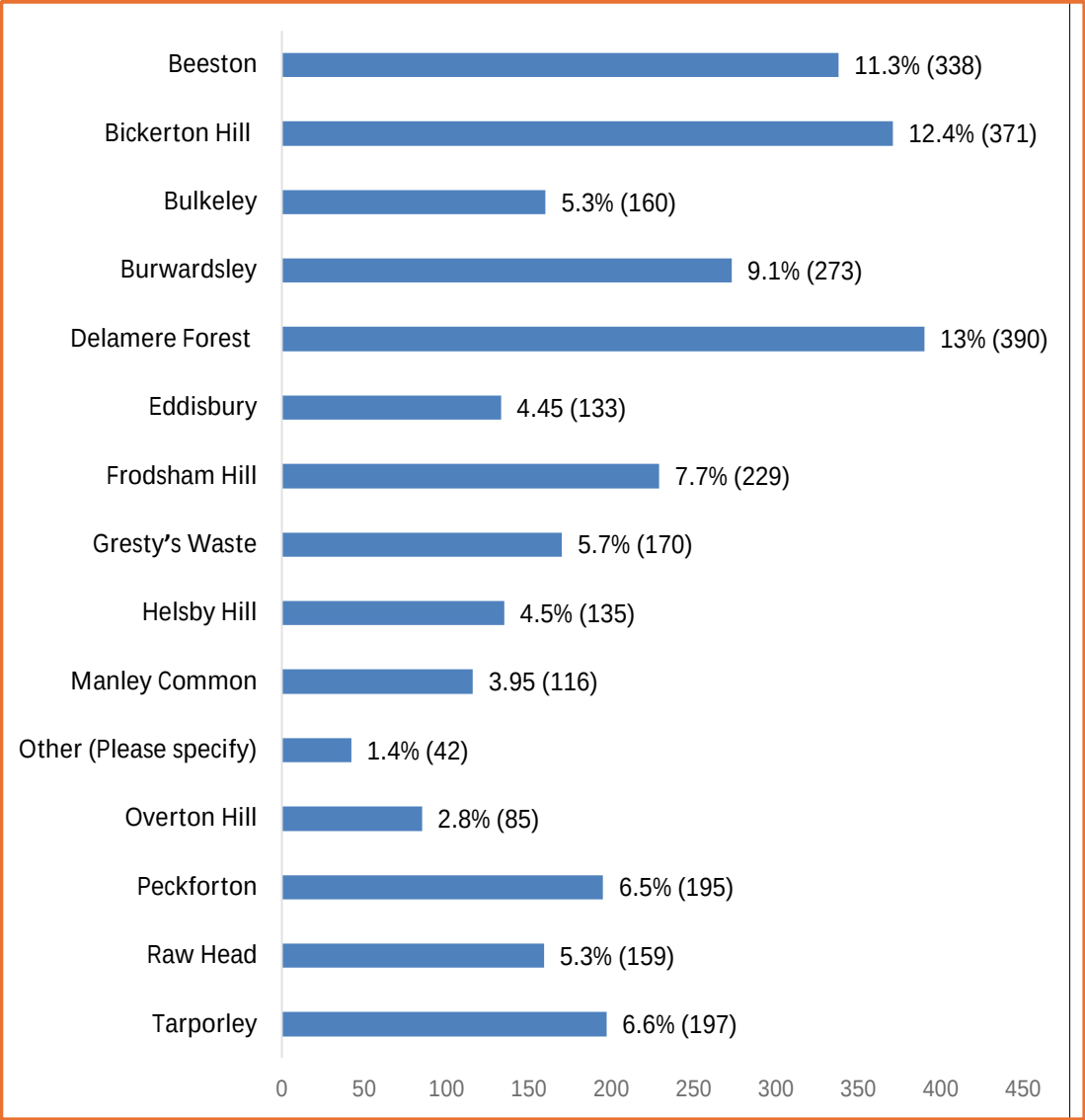
As with the on-site survey (page 22) the data again highlights that all locations across the Cheshire Sandstone Ridge have been or will be visited. The findings were also very similar to the on-site results, with locations such as Delamere Forest (13% compared to 17.9% on-site), Bickerton Hill (12.4% compared to 10.9%), Beeston (11.3% which is nearly identical to the 11.4% recorded on-site), Burwardsley (9.1% compared to 9.7%), Frodsham Hill (7.7% compared to 8.6%), and Tarporley (6.6% compared to 7.6%), also receiving the highest proportion of visitors.

For those selecting ‘other’ (1.4%) the locations indicated multiple locations in one day via walking trips with several visitors outlining that they had ‘walked the Sandstone Trail’.

There were 2993 responses to this question as visitors were able to indicate multiple sites that they had visited or intended to visit. The percentages shown indicate the popularity of the multiple selections made by visitors, as well as the actual number of responses recorded for each location.

This overall data (when considered with the on-site results) is very useful in highlighting the common most visited sites across the Cheshire Sandstone Ridge. As previously outlined (page 22) this aids in determining where any infrastructure projects, activities or events, and improvements could be prioritised.

Locations visited or to be visited on the Cheshire Sandstone Ridge



Reasons for Visiting the Cheshire Sandstone Ridge

In keeping with the on-site survey, the online survey also explored the reasons for visiting the Cheshire Sandstone Ridge.

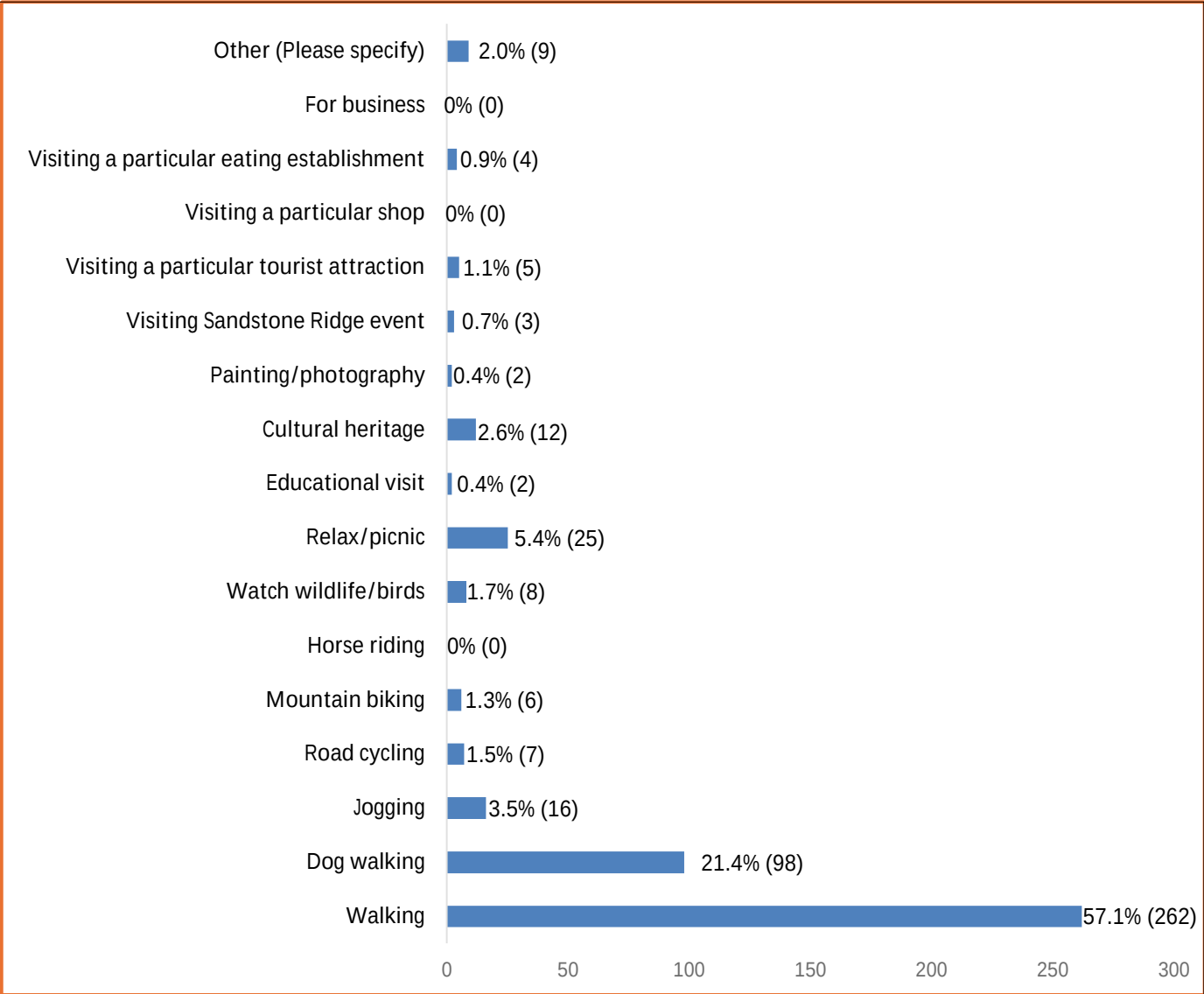
The findings are again comparable to the on-site results (page 23), which again demonstrates that the overwhelming majority visited to walk (57.1% compared to 44.1% on-site), or for dog walking (21.4% compared to 29.6% on-site).

A wide array of other recreational activities was again recorded demonstrating the versatility of how and why people use the Ridge. For example, online responses outlined that to relax/have a picnic (5.4% compared to 6% on-site), jogging (3.5% compared to 2.4%), cycling (1.5% compared 2.4%) or mountain biking (1.3% compared 2.1%), watching wildlife or birds (1.7% compared to 2.1%), and cultural heritage (2.6% compared to 1.3%) were some of the most popular reasons for visiting.

Of the 2% who noted ‘other’ reasons for visiting the Ridge, these included supporting activities such as local scout group expeditions, and commemorative events.

The overall findings continue to demonstrate the versatility of how and why people visit the Ridge.

Reasons for visiting the Cheshire Sandstone Ridge



Reasons for Visiting the Sandstone Ridge

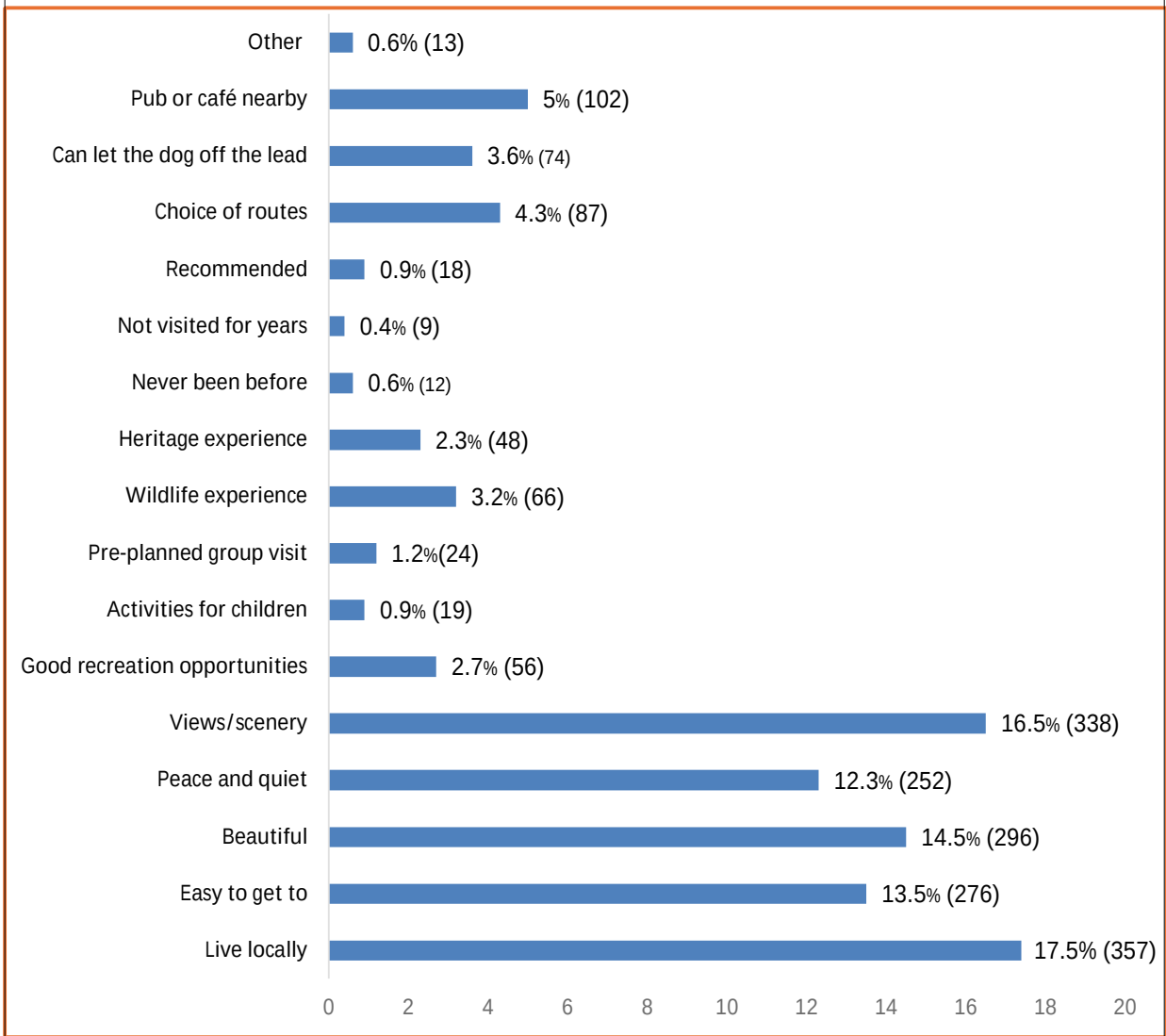
The online survey also asked visitors to indicate their reasons for visiting the Cheshire Sandstone Ridge rather than another area of countryside. Visitors could record multiple reasons for their visit, resulting in 2047 responses from the 470 respondents. The percentages shown indicate the popularity of the selections made by visitors, as well as the actual number of responses recorded for each option.

The main reasons identified those visitors that lived locally (17.5% compared to 16.4% on-site) to the Cheshire Sandstone Ridge, and that it was easy to get to and access (13.5% similar to 13.4% on-site) and, in keeping with the on-site results, that it was the landscape of the Ridge that attracted people to visit (page 24). For example, many of the online visitors also noted they visited the Ridge for its beauty (14.5% compared to 13.5% on-site), its peace and quiet (12.3% identical to the 12.3% on-site), and its views and scenery (16.5% compared to 14.5% on-site).

The other reasons noted for visiting the Ridge differed slightly to the on-site results, with visiting a pub or café (5% compared to 2.9% on-site) being one of the more popular reasons. Others again included the recreational opportunities (2.7% compared to 3.1% on-site), heritage experiences (2.3% compared to 1.6% on-site), the wildlife (3.2% compared to 3.8% on-site), the choice of routes (4.3% compared to 3.4% on-site), and from a dog walking perspective the ability to let the dog off the lead (3.6% compared to 5.9% on-site).

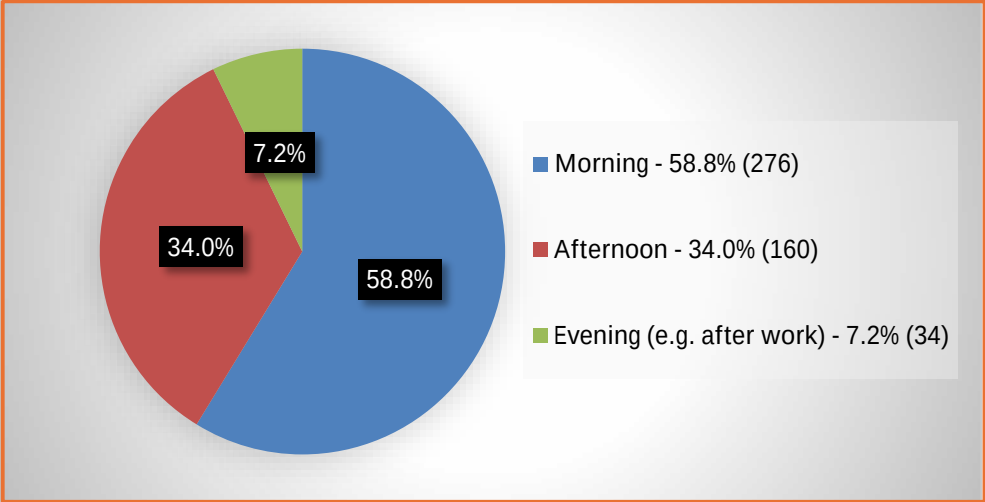
The overall data highlights that the ease of access and the variety of activities offered on and across the Ridge, provide a very strong draw to visitors. As previously stated, (page 24), this versatility should be reflected in future marketing campaigns for the Cheshire Sandstone Ridge, as well as in any future events or activities for specific parts of the Ridge.

Reasons for visiting the Cheshire Sandstone Ridge rather than another area of countryside



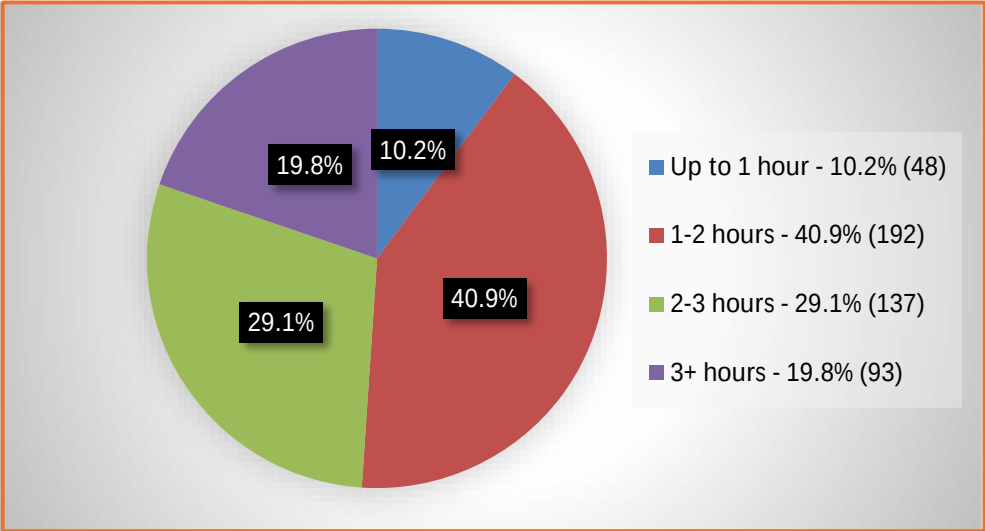
Dwell time at the Cheshire Sandstone Ridge

Time of day preference for visiting the Cheshire Sandstone Ridge



Visitors were also asked to express their preference in terms of when they liked to visit the Cheshire Sandstone Ridge (top left). The visitors responded that they predominately preferred to visit in the morning (58.8% compared to 70.8% on-site), with 34% (compared to 24.5% on-site) indicating that they prefer to visit in the afternoon. Similar to the on-site findings, only a small proportion (7.2% compared to 4.7% on-site) outlined a preference for an evening visit.

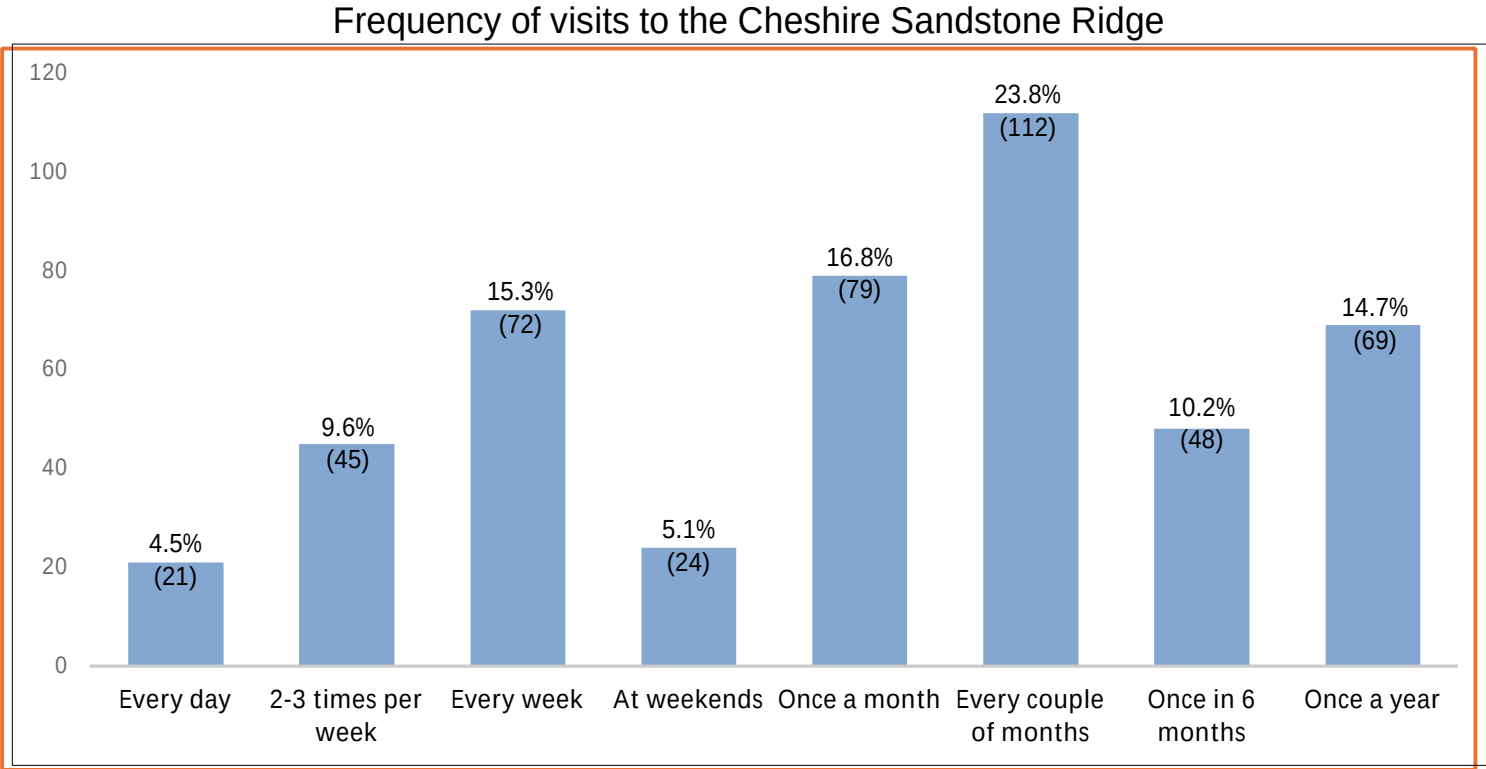
Duration of visit to the Cheshire Sandstone Ridge



The online visitor survey also explored how long on average they visited the Ridge (bottom left). In keeping with the on-site findings (page 26), the majority (40.9% compared to 45.1%) again indicated that they would spend between one and two hours at the Ridge, with a further 29.1% (compared to 23.5%) indicating they would spend between two and three hours at the Ridge.

This data is useful as it helps to indicate that the dwell time on and across the Ridge is between one and three hours in total (70%, similar to the 68.6% on-site). Given the previous data on the locations most visited across the Ridge (page 22 and 46), this will aid in deciding where additional infrastructure or resources may be needed to support the visitors and provide appropriate facilities for their visit, and/or where additional events or activities could be hosted.

Frequency of Visits to the Cheshire Sandstone Ridge



As outlined previously (page 43), 86.1% of the visitors who had visited the Cheshire Sandstone Ridge, were asked the frequency of their visits.

A small proportion of the visitors (4.5% compared to 8.3% on-site) indicated that they visited the Ridge every day, and a further 24.9% (compared to 31.5% on-site) outlining that they visited the Ridge at least once a week (15.3% compared to 17.1% on-site), if not two to three times a week (9.6% compared to 14.4% on-site), or just at weekends (5.1% compared to 3.2% on-site). Of the remaining visitors, 40.6% (compared to 37.2% on-site) indicated that they visited at least once a month (16.8% compared to 19.5% on-site), or once every couple of months (23.8% compared to 17.7% on-site). Finally, 24.9% (compared to 19.8% on-site) indicated that they visited less frequently either once every six months (10.2% compared to 9.7% on-site), or once per year (14.7% compared to 10.1% on-site).

The overall findings clearly demonstrate that the majority of visitors (75%+) are visiting the Cheshire Sandstone Ridge on a regular, i.e. at least once every couple of months, if not more regularly. It is important, therefore, the key stakeholders work collaboratively to maintain and protect the Ridge, investing in improvements and infrastructure, as well as marketing campaigns to highlight different aspects of the Ridge to visit.

Awareness of the Cheshire Sandstone Ridge

Online visitors were asked to outline how they first found out about the Cheshire Sandstone Ridge.

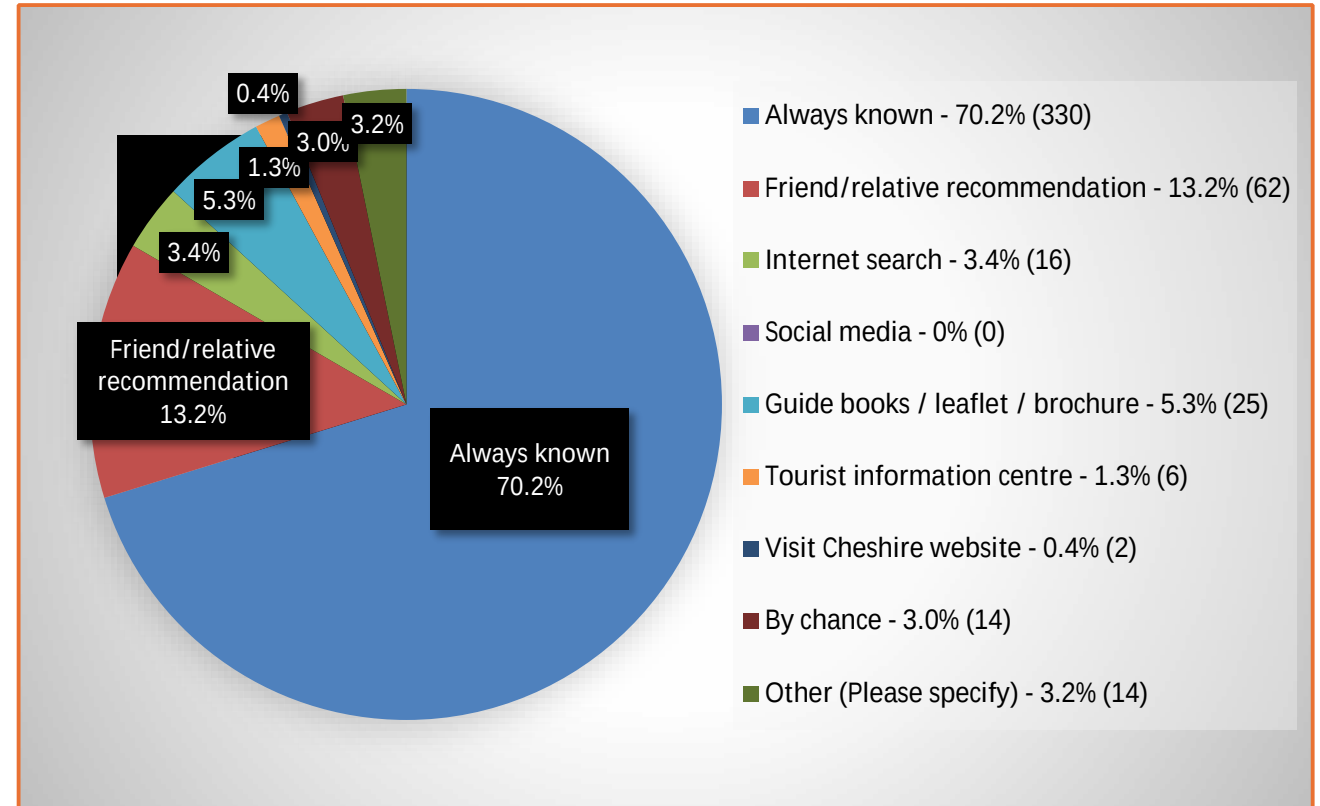
In keeping with the on-site findings (page 27), The majority of respondents (70.2% compared to 60.3% on-site) reported that they had always known about the Ridge, indicating strong local or longstanding awareness. Meanwhile, 13.2% learned about it through friends or relatives (compared to 19.8% on-site), highlighting the role of word-of-mouth in spreading information.

Furthermore, the data also indicates that 5.3% had discovered about the Ridge via a guide book, leaflet or brochure (compared to 3.7% on-site). A further 3.4% discovered the site through an internet search (compared to 4.9% on-site), and 3% came across it by chance (compared to 4.3% on-site).

For the 3.2% noting 'other' (compared to 5.2% on-site), the awareness was recorded from a variety of sources which included but not limited to: 'visiting through an organised trip', 'discovering via OS Maps', 'moved to the area recently', via a 'television programme', and 'visiting with fellow ramblers'.

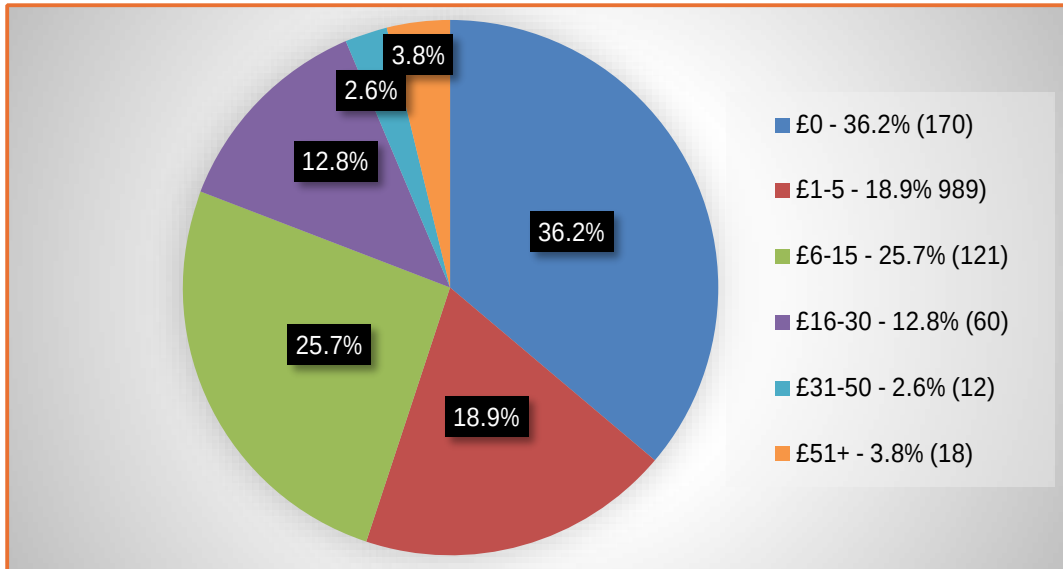
These results suggest that while inherent awareness is high, digital visibility remains limited, presenting an opportunity for improved online promotion. The overall data can be used to develop new marketing campaigns to target more regional and national visitors to the Ridge, as well as to review existing marketing collateral, particularly digital marketing and platforms.

Awareness of the Cheshire Sandstone Ridge (2024)

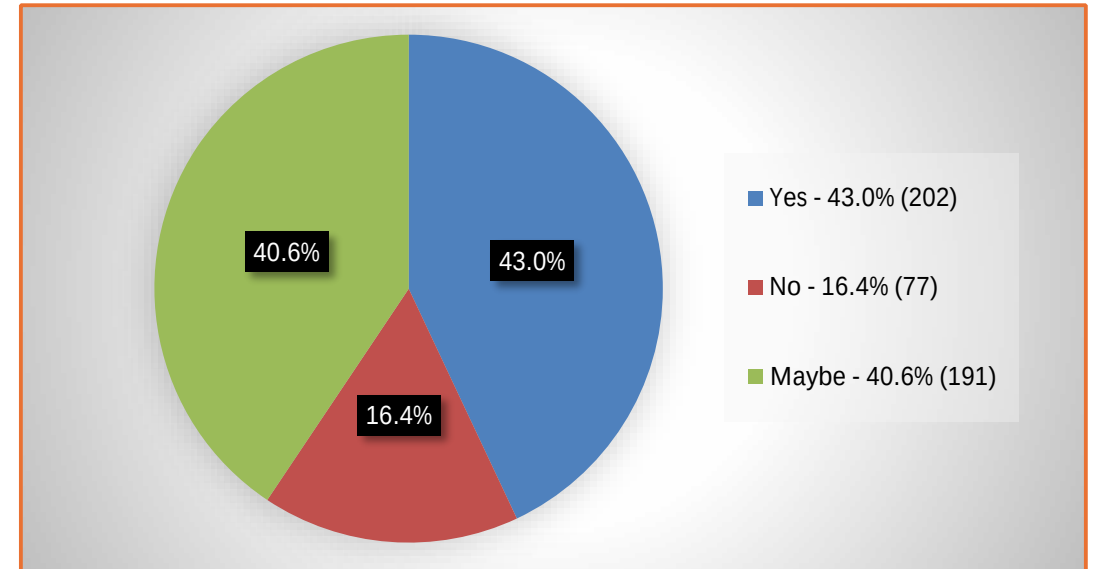


Visitor Spend at Cheshire Sandstone Ridge

Average visitor spend



Visitors support for financial contribution to help fund the Cheshire Sandstone Ridge



Online visitors were also asked to comment on how much they spend on average when they visit the Ridge, and if they would support spending more as part of their visit, if the monies raised were invested in maintaining the Cheshire Sandstone Ridge. Similar to the on-site findings (page 28) 36.2% (compared to 30.8% on-site) commented that they did not spend anything as part of their visit, but that the majority of visitors (63.8% compared to 69.2% on-site) had also spent between a modest £1 to £5, up to and in excess of £51.

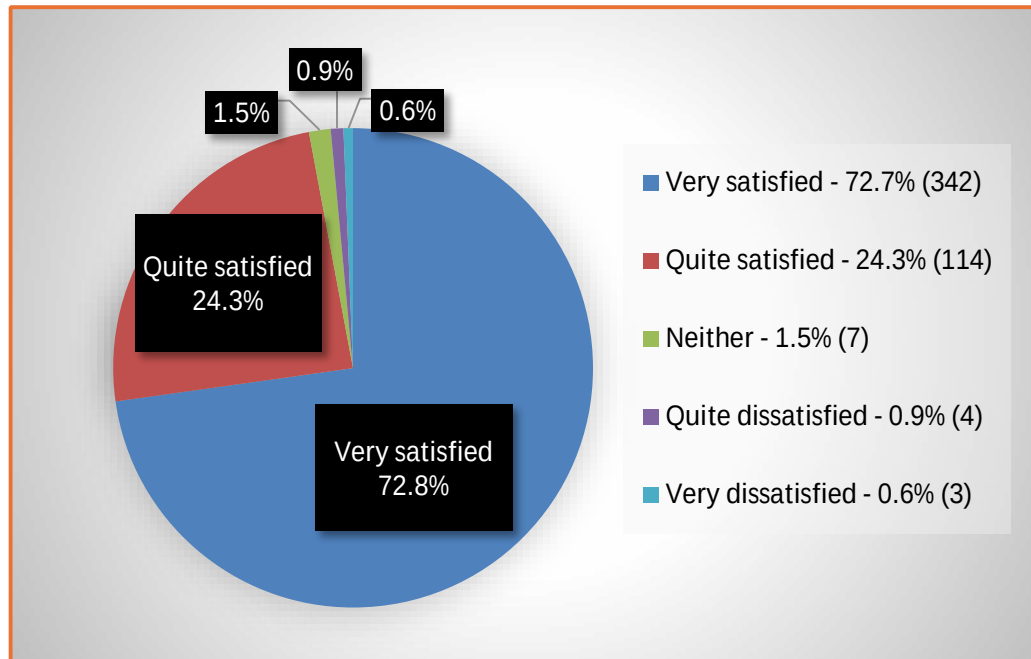
In general, the visitor spend was between £6 and £30 (38.5% compared to 35.4% on-site) and these results again correlate to specific sites on the Ridge, such as Delamere Forest, and Beeston (Castle), where there are costs associated with the visit (such as car parking, food, and entry fees).

In terms of supporting spending more as part of their visit, 43% (compared to 46.3% on-site and 38% in 2017) support spending more (page 29). Furthermore, 40.6% (compared to 29.6% on-site and 38% in 2017) commented that they 'maybe' supportive, demonstrating a positive trend in terms of a willingness to consider increased financial support for the Ridge. Finally, only 16.4% (compared to 24.1% on-site and 24% in 2017) commented they would not be willing to spend more.

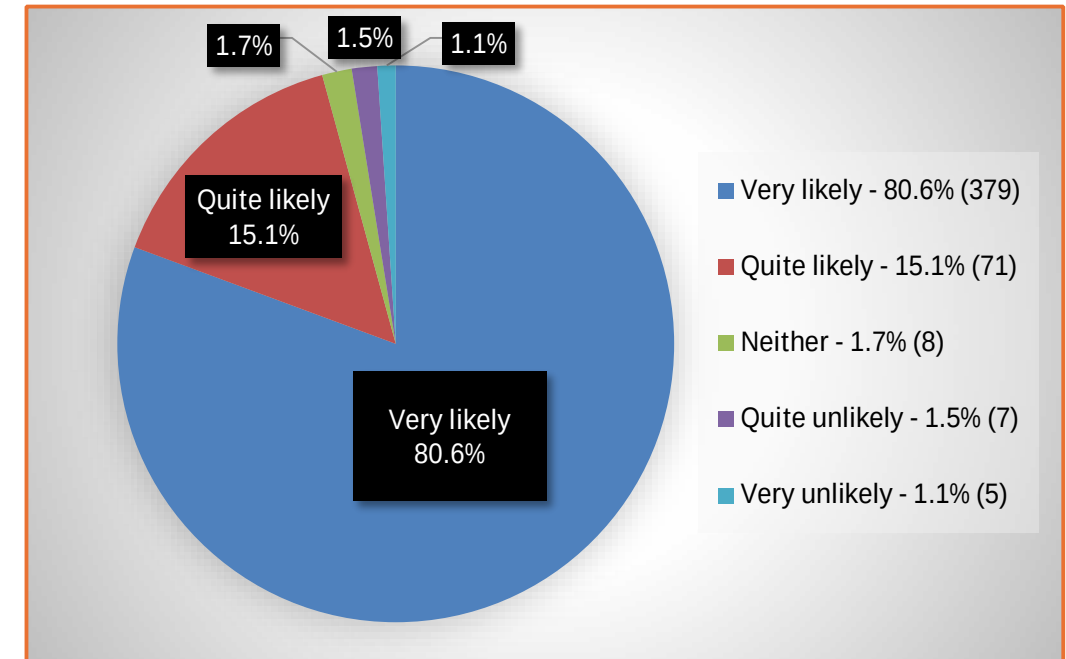
The overall data emerging suggests that value-driven spending, particularly for conservation and local development, could be an effective approach to encourage greater financial contributions from visitors.

Visitor Satisfaction

Visitor satisfaction



Likelihood for return visit



The final questions focussed on overall visitor satisfaction, and the likelihood to return to the Cheshire Sandstone Ridge.

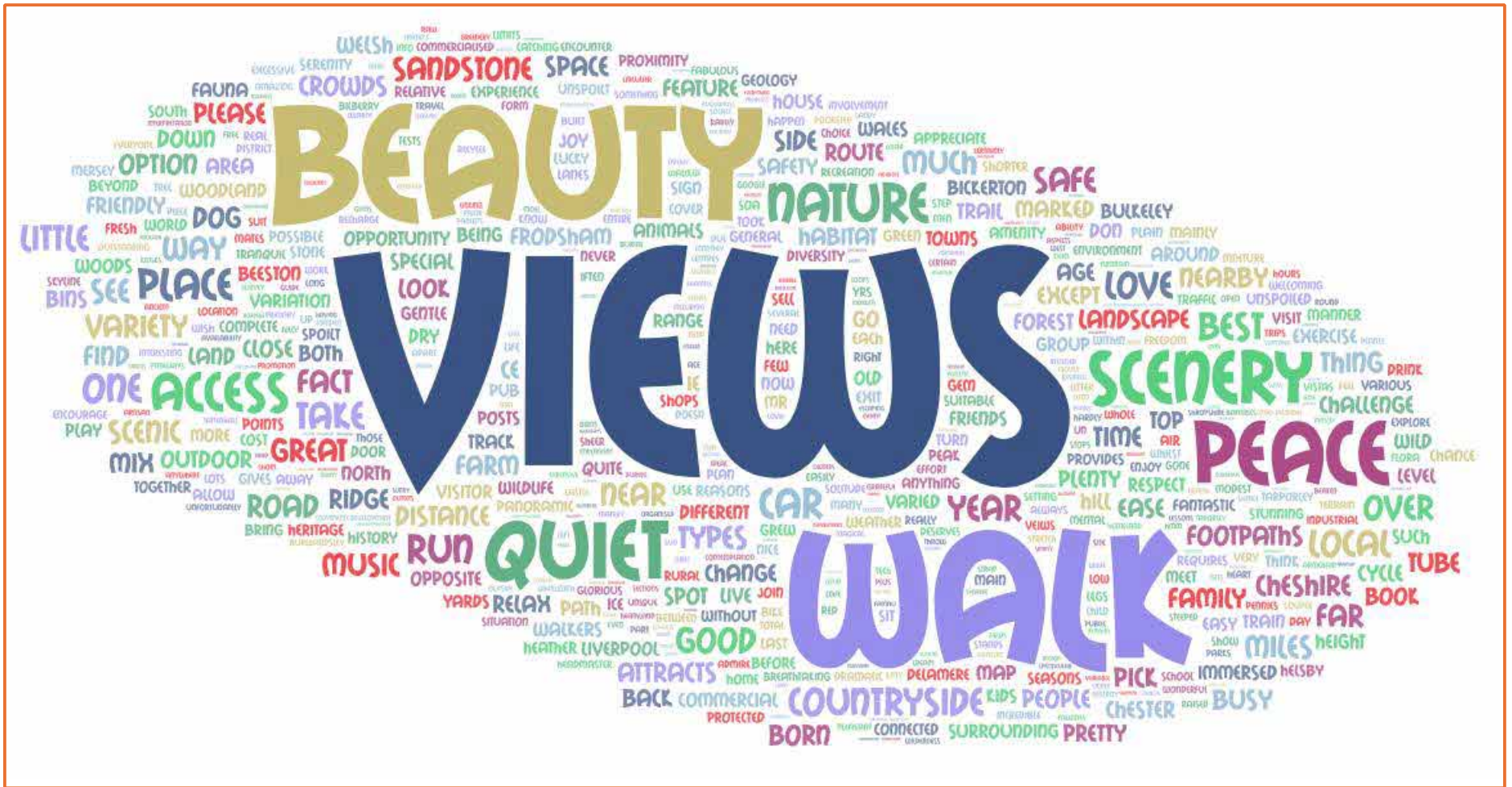
The results (above left) were highly positive with 72.8% (compared to 79.9% on-site and 89% in 2017) reporting that they were 'very satisfied' with their visit, and that 24.3% (compared to 16.8% on-site and 10% in 2017) were 'quite satisfied'. Only a very small proportion 0.9% (compared to 1.4% on-site), indicated that they were 'dissatisfied', and 0.6% 'very dissatisfied' with their visit. In keeping with the on-site findings (page 30 and 31), the positive satisfaction ratings also correlate with the likelihood of return visits to the Ridge, with 80.6% (compared to 90.3% onsite and 93% in 2017) 'very likely' to return. 15.1% (compared to 8.8% on-site and 6% in 2017) outlined that they were 'quite likely' to return, and 1.5% (compared to 0.6% onsite) 'quite unlikely' to return. Of note is a small number of visitors (1.1%) outlining that they were 'very unlikely' to return.

Whilst the overall data appears to maintain a positive visitor experience overall, there does appear to be a decline in these satisfaction levels. Some of the reasons are outlined in how the visit could be improved (page 54 to 58) but this is an aspect that will need to be monitored to ensure this is not a continuous decline, which could have implications on return visitors and economic impacts in the future. Despite this potential concern, the findings highlight the Ridge's continuous appeal and suggest a high potential for repeat visitation, reinforcing the importance of maintaining and enhancing visitor experiences (page 30 and 31).

Visitor Satisfaction

Online visitors were also asked to comment on what they felt the best thing about the Cheshire Sandstone Ridge was. The themes emerging highlighted the views, scenery, peace, landscape, beauty, and quiet, as well as the diversity of nature, and the variety of activities available.

The word cloud to the right illustrates these findings.



Visitor Satisfaction

Below is a selection of some of the comments received from visitors concerning the best thing about their visit to the Cheshire Sandstone Ridge:

“The quiet tranquillity and natural beauty of the countryside”

“Beautiful countryside, Immersion in a wild place with dramatic Sandstone Ridge providing fantastic views over the Cheshire Plain and beyond”

“Great walking routes with interesting history and two castles to visit”

“Nice roads, hills and track: cycle on”

“It is beautiful and peaceful and also if you meet people, they are generally friendly and also appreciate the surroundings.”

“Natural unspoiled landscape”

“Outstanding views and great for dog walks”

“The variety and extent of walks, either short strolls for all capabilities but also challenging long ridge walks that can take days to complete is unique.”

“It’s sheer beauty and tranquillity”

Visitor Satisfaction

Online visitors were asked to comment on any aspect about the Cheshire Sandstone Ridge that they ***did not like***. The themes emerging highlighted some tensions across how the Ridge is used, with dogs, dog waste, parking, signage, other people, facilities, and transport, being raised as key issues.

The word cloud to the right illustrates these findings.



Visitor Satisfaction

Below is a small selection of some of the comments received from visitors about anything visitors did not like concerning the Cheshire Sandstone Ridge:

“A shortage of car parking combined with no, or very little rural public transport”

“Lack of public transport to access from Liverpool”

“Lack of toilets or refreshments stops along Sandstone trail itself”

“Crowded at weekends”

“Dog walkers leaving poo bags on the floor or hanging from trees”

“Car parking can be expensive”

“Need a road crossing at Gretty's Waste as its a very busy road”

“In Summer the paths can become overgrown restricting access.”

“Lack of maintenance on less travelled sections make it impassable at certain times of the year”

“Not enough parking in some spots and certain not enough public bus service to give you confidence to use it”.

Improving the Visit

The final question that online visitors were asked (again aligned to the on-site survey, page 36) concerned how the visit could be improved and made a more enjoyable experience. Visitors could select multiple responses to this question, as well as provide some text (for other) to provide additional information. In total 1,033 responses were recorded from the 470 respondents, with a range of suggestions captured.

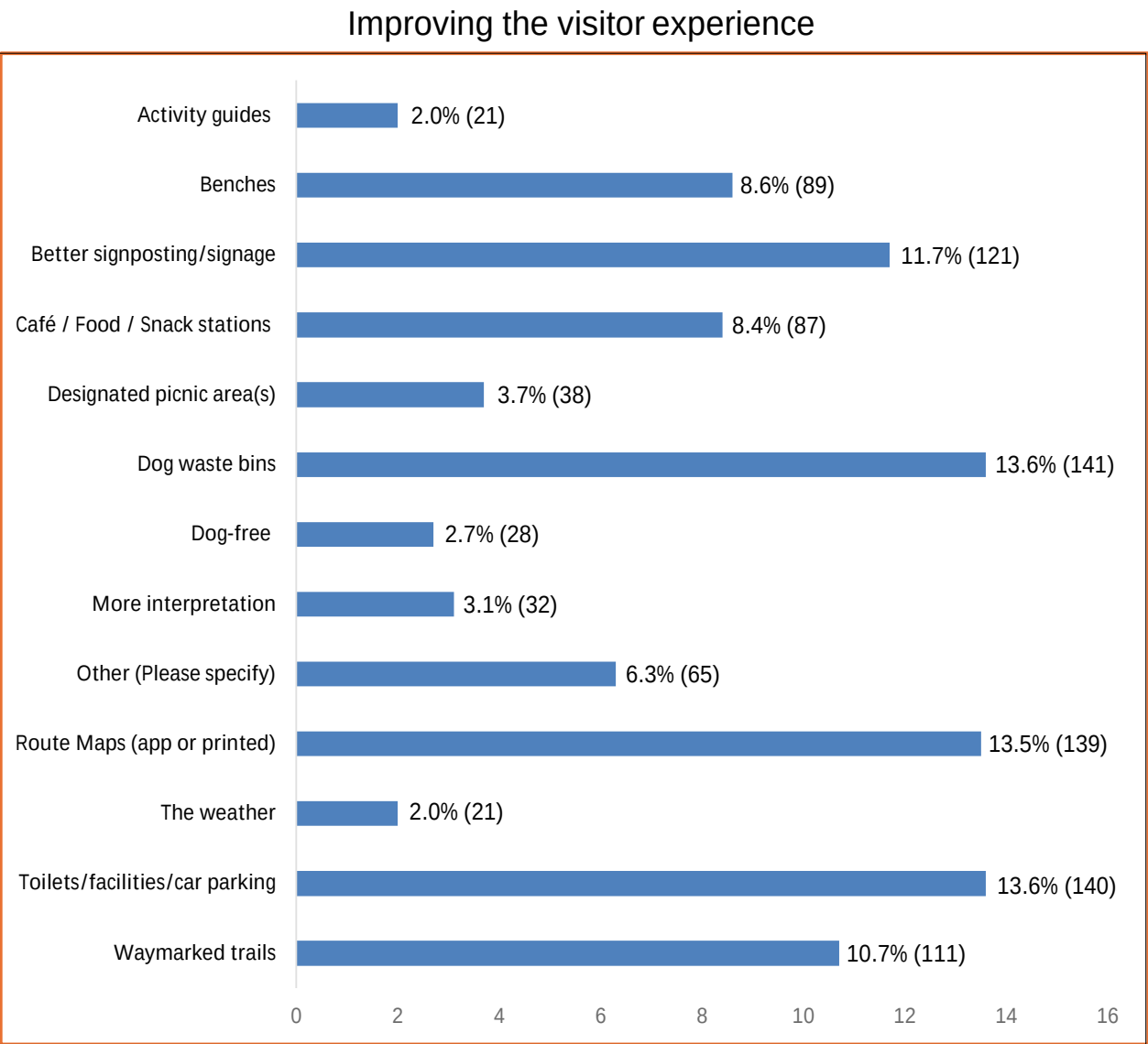
As highlighted within from the comments concerning ‘anything visitors didn’t like’, dog waste bins was the highest priority that visitors raised (13.7% compared to 26.4% on-site), which was again reflected throughout many of the ‘other’ text responses recorded (6.3%).

Other priorities for improving the visit included better signage (11.7%, identical to the 11.7% on-site findings), better facilities such as toilets and better parking (13.6% compared to 9.9% on-site), route maps (13.5% compared to 9.2% on-site), better waymarked trails (10.7% compared to 5.2% on-site), more benches (8.6% compared to 6.1% on-site), and more catering options (8.4% compared to 5.7% on-site).

The ‘other’ priorities (6.3%) also included improved footpath maintenance (including managing overgrown sections) and linking of paths, better transport links and accessibility, and more information points (such as on conservation activities).

The overall 2024 survey results (both online and on-site) are similar to the 2017 findings, where signage, access, path maintenance, and dog waste bins were also key priorities.

The findings demonstrate the importance of investing in the infrastructure (new and existing) across the Cheshire Sandstone Ridge, in order to enhance the overall visitor experience.



Barriers to Visiting the Cheshire Sandstone Ridge

As previously outlined (page 43) those visitors (13.9%) who noted that they had never visited the Ridge before, were asked an alternative question to examine the reasons as to why they may have never visited the Ridge.

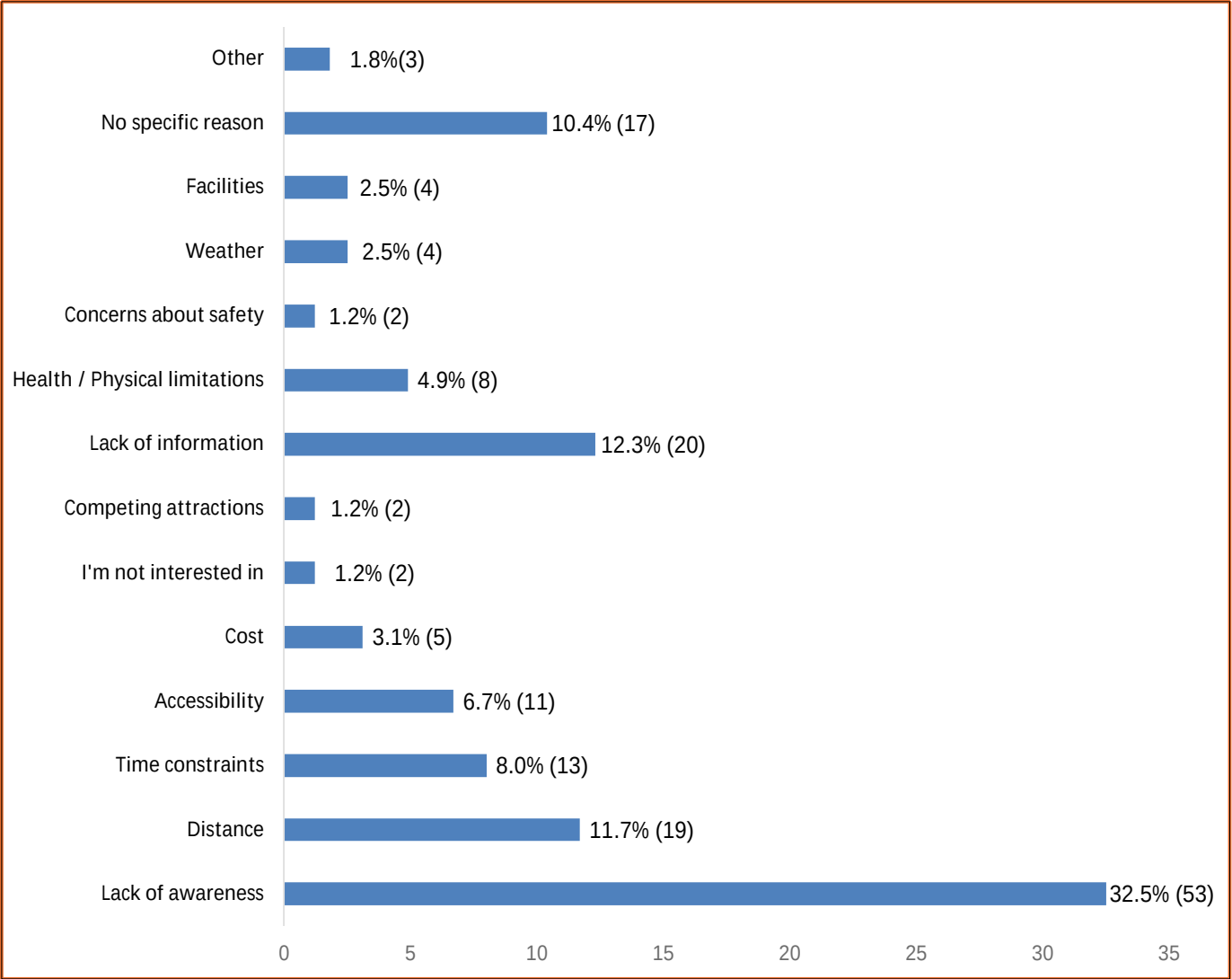
The primary reason emerging from the respondents as to why they had not visited the Ridge was due to a lack of awareness (32.5%). Additionally, 12.3% mentioned a lack of information about the Ridge, highlighting a need for improved promotional efforts, including digital information (such as websites and social media).

Other barriers included distance to the Ridge (11.7%), time constraints (8%), accessibility issues (6.7%), and cost (3.1%). Health or physical limitations were also a factor for 4.9% of respondents, while 10.4% had no specific reason for not visiting.

These findings suggest that increasing awareness and providing clearer information about the site could significantly improve visitation rates, potentially overcoming many of the barriers identified.

Furthermore, ensuring the Ridge is accessible from both a transport and disability perspective will also be key to opening up the Ridge to new visitors.

Barriers to visiting the Cheshire Sandstone Ridge



Part 3 – Recommendations

Recommendations

The two visitor survey's have provided a wealth of useful data and information that stakeholders who support the Cheshire Sandstone Ridge can utilise to help determine where investment and/or new infrastructure may be needed. The table pulls together the key areas for consideration and recommendations arising from survey findings:

Areas for consideration	Recommendations
Travel and transport	
1. Car Parking	I. Clearer parking signage and information on any fees and how monies raised are used to support the maintenance of the Ridge, and specific sites. II. Improve access to parts of the Ridge, such as fixing potholes and improving signage. III. Improve parking across the Ridge, such as creating clear parking bays and/or designated parking sites (to prevent congestion in rural villages in the summer months).
2. Cost of car parking (and how money raised through this is used)	I. Provide information on how parking charges are used to maintain the Ridge and infrastructure by the organisations and charities that manage the Ridge.
3. Public transport links to and from the Ridge	I. Work with local council and transport providers to try and improve train and bus services and increased timetabling, particularly during the summer months. II. Explore the feasibility of a seasonal hop-on and hop-off Ridge bus.
Visiting and experiencing the Cheshire Sandstone Ridge	
4. Challenges with multi-purpose use of the Ridge (such as dog walking, cycling, park runs, and family activities)	I. Work with key stakeholders to review how the Ridge is used, where pinch points exist, and plan/promote different routes for different activities.
5. Dog walkers and behaviours (dogs off the lead, not under control, and dog waste)	I. Improved signage at key points (car parks, path start points, etc) reminding visitors of controlling dogs and disposing of all waste. II. More bins at key points on routes. III. Enforcing fines to aid in changing dog owners' behaviours around waste and control of dogs.

Recommendations

Areas for consideration	Recommendations
Marketing and branding of the Cheshire Sandstone Ridge	
6. Ridge signage and route guides	I. Review and improve route paths across the Ridge to ensure these are clear and easy to follow. II. Potential to develop a 'Ridge App' for suggested guides and routes. III. Review and enhance current printed guides and routes that are available at key locations and online.
7. Attracting a diverse array of visitors	I. Review the marketing campaigns, messaging and imagery to help attract a wider audience to visit the Ridge. II. Develop marketing campaigns that highlight the accessibility of the Ridge, and/or key sites that are the most accessible. III. Develop marketing campaigns that target specific demographic groups, such as those aged 18 to 32, to encourage a younger and more diverse audience to visit the Ridge, and help to influence their networks.
8. Marketing campaigns to raise awareness locally, regionally, nationally in partnership with key stakeholders.	I. Marketing activities can include: i. How and where to visit the Ridge. ii. Activities and events taking place on and across the Ridge. iii. Develop digital marketing presence on platforms such as Instagram, Facebook, and/or Tik Tok. II. Market and promote the amazing work of the organisations that manage the Ridge, projects that are planned, and seeking additional feedback and suggestions. III. Work with key stakeholders to create broader regional and national marketing campaigns – such as Marketing Cheshire, Cheshire and Warrington LEP, Cheshire West and Chester Council, Cheshire East Council, regional train and bus operators, as well as organisations such as Forestry England, English Heritage, National Trust and the Cheshire Wildlife Trust. IV. Work with hospitality and/or tour guides to create more official 'Ridge Walks'.

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Further information

If you would like further information arising from the Cheshire Sandstone Ridge visitor survey findings please contact:

[REDACTED]
[REDACTED]
General enquiries – email: Sandstonesurvey@chester.ac.uk

Cheshire Sandstone Ridge Trust
email: info@sandstoneridge.org.uk

Or visit www.sandstoneridge.org.uk