

The Flintshire Unitary Development Plan Sustainability Appraisal and Strategic Environmental Assessment

Sustainability Report

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Flintshire County Council

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Contents

Abbreviations1			
1	Intro	duction	3
	1.1	Sustainability Appraisal and Strategic Environmental Assessment	3
	1.2	The Flintshire UDP and SA/SEA	3
	1.3	Scope of the UDP	4
	1.4	SA/SEA Guidance	4
	1.5	The Study Area	
	1.6	Purpose of the Sustainability Report	6
	1.7	Structure of the Sustainability Report	
	1.8	Consultation and Involvement	7
2	Sust	ainability Appraisal	8
	2.1	The SA Process	8
	2.2	SA Progress to Date	
	2.3	The Legislative Requirements of the SEA Directive	
	2.4	Consultation Requirements	
	2.5	Limitations of this SA Process	12
3	Rela	tionship with other Relevant Plans, Programmes and Policies	13
	3.1	Legislative Requirements of the SEA Directive	13
	3.2	Methodology	13
4	Base	eline Characteristics and Sustainability Issues	15
	4.1	Legislative Requirements of the SEA Directive	15
	4.2	Methodology	15
	4.3	Sustainability Issues and Opportunities	17
	4.4	Relationships with Other Areas/Transboundary Issues	28
5	Арри	raisal Methodology	29
	5.1	The SA Framework	29
	5.2	Internal Consistency of the Objectives	30
	5.3	Development of Guide Questions, Indicators and Targets	31
	5.4	Elements of the UDP Requiring Assessment	48
	5.5	Appropriate Assessment	51
	5.6	Assessment Workshops	52
	5.7	Modifications to the UDP Based Upon SA Recommendations	52
6	Com	patibility of the SA Objectives and UDP Strategic Aims	54
	6.1	Requirements	54
	6.2	Compatibility Results	54



	6.3	Recommendations	5
7	Asse	ssment of Spatial Options5	6
	7.1	SEA Directive Requirements5	6
	7.2	Option 15	6
	7.3	Option 25	8
	7.4	Option 3 5	9
	7.5	Option 46	0
	7.6	Option 56	1
	7.7	Option 66	2
	7.8	Option 76	3
	7.9	Recommendations and the Preferred Strategy6	4
8	Asse	ssment of UDP Policies6	7
	8.1	SEA Directive Requirements	7
	8.2	Policy Screening Exercise	7
	8.3	Part 1 Policies	7
	8.4	General Development Considerations7	1
	8.5	Design	3
	8.6	Trees, Woodlands and Hedgerows7	5
	8.7	Landscapes7	6
	8.8	Wildlife and Biodiversity7	9
	8.9	Historic Environment	0
	8.10	Access and Communications	1
	8.11	Housing8	5
	8.12	Shopping Centres and Commercial Development12	6
	8.13	Employment13	6
	8.14	Rural Enterprise and Agriculture16	8
	8.15	Sport and Recreation	0
	8.16	Tourism 17	3
	8.17	Community Facilities	6
	8.18	Minerals17	8
	8.19	Energy, Waste and Pollution	1
	8.20	Implementation	0
9	Cum	ulative and Synergistic Effects19	2
	9.1	Types of Cumulative/Synergistic Effects	2
	9.2	Cumulative/Synergistic Effects of the UDP 19	2
	9.3	Interactive and Transboundary Effects	9
10	Moni	toring Framework20	0
	10.1	Introduction	0
	10.2	Legislative Requirements of the SEA Directive	0
	10.3	Approach to Monitoring	0
	10.4	Proposed Monitoring Framework	1
			Page ii



		lusions2	
	10.5	Management and Responsibilities	214

Tables

Table 1-1	Structure of the Sustainability Report	6
Table 2-1	Stages in the SA Process	9
Table 4-1	Sustainability Issues and Opportunities	19
Table 5-1	Final SA Objectives	29
Table 5-2	Objective Compatibility Summary	31
Table 5-3	SA Objectives, Guide Questions, Indicators and Targets	33
Table 5-4	Extract of the SA Matrix for the Assessment of Spatial Options	49
Table 5-5	Notation Used to Complete Matrix	49
Table 5-6	Policy Assessment Matrix	50
Table 8-1	Key Sustainability Strengths and Weaknesses of the Allocations HSG1	in Policy 91
Table 8-2	Key Sustainability Strengths and Weaknesses of the Allocations S1	in Policy 129
Table 8-3	Key Sustainability Strengths and Weaknesses of the Allocations EM1	in Policy 138
Table 8-4	Employment Allocations potentially affecting Natura 2000 sites	151
Table 8-5	Key Sustainability Strengths and Weaknesses of the Allocations EM2	in Policy 155
Table 8-6	Key Sustainability Strengths and Weaknesses of the Allocations EM3	in Policy 159
Table 8-7	Key Sustainability Strengths and Weaknesses of Areas of Search EWP6	n in Policy 184
Table 9-1	Cumulative/Synergistic Effects	193
Table 10-1	Proposed Monitoring Framework	203
Table 10-2	Monitoring Responsibilities Table	214

Figures

Figure 1-1 Location of Flintshire County

Appendices

Appendix A – Scoping Consultation Responses
Appendix B – Review of Plans, Programmes and Policies
Appendix C – Baseline Data and Welsh Index of Multiple Deprivation Plans
Appendix D – Development of the SA Objectives
Appendix E – SA Objective Compatibility
Appendix F - UDP Strategic Aims and SA Objective Compatibility
Appendix G – Strategic Options Assessment



Appendix H – Policy/Screening Grouping Table Appendix I – Policy Assessment Matrices



Abbreviations

AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
СС	County Council
ccw	Countryside Council for Wales
CO ₂	Carbon Dioxide
DCLG	Department for Communities and Local Government
EA	Environment Agency
GCSE	General Certificate of Secondary Education
GIS	Geographical Information System
GVA	Gross Value Added
НМО	House in Multiple Occupation
ICT	Information and Communication Technology
IPCC	Intergovernmental Panel on Climate Change
LBAP	Local Biodiversity Action Plan
LDP	Local Development Plan
LSOA	Lower Super Output Area
LTP	Local Transport Plan
NO ₂	Nitrogen Dioxide
NVC	National Vegetation Classification
NVQ	National Vocational Qualification
ODPM	Office of the Deputy Prime Minister
PM ₁₀	Particulates
PPPs	Plans, Programmes and Policies
PPW	Planning Policy Wales
PRamsar	Proposed Ramsar site
RIGS	Regionally Important Geological Sites
RSPB	Royal Society for the Protection of Birds
SA	Sustainability Appraisal
pSAC	Possible Special Area of Conservation
SAC	Special Area of Conservation
SAM	Scheduled Ancient Monument
SEA	Strategic Environmental Assessment
SMR	Standardised Mortality Ratio
L	



pSPA	Potential Special Protection Area	
SPA	Special Protection Area	
SPG	Supplementary Planning Guidance	
SRSS	Sub-Regional Spatial Strategy	
SSSI	Site of Special Scientific Interest	
STW	Sewage Treatment Works	
SuDS	Sustainable Drainage System	
UDP	Unitary Development Plan	
VAT	Value Added Tax	
WAG	Welsh Assembly Government	
WIMD	Welsh Index of Multiple Deprivation	



1 Introduction

1.1 Sustainability Appraisal and Strategic Environmental Assessment

Sustainability Appraisal (SA) is a process for assessing the social, economic and environmental impacts of a plan and aims to ensure that sustainable development is at the heart of the plan-making process. Planning Policy Wales (PPW) (2002) requires an SA to be undertaken for all Unitary Development Plans (UDPs).

The Strategic Environmental Assessment (SEA) Directive 2001/42/EC¹ was transposed into national legislation in 2004² and this requires an SEA to be undertaken for all plans whose preparation commenced after July 2004 or whose preparation began 21 July 2004 but will not be adopted until 21 July 2006. The aim of SEA is to *"provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development"* (Article 1 of the SEA Directive).

1.2 The Flintshire UDP and SA/SEA

The preparation of the Flintshire UDP commenced in 1999 and the draft document was placed on deposit between September and November 2003, following which over 17,000 individual representations were received on the plan. The vast number of representations inevitably lengthened the plan's preparation and so an SEA of the UDP had to be undertaken because the plan would not be adopted before the 21 July 2006.

An earlier form of SA was undertaken on the Draft Deposit UDP in 2003/04, although this did not conform with the requirements of the SEA Directive, nor did it fully comply with current SA guidance. Guidance currently exists for the application of both SA and SEA, and it is now commonly considered best practice to combine the two processes into one. This is the approach being taken for Flintshire County Council's (CC) UDP.

Consequently, a comprehensive SA/SEA will now be undertaken for the UDP, which involves revisiting the earlier SA work and findings of the Draft Deposit UDP as appropriate. This partly retrospective approach has been recognised by the Welsh Assembly Government (WAG) and the Office of the Deputy Prime Minister (ODPM) as a potentially common occurrence for

¹ Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, June 27, 2001

² Welsh Statutory Instrument 2004 No. 1656 (W.170) The Environmental Assessment of Plans and Programmes (Wales) Regulations 2004



UDPs currently in the process of adoption, and guidance has been provided as to how best to undertake it. This guidance has been adhered to. From here on, the combined SA/SEA process shall be referred to as SA but with the legal requirements of the SEA process clearly highlighted throughout the document.

1.3 Scope of the UDP

When undertaking an SA of any plan or programme it is essential to understand the scope and influence of the plan being assessed. The purpose of the UDP is to provide a framework for making rational decisions on planning applications and to guide development to appropriate locations within the County. The UDP identifies land for various forms of development (housing, retail, employment etc) and sets out general policies to control new development, changes in the use of land or buildings and to protect the environment from inappropriate change.

The plan is developed taking into consideration national and regional planning policy requirements and other strategies and documents produced at the County level including the Local Transport Plan (LTP), Biodiversity Action Plan (BAP), Economic Development Strategy and the Local Housing Strategy.

1.4 SA/SEA Guidance

The following guidance documents have been consulted when undertaking the SA.

- Welsh Assembly Government (WAG), (August 2004), Strategic Environment Assessment of Unitary Development Plans: Interim Good Practice Guide;
- ODPM et al (2005), A Practical Guide to the Strategic Environmental Assessment Directive.

Although the Welsh guidance is most appropriate, the method has also drawn upon emerging good practice produced by the ODPM including:

 ODPM (2005), Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents

1.5 The Study Area

Flintshire County is situated in North East Wales and is bounded by the counties of Wrexham, Cheshire and Denbighshire (see Figure 1-1). It is the most densely populated County in Wales having a population of 149,400 (mid 2003). Key physical boundaries are the River Dee and Estuary, the Clwydian Hills and the Irish Sea. The five main population centres are Deeside, Buckley, Flint, Holywell and Mold.





Figure 1-1 Location of Flintshire County (Source: www.flintshire.gov.uk

Flintshire is largely rural but along the coast and in the Deeside area, it is a traditional industrial zone with coal, steel and textiles having historic importance. During the 1980s heavy industry declined leading to job losses and increased unemployment. However, inward investment has revitalised the economy and aerospace, food, paper products, chemicals and motor products are now important components of the manufacturing economy. The Deeside Development Zone is one of the largest industrial parks in Wales being an important source of local employment. Despite the large amount of industry in the County, there is a high quality natural environment, much of which is designated for its rare ecological diversity.

Data from the Welsh Index of Multiple Deprivation (WIMD) 2005 illustrates that the County does not suffer greatly from deprivation issues, although there are pockets of deprivation within the coastal towns and larger urban areas. This issue is explored further in Section 4 'Baseline Characteristics and Sustainability Issues.'

Although Flintshire is largely rural there are good 'A' road links to major sub-regional centres such as Chester to the east and Wrexham to the south and via the A55 to the port of Holyhead. External links to the motorway network provide connections to Liverpool and Manchester including their international airports. There are excellent rail links into and out of the County, and realisation of the plans to electrify the Wrexham-Bidston line and develop the Shotton Cord would further improve these links.



1.6 Purpose of the Sustainability Report

The SEA Directive requires the preparation of an Environmental Report documenting the entire SEA process. As a combined SA/SEA has been undertaken a Sustainability/Environmental Report (herein referred to as the Sustainability Report) has been produced that fully complies with the SEA Directive requirements. The Sustainability Report is intended to be a consultation document that is issued to the statutory consultees (the Environment Agency (EA), Countryside Council for Wales (CCW) and Cadw) and is made available to other interested parties and the public along with the Flintshire Unitary Development Plan – Pre Inquiry Changes for their comments.

It should be noted that the SA was undertaken on the Draft Deposit UDP subject to any modifications that were made to the UDP following the review of representations received since September 2003. This was to ensure that the most up-to-date version of the plan was assessed.

1.7 Structure of the Sustainability Report

Table 1-1 outlines the structure of the Sustainability Report.

Section of Scoping Report	Outline Content	
1. Introduction	Explains why an SA is being undertaken for the UDP. Provides an overview of the County and the structure of the Sustainability Report.	
2. Sustainability Appraisal	Outlines the key stages of the SA process, SA progress to date, SEA legislative requirements and consultation procedures.	
3. Relationship with other Relevant Plans, Programmes and Policies (PPPs)	Identifies how the PPP review was undertaken and summarises the main findings.	
4. Baseline Characteristics and Sustainability Issues	Provides a summary of the baseline characteristics of Flintshire and the key sustainability issues and opportunities.	
5. Appraisal Methodology	Details the development of the SA appraisal framework, including the SA objectives, indicators and targets and the SA appraisal matrix.	
6. Compatibility of the SA Objectives and UDP Strategic Aims	Assessment of the compatibility of the SA objectives and aims of the UDP.	
7. Assessment of Spatial Options	Assessment of the UDP spatial options against the SA objectives.	
8. Assessment of UDP	Assessment of the UDP policies against the SA	

 Table 1-1
 Structure of the Sustainability Report



Section of Scoping Report	Outline Content
Policies	objectives.
9. Cumulative and Synergistic Effects	Assessment of the main cumulative and synergistic effects of the UDP.
10. Monitoring Framework	Details of the proposed monitoring framework to monitor the significant effects of implementing the UDP.
11. Conclusions	Summary of key findings and outcomes of the assessment
Appendix A	Scoping Consultation Responses
Appendix B	Review of Plans, Programmes and Policies
Appendix C	Baseline data and Welsh Index of Multiple Deprivation (WIMD) Plans.
Appendix D	Development of the SA Objectives
Appendix E	SA Objective Compatibility
Appendix F	UDP Strategic Aims and SA Objective Compatibility
Appendix G	Strategic Options Assessment
Appendix H	Policy Screening/Grouping Table
Appendix I	Policy Assessment Matrices

1.8 Consultation and Involvement

This Sustainability Report has been issued for consultation alongside the Flintshire Unitary Development Plan - Pre-Inquiry Changes. Please address any consultation responses to Andy Roberts at the address below:

Environment and Regeneration, Flintshire County Council, County Hall, Mold, CH7 6NF

The documents can also be viewed on Flintshire CC's website: <u>www.flintshire.gov.uk</u>

Your comments are invited on the SA. These comments will be used to produce a final version of the UDP that will be adopted by the Council.



2 Sustainability Appraisal

2.1 The SA Process

Table 2-1 outlines the stages in the SA process. Whilst the process can be subdivided into a number of separate stages it is the intention that the process is iterative. The SA process should also be carefully integrated with the plan preparation process to ensure that sustainable thinking is at the heart of the plan-making process. Whilst this has been a retrospective SA, close liaison has occurred with the plan-makers during modifications to the plan to ensure that the recommendations of the SA have been included where possible.



SA Stage	Activity		
A: Setting the context and	Instigate SA – contact stakeholders and inform public within 28 days (SEA screening procedures)		
objectives, establishing the baseline and	Establish relationships with other relevant plans and programmes and environmental protection objectives		
deciding on the scope	Establish environmental baseline		
	Identify potential sustainability problems and opportunities		
	Develop SA appraisal framework - SA objectives, indicators a	and targets	
	Consulting on the Scope of the SA - produce Scoping Report		
	Scoping Report to be consulted upon for minimum 5 week per	riod	
B: Developing	Test plan objectives against SA framework		
and refining options and assessing	Develop and assess the strategic options – high-level appraisal	The assessment stage is an iterative process involving ongoing feedback to the plan-makers and re-appraisal of amendments to the plan as necessary.	
effects	Refine options and predict and evaluate the effects of the plan against the SA appraisal framework		
	Propose measures to mitigate adverse effects and maximise benefits		
	Propose monitoring measures		
C: Preparing	Prepare the SA Report		
the SA Report	The SA Report should be consulted upon with stakeholders and the public alongside the UDP		
D: Consulting	Consult statutory bodies on SA Report and draft plan prior to adoption of the plan		
and decision- making	Assess any significant changes from consultation		
	Prepare Post-Adoption statement illustrating how the SA has influenced the UDP		
<i>E: Monitoring</i> <i>and</i> <i>Implementation</i> <i>of the Plan</i>		n of the Plan.	

Table 2-1 Stages in the SA Process

2.2 SA Progress to Date

The SA process commenced in May 2006 with a scoping study (Stage A in the process). This set the framework for the SA and included the following elements:

- A review of other plans, programmes and policies that could influence the development of the UDP and SA, for example the Wales Spatial Plan and the Flintshire Biodiversity Action Plan (BAP)
- The gathering of data about the key social, economic and environmental characteristics of the County



- The identification of the key sustainability problems and opportunities, for example levels of deprivation in the County
- The development of the SA framework comprising objectives, indicators and targets against which the elements of the UDP will be assessed

During the preparation of the Scoping Report a workshop was held with representatives of CCW, the Environment Agency (EA) and staff from a number of departments in Flintshire CC. The aim of the workshop was to identify the key sustainability issues and opportunities facing the County and to gain some feedback on the potential SA objectives.

The findings from the scoping stage were documented in a Scoping Report that was issued to the statutory bodies (EA, CCW and Cadw), along with the Royal Society for the Protection of Birds (RSPB) to seek their comments and feedback on the proposed scope of the SA. In accordance with legislative requirements a 5 week scoping consultation period was held.

Formal scoping consultation responses were received from CCW and the EA. Appendix A comprises a table outlining how the consultation comments have been incorporated into the SA. A telephone response was received from Cadw which confirmed that they were satisfied with the proposed scope of the SA.

Following on from the scoping exercise, the assessment of the UDP spatial options and policies commenced (Stage B in the process). The results of the assessment were fed back to Flintshire County Council during the final revisions to the UDP to enable the SA process to influence the preparation of the plan. Consultation and liaison with the plan-makers has been integral to the process, despite this being a retrospective SA.

2.3 The Legislative Requirements of the SEA Directive

Whilst there are formalised approaches for both SA and SEA, only SEA has a legal obligation to perform certain activities. Throughout this report, the SEA Directive requirements are identified and have been adhered to throughout the SA process.

The SEA Directive requirements for the Environmental Report are presented in Box 1.



Box 1: SEA Directive Requirements Applicable to the Environmental Report

"the environmental report shall include information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, [and] its stage in the decision-making process" (Article 5.2).

Information to be provided in the Environmental Report includes:

- "the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, materials assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. These effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects" (Annex I (f) and footnote)
- "an outline of the reasons for selecting the alternatives dealt with" (Annex I (h))
- "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" (Annex I (g))

2.4 Consultation Requirements

The SEA Directive requires that consultation is undertaken at four key stages of the process:

- 1 Consultation bodies should be consulted on the decision to carry out an SEA and the decision should be made public within 28 days of determination. This can also be combined with requests for data.
- 2 Consultation bodies should be consulted upon the scope and level of detail of the Environmental Report.
- **3** Consultation bodies and the public should be given an early and effective opportunity to comment upon the Environmental Report at the same time as the Draft UDP.
- 4 Following adoption of the UDP the consultation bodies and the public should have made available to them the final UDP and a statement summarising how the environmental considerations have been integrated into the UDP and the measures decided concerning monitoring.

The Consultation bodies in Wales are:

- CCW
- EA
- Cadw

Consultation was undertaken with the statutory consultees in April 2006 when they were informed about the decision to undertake the retrospective SEA/SA of the UDP (Stage 1 in the consultation process). Information was also requested about baseline data, sustainability issues and opportunities and potential objectives, indicators and targets.



The second stage of the consultation requirements was fulfilled in June 2006 when the statutory consultees were consulted on the scope of the SA. The third mandatory consultation stage is currently underway through the release of this document alongside the Pre Inquiry Changes.

Consultation has occurred over and above the mandatory requirements as a scoping workshop has been held and there has been ongoing liaison with CCW and the EA regarding various issues. Flintshire CC has sought to make the SA process as inclusive as possible and there have been a number of meetings held with CCW staff to discuss issues relating to Appropriate Assessment at the strategic level to determine the best way forward to approach this emerging and challenging area.

2.5 Limitations of this SA Process

This SA has been largely retrospective and this has inevitably limited the extent to which the SA could influence the direction of the UDP. The SA commenced following the selection of the spatial option and following the development of the plan policies and allocations. Nonetheless, the SA has assessed all elements of the plan, sought to verify earlier decisions and has made a number of recommendations to improve and strengthen the UDP policies particularly in relation to their coverage of environmental issues. Many of the recommendations have been taken on board by the planmakers as demonstrated in the following chapters of this report.

Data gaps have been identified and a number still remain and although this has reduced our understanding of key trends affecting Flintshire it has provided the opportunity to focus future monitoring frameworks and requirements. A key data gap has been a lack of information about water resources and water supply issues and this is an issue which needs to be followed up, particularly when preparing the Local Development Plan (LDP).



3 Relationship with other Relevant Plans, Programmes and Policies

3.1 Legislative Requirements of the SEA Directive

Box 2 presents the SEA Directive requirements for this element of the process.

Box 2: SEA Directive Requirements Applicable to PPPs

The SEA Directive requires that the SEA covers:

"the relationship (of the plan or programme) with other relevant plans and programmes" (Annex1(a))

"the environmental protection objectives, established at international (European) 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" (Annex 1 (e))

3.2 Methodology

A review of other PPPs that may affect the UDP was undertaken in order to contribute to the development of the SA and the UDP. This included:

- Identification of any external social, environmental or economic objectives, indicators or targets that should be reflected in the SA process
- Identification of any baseline data that should be reflected in the SA
- Identification of any external factors that might influence the preparation of the plan, for example sustainability issues
- Identification of any external objectives or aims that would contribute positively to the development of the UDP
- Determining whether there are any clear potential conflicts or challenges between other identified plans, programmes or sustainability objectives and the emerging UDP.

The review included documents prepared at international, national, regional/sub-regional and county scale. Each document reviewed and how it may affect the SA and UDP is summarised in Appendix B. It should be noted that in selecting plans for review the scope of the UDP was a major consideration to ensure that the most appropriate plans were included. The PPPs recommended in SEA Guidance³ were used as a broad guide.

³ ODPM, Scottish Executive, Welsh Assembly Government, Department of the Environment , (September 2005) A Practical Guide to the Strategic Environmental Assessment Directive



The key themes emerging from the review of the PPPs are listed below:

- Recognising the challenge of climate change and implementing appropriate action to deal with it
- Promoting renewable energy and energy efficiency
- Protecting and enhancing biodiversity and the natural environment including the landscape
- Protecting cultural heritage resources and the built environment
- Achieving resource efficiency and the development of more sustainable patterns of production and consumption
- Protecting and enhancing water resources
- Using natural resources wisely
- Using the precautionary principle
- Contributing to a high quality of life and social well-being for citizens
- Providing high quality services that are as accessible as possible
- Encouraging sustainable design initiatives
- Protecting and enhancing the quality and character of urban areas
- Treating waste as a resource by contributing to the re-use, recycling and composting opportunities
- Promoting more sustainable transport choices and improving accessibility
- Recognising the importance of open spaces, sport, and recreation and the contribution that they make to enhancing quality of life
- Increasing knowledge, research and development and innovation capacity
- Tackling the long term roots of deprivation
- Retaining areas of natural floodplain
- Strengthening the Welsh national identity
- Achieving an overall improvement in quality of life for all residents
- Providing quality education and training opportunities for all
- Improving public transport facilities and accessibility
- Improving visitor accessibility to Welsh culture
- Regenerating rural communities and livelihoods
- Extending local democracy and local action



4 Baseline Characteristics and Sustainability Issues

4.1 Legislative Requirements of the SEA Directive

Box 3 outlines the legislative requirements for this element of the SA process.

Box 3: SEA Directive Requirements for Baseline Data Collation

The SEA Directive requires that the SEA covers:

"relevant aspects of the current state of the environment and the likely evolution thereof without its implementation of the plan or programme" and, "the environmental characteristics of the areas likely to be significantly affected" (Annex 1(b), (c))

"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" (Annex 1 (c))

Characterising the environmental and sustainability baseline, issues and context is an important activity in defining the framework for the SA. It involves the following elements:

- Characterising the current state of the environment of the County including social and economic aspects; and
- Using this information to identify existing problems and opportunities which should be considered in the UDP.

4.2 Methodology

The environmental, social and economic baseline was characterised through the following methods:

- Review of national, sub-regional and county plans, strategies and programmes
- Data research based around a series of baseline indicators developed from the ODPM's guidance, previous consultation recommendations from similar SAs and the data available for the County
- The use of GIS data provided by the EA, CCW, Cadw and Flintshire CC
- A workshop held with council officers, the EA and CCW in May 2006
- Discussions with statutory consultees

The collation of the data also enabled the identification of sustainability issues and opportunities affecting the County.



A comprehensive baseline spreadsheet, including national and regional comparators and data referencing is presented in Appendix C with a summary of the key sustainability issues and opportunities presented in Section 4-3. In accordance with best practice guidance, gaps in or uncertainties with the available data have been noted.

Baseline data has been sourced for each of the SEA Directive topics, where it is available to ensure the fulfilment of legislative requirements. There is a wealth of baseline data available and it is often very difficult to decide how to rationalise and focus the process, particularly when collating data about social and economic characteristics. Consequently the scope and influence of the plan has been a very important factor when collating the data. The SA objectives also influenced the selection of baseline indicators and the process has been iterative with indicators being modified as SA objectives were developed. As this is a strategic study the level of detail of the information collated has been carefully controlled to ensure that the process remains strategic and does not become too specific; for example, whilst Phase 1 habitat survey data may provide a broad indication of habitat presence, comprehensive National Vegetation Classification (NVC)/phase II survey data would be far too detailed for this type of study.

The SEA Directive also requires, 'material assets' to be considered. Materials assets refer to the stock of valuable assets within a study area and can include many things from valuable landscapes, natural and cultural heritage through to housing stock, schools, hospitals and quality agricultural land. It is considered that material assets of the County are appropriately covered in the following baseline categories, and consequently have not been allocated a specific section within the baseline spreadsheet:

- Biodiversity, flora and fauna
- Soil and land quality
- Cultural heritage
- Landscape
- Housing
- Transportation

The location of the key nature conservation sites in Flintshire are shown on the plan in Appendix C.

4.2.1 Key Data Gaps and Data Quality/Suitability

Although a significant amount of baseline data has been collated, some data gaps and inadequacies with the existing data were identified. One of the most significant issues has been sourcing historical data which would provide an indication of performance over time. A lack of data at the national level also meant that it was difficult to determine how well the County was performing relative to Wales and England and Wales



combined. Table 5-3 in Section 5.3 identifies the SA objectives, indicators and targets and highlights where it has not been possible to obtain baseline data for some of the indicators.

There have also been a number of discrepancies identified amongst the data and between different data sources, for example the waste management statistics for the County vary considerably depending upon the source of the data. For the purposes of the SA the waste management data has been sourced from the National Assembly for Wales Performance Indicators as this was considered to be the most reliable source.

The age of the biodiversity, flora and fauna data has been discussed with CCW. Many of the datasets, particularly the Ancient Woodland inventory is approximately 15 years old and the way in which the data was collated means that not all areas of Ancient Woodland are recorded. The quality of the data and its suitability has been considered when using it during the SA process and there may be an opportunity to improve upon and encourage more regular collation of data through the monitoring process.

Throughout the SA/SEA process information about water resources and water supply has been sought. This information was needed to determine whether the scale of development proposed in the UDP could be adequately supplied and whether in supplying this water there could be any risks to some of the important features of the Flintshire environment. particularly the River Dee and Bala Lake Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) and the Dee Estuary possible Special Area of Conservation (pSAC), Ramsar site, proposed Ramsar site (pRamsar), Special Protection Area (SPA) and potential SPA (pSPA). To date it has not been possible to source this information as there has been difficulty in obtaining the Dee Valley and Welsh Water Resource Plans. Consequently the approach adopted has been to highlight any potential risks posed by development and to ensure that the policy wordings in the UDP are sufficient to ensure that adverse impacts would not occur as a result of water supply issues. It should be noted that the feedback received from Welsh Water to date regarding the UDP has not indicated that they have any concerns regarding water supply.

4.3 Sustainability Issues and Opportunities

A number of sustainability issues and opportunities have been identified for the County. A summary of the issues is presented in Table 4-1. Although the issues/opportunities have been subdivided into different headings, many of them are closely related being directly/indirectly linked. The Welsh Index of Multiple Deprivation is referred to throughout the table and measures multiple deprivation at the Local Super Output Area (LSOA) scale (a geographical description of area, smaller than electoral wards). There are seven domains used to determine deprivation (income; employment; health; education; skills and training; housing; physical environment; and geographical access to services by bus and walking) and the overall WIMD comprises a weighted aggregation of the specific dimensions of deprivation. Figures supporting the deprivation issues



identified are presented in Appendix C, following the baseline data spreadsheet.

Table 4-1 Sustaina	ty issues and Opportunities		
SA Topic	Key Sustainability Issues	Key Sustainability Strengths/Opportunities	
Population	The proportion of older people in the population is expected to grow by 25% between 2004 and 2014 leading to increased demand for all services including education and transport (Social Inclusion Strategy ⁴)		
	Flintshire has a low Black Minority Ethnic population leading to problems associated with isolation of this sector of the population. Discussion at the workshop highlighted that the ethnic population is likely to increase in the future in the County and it will be important to ensure good integration between people from different backgrounds.		
	The population has increased as a result of in-migration. The continuing trend of in-migration from English authorities and Denbighshire could lead to a loss of local identity (Sub-Regional Spatial Strategy (SRSS) ⁵)		
	The percentage of the population with a knowledge of the Welsh language is below the national average and this could be because of the cross-border links the County has with England.		
Education and Qualifications	Furthering the educational attainment of the County is essential to the development of the economy.	Flintshire is well served with educational establishments that provide opportunities for further education. There are two	
	There is a need to promote lifelong learning and increased adult participation in education.	further education colleges, 12 high schools, 75 primary schools and a range of private training organisations.	
		The percentage of the working age population with no	

Table 4-1 Sustainability Issues and Opportunities

⁴ Flintshire County Council, Social Inclusion Strategy 2005 – 2008.

⁵ Hyder Consulting (2005) West Cheshire/North East Wales Sub-Regional Spatial Strategy

SA Topic	Key Sustainability Issues	Key Sustainability Strengths/Opportunities
		qualifications is lower than in Wales and Great Britain.
		The percentage of the working age population achieving National Vocational Qualification (NVQ) Level 4 is above the percentage for Wales and comparable to that for Great Britain.
Human Health	17.2% of households have one or more members in an identified special needs group, which is above the average nationally (11-13% identified by Fordham Research in the Housing Needs Assessment 2004/05). The physically disabled is the predominant group.	Levels of health are better than the Wales average and slightly better than the England and Wales average e.g. the percentage of the population with a long-term limiting illness is significantly lower than the Wales percentage.
	Flintshire has a relatively high proportion of older people and this is likely to rise over the next 20 years placing a greater demand upon health services.	
	There are pockets of health deprivation in the County with three LSOAs in the bottom 10% for health deprivation ⁶ (Flint Trelawny 1, Greenfield 2 and Shotton Higher 2) (see Figure 1 in Appendix C).	
Water	has not highlighted any concerns regarding the availability of water resources. It will be important to monitor this issue in the future particularly as issues of over-abstraction could have significant impacts for the River Dee and Bala Lake SSSI and SAC and the Dee Estuary pSAC. Bamsar site, pBamsar, pSPA and SPA	The biological and chemical water quality of rivers in Flintshire has improved although could be further enhanced.
		There are opportunities to incorporate sustainable drainage system (SuDS) into new developments which could assist with water treatment and the management of runoff from new developments.
	There are current foul and surface water disposal issues in Mold and Connah's Quay. These are primarily associated with the management of Welsh Water assets and their spending plans rather than	

⁶ The health deprivation domain is based upon standardised limiting long-term illness, standardised mortality ratio for all causes for all ages years 1999 – 2003, cancer standardised incidence ratio 1994 – 2004.

SA Topic	Key Sustainability Issues	Key Sustainability Strengths/Opportunities
	environmental constraints. During the consultation on the draft UDP in 2003 Welsh Water did not raise any other water resource or asset issues.	
Soil and land quality	 There is a very little high quality agricultural land in the County or in Wales as a whole i.e. Grade 1 or Grade 2 land. There is believed to be a legacy of contamination associated with historic lead mining activity in the Halkyn area and a number of potentially contaminated sites within the Deeside Industrial area. The redevelopment of some brownfiled sites may not always be appropriate. The metalliferous and coal mining history of the County and its history of quarrying for limestone, clay and silica sand means that Flintshire is littered with small scale brownfield sites in the open countryside and within part of the Area of Outstanding Nautral Beauty (AONB). Therefore, not all brownfield sites may be appropriate for redevelopment. 	Brownfield sites should be redeveloped and remediated where possible in preference to greenfield sites. However, there is the potential for such sites to be highly biodiverse and there may need to be extensive surveys of sites and suitable mitigation measures implemented. New development has the potential to modify soil functions, for example current infiltration patterns. Opportunities should be sought to utilise SuDS in new developments to adapt to such changes.
Air quality	 Although there are currently no significant air quality issues there are a number of potential industrial and traffic related sources of air pollution. The A494 Aston Hill dual carriageway has been identified as a 'hot spot' location with the potential for exceedances of nitrogen dioxide (NO₂) and fine particulate (PM₁₀) concentrations at nearby residential properties. There are proposals by WAG to widen the southbound carriageway and it is envisaged that construction of the scheme would commence in 2007/08. Without the scheme the 2010 limit value for PM₁₀ will be exceeded (Flintshire CC). 	Although Aston Hill is a potential air quality hot spot there are currently no Air Quality Management Areas (AQMAs) in the County.
Climatic factors	Areas of the County adjacent to the Dee Estuary and in proximity to the River Alyn are at risk of flooding.	Opportunities should be sought to encourage sustainable patterns of land use and minimise use of the private car.

SA Topic	Key Sustainability Issues	Key Sustainability Strengths/Opportunities
	 There is a considerable amount of industry along the Dee Estuary, all of which is at risk of flooding and future sea level rise. Continued reliance on the private car in the County will continue to contribute to carbon dioxide emissions and climate change. In 2001 – 44% travelled to work by private car compared to 35% in Wales and 34.7% in England and Wales. 	The recommendations of the Shoreline Management Plan need to be carefully considered as in the future options relating to managed retreat may need to be considered along the Estuary.
Biodiversity, Flora and Fauna	Development including agriculture, housing, mineral extraction has all had an impact on biodiversity. There is pressure on biodiversity resources because of the need for inward investment and development. Improving the connectivity between wildlife sites is particularly important to enable the migration and movement of species.	 There are a number of areas of informal greenspace in the County created by a legacy of old industrial workings which support a wealth of natural flora and fauna. Designated areas include 5 SACs and 22 SSSIs of which 10 are within SACs. The River Dee Estuary is designated a SPA, pSPA, pSAC, pRamsar and Ramsar Site for its international importance for birds. The county also supports a wide variety of Local Biodiversity Action Plan (LBAP) species and habitats e.g. Great Crested Newt, Lesser Horseshoe Bat and Badger. There are a further 257 wildlife sites with no statutory designation. Commercial fisheries are very important within the River Dee catchment and estuary for salmonids and cockles and these must be managed sustainably. There are a number of areas of ancient woodland distributed across the County.
Cultural Heritage	It is currently unknown how many listed buildings are on the 'at risk' register.	There are a wealth of cultural heritage features in the County that must be protected and enhanced including Scheduled Ancient Monuments (SAMs), Registered Parks and Gardens, and Listed Buildings.



SA Topic	Key Sustainability Issues	Key Sustainability Strengths/Opportunities
		The cultural heritage resource across Flintshire also includes landscapes of special historic interest. There are two areas identified on the CCW register of historic landscapes: Holywell Common and Halkyn Mountain and Vale of Clwyd (the latter is only a very small part of the County). The preservation of these historic landscapes is essential.
		The cultural heritage resources are a tourism/leisure and educational opportunity.
		There is the potential for undiscovered archaeological remains to exist throughout the County.
Landscape/Townscape		Part of the Clwydian Hills AONB is situated in the County which must be protected and enhanced where appropriate.
		The high quality landscapes of the County present a significant tourist opportunity.
		Green spaces within settlements need to be preserved and enhanced e.g. Buckley Common.
		There are a wealth of features that contribute to the quality of the County's landscape including both designated and undesignated features which need to be preserved.
		Common land contributes to Flintshire's landscape and this needs to be protected. The location of Common Land in Flintshire is mapped in Appendix C.
Minerals and Waste	The County has a history of quarrying and mining, particularly limestone quarrying and lead mining in the Halkyn Mountain area of	Reliance on landfill as a waste disposal option has decreased nationally and in Flintshire. This has been accompanied by an



SA Topic	Key Sustainability Issues	Key Sustainability Strengths/Opportunities
	the County. The North Wales Regional Aggregates Working Party Annual Report for 2003 reported that although there have been increased sales of secondary aggregates and improved recycling rates, primary won materials continue to provide the bulk of construction aggregates. There is currently an issue associated with the overprovision of consented reserves of aggregates and other mineral reserves. Flintshire holds a significant proportion of the landbank in North Wales ⁷ .	increase in the percentage of municipal waste being reused/recycled. There are 26 Regionally Important Geological Sites (RIGS) in the County which represent the range and diversity of the County's earth heritage. Geological and geomorhological sites can be very vulnerable and the preservation of these sites is very important.
Transportation	The rail passenger network would benefit from investment particularly the Wrexham-Bidston line and the electrification of the North Wales Coast Line. The Shotton Cord would be beneficial to freight services. (West Cheshire/North East Wales Sub-Regional Spatial Strategy). There is limited public transport available in rural areas which reduces educational and employment opportunities and can also impact on people's health and quality of life by reducing access to healthcare facilities and social and leisure facilities.	Flintshire is well-connected to the national motorway network, Mostyn Docks, there are good rail links to London and access to Manchester, Liverpool and Hawarden airports. Opportunities should be sought to improve recreational cycle routes and Public Rights of Way to increase activity levels amongst the population and promote the use of more sustainable modes of transport.
Economy	Inadequate access to adequate Information and Communication Technology (ICT) infrastructure could inhibit the development of some businesses, although it should be recognised that increasing ICT infrastructure could have adverse social impacts by increasing isolation. The tourism potential of the County is underdeveloped, although	Flintshire's manufacturing sector is of national importance. The County is of international importance for the aerospace industry e.g. BAE systems, although this sector can also be very vulnerable and the consequences of a closure could be very significant for the economic performance of the County. Unemployment was 2.1% in February 2006 which was below

⁷ It should be noted that the landbank is not always an accurate representation of the availability of aggregate reserves and caution should be exercised when relying upon these figures.

SA Topic	Key Sustainability Issues	Key Sustainability Strengths/Opportunities
	 discussion at the workshop highlighted that the County might be seen as a stop-off site for people travelling to Snowdonia, limiting the benefits actually generated for the County. There is a lack of immediately available investment sites. A high proportion of people in the County are employed in the manufacturing sector in comparison to the Wales and Great Britain averages which means that the County's economy is heavily dependent upon one sector making it particularly vulnerable to change. The strategic location of the County provides inhabitants with the opportunity to exploit employment in other areas. Cheshire, Manchester and Merseyside might be seen as a threat to the economic performance of the County as there is a risk that disposable incomes may also be spent outside of the County. A number of relatively modest town centres result in significant spending being lost to areas outside of the Broughton Retail Park may help to regain significant amounts of the lost expenditure. 	 the Wales and Great Britain average. There are no LSOAs in the bottom 10% and only 2 in the bottom 20% for employment deprivation⁸ (See Figure 2 in Appendix C). The strategic location of the county presents significant investment opportunities. Development of skills, innovation, research and development and technology will be critical to future economic success. Economic activity in Flintshire was 79.7% for the period April 2004 to March 2005 which was significantly above performance in Wales and Great Britain. Deeside College is a highly regarded further education centre. External factors are contributing to the economic success in Flintshire, namely the strong commuting, business and transport links to Chester, Cheshire, Merseyside, Manchester, Manchester Airport. Flintshire has achieved significant economic success over the last two decades and the investment at the Deeside Industrial Estate has been a key driver in increasing the working age employment rates and driving forward the Flintshire economy. There is vast tourism potential in the county – e.g. assets at Holywell, Clwyd Theatre, the Clwydian Range AONB.

⁸ The employment deprivation domain is based upon claimants of incapacity benefit, claimants of severe disablement allowance and participants on options for new deal for young people and intensive activity period for New Deal 25 plus.

Sustainability Appraisal and Strategic Environmental Assessment The Flintshire Unitary Development Plan K:\projects\NH50993\F-Reps\SA Report{003-NH50993-NHR-01-SA ReportF.doc Hyder Consulting (UK) Ltd 2212959 22/09/06 12:04 88

SA Topic	Key Sustainability Issues	Key Sustainability Strengths/Opportunities
Deprivation and Living Environment	The most deprived urban areas are where there have been significant closures or severe downsizing of major employers (including British Steel, British Coal) (Social Inclusion Strategy). There are 2 LSOAs in the bottom 10% most deprived (Shotton Higher 2, Greenfield 1) (See Figure 3 in Appendix C). Anti-social behaviour continues to be the main concern of Flintshire's residents – alcohol related disorder being their number one concern, followed by drugs and youth nuisance. Hotspots for vehicle crime within the County are Holywell, Queensferry, Connah's Quay and Shotton (Draft Community Safety Strategy ⁹). Between 2003 and 2004 there has been a reduction in burglary dwelling (25%); vehicle crime (8%) (Draft Community Safety Strategy) Access to services in rural areas is limited because of poor transport connections. There are 4 LSOAs in the bottom 10% most deprived for access to services by bus and walking (see Figure 4 in Appendix C). Mold West, Higher Shotton, Holywell neighbourhoods, Flint, rural north Flintshire, Buckley Bistre West and Sealand are all target areas within the Flintshire Children and Young People's Framework Partnership. They are areas where child poverty is an issue.	 WAG Communities First Programme presents an opportunity to encourage community involvement in the design and implementation of measures to improve quality of life and economic activity. There are five Communities First Areas in Flintshire: Bryn Gwalia; Flint Castle; Higher Shotton; Holywell neighbourhoods; and rural north Flintshire covering approximately 5% of the County. Communities First is a major flagship Welsh Assembly programme aimed at reducing poverty problems. The scheme aims to get people involved in tackling their problems. In most areas crime is decreasing and Flintshire is generally a safe place to work and live (Draft Community Safety Strategy) The percentage of unemployment benefits claimants is below the Wales average Average weekly pay is comparable with the Great Britain average and significantly above the Wales average.

⁹ Flintshire Community Safety Partnership (January 2005) Draft Community Safety Strategy 2005/08

SA Topic	Key Sustainability Issues	Key Sustainability Strengths/Opportunities
	Coleshill 2, Connah's Quay, Golftyn 1, Connah's Quay Central 2) (See Figure 5 in Appendix C).	
	Fear of crime is an issue, along with alcohol related crime and youth nuisance.	
Housing	There is a need to provide social rented housing (Housing Needs Assessment 2004/05).	Brownfield sites should be used for housing developments in preference to greenfield locations.
	House prices in Flintshire are comparable to the Wales average but below the England and Wales average.	The proportion of vacant housing and Houses in Multiple Occupation (HMO) in the County is below the national
	The Housing Needs Survey identified that there is a shortfall of affordable housing across the Flintshire CC area. This is a particular problem in rural areas where in-migration has affected the cost of housing, increasing prices beyond the reach of local people. This has knock on effects for community structure and cohesion.	average.
	There are 9 LSOAs in the bottom 10% for housing deprivation (see Figure 6 of Appendix C).	



4.4 Relationships with Other Areas/Transboundary Issues

The County has a number of connections and links with other areas which has been demonstrated through the baseline data collation, consultation and the review of other plans and programmes, particularly the Wales Spatial Plan and the Sub-Regional Spatial Strategy (SRSS) for West Cheshire and North East Wales. The excellent communication links into and out of the County provide both opportunities for inward investment but also enable people in the County to have good access to job opportunities in other areas. Whilst the economy is performing well, it is recognised that the daily out-migration of people from the County for employment purposes could be inhibiting the level of economic growth and personal spending in the County. Indeed the lack of a major urban centre within the County results in many people travelling to Chester for retail purposes.

Although the County has a vast tourism potential owing to its high quality environment, the amount of tourist spending within the County is believed to be relatively low. This could be because the County is viewed as a stopoff location on the way to the Snowdonia National Park or parts of the Welsh coast.

The in-migration of people into the rural parts of the County has also created housing affordability problems.



5 Appraisal Methodology

5.1 The SA Framework

The SA framework underpins the assessment methodology. A set of 23 sustainability objectives were developed against which the UDP spatial strategy options and policies were assessed. The SA objectives are distinct from the UDP objectives/aims.

The methodology used to develop the objectives followed good practice guidance. The objectives were derived using the SEA topics, the issues and opportunities identified and objectives within other plans and programmes. Appendix D demonstrates how the objectives were developed. Some of the objectives were modified slightly following the scoping exercise based upon consultation feedback and discussions held at the assessment workshops. The changes were relatively small and focused upon specific wording modifications. An objective relating to the development of skills and training was removed as it was felt that the UDP is unlikely to be able to influence this and the educational objective 'To maintain and improve levels of educational attainment for all sectors of society' would ensure that educational issues are adequately covered in the assessment. Table 5-1 presents the final set of SA objectives used in the assessment.

SA (SA Objective		
1	To reduce crime, disorder and fear of crime		
2	To maintain and improve levels of educational attainment for all sectors of society		
3	To maintain and improve levels of health for all and reduce health inequalities		
4	To provide access to good quality, affordable housing that meets the needs and requirements of the community		
5	To protect and enhance the Welsh language and cultural resource		
6	To protect and enhance community spirit and cohesion		
7	To maintain and improve access to basic goods, services and amenities for all groups		
8	To promote a sustainable economy and business development		
9	To develop and market the County's image as a place to live, work and visit		
10	To maintain and improve the quality of life in rural areas		
11	To deliver urban renaissance and improve the vitality and vibrancy in urban areas		
12	To improve the effectiveness of communications links and infrastructure		
13	To ensure that biodiversity is valued, protected and enhanced		
14	To ensure that landscapes and townscapes are properly valued, conserved and enhanced		

Table 5-1 Final SA Objectives



SA (Dbjective
15	To ensure that diversity, local distinctiveness and cultural heritage are valued protected and enhanced
16	To protect and enhance water features and resources ¹⁰
17	To avoid, reduce and remediate contaminated soils and encourage the appropriate re-use of brownfield sites ¹¹
18	To reduce greenhouse gas emissions and ensure that adequate adaptation measures to climate change are in place
19	To protect and improve air quality
20	To increase energy efficiency and require the use of renewable energy sources
21	To ensure the sustainable use of natural resources
22	To minimise waste, increase re-use and recycling
23	To promote the use of sustainable modes of transport

5.2 Internal Consistency of the Objectives

The SA objectives were tested against each other to identify any potential areas of incompatibility. The full compatibility assessment is presented in Appendix E with a summary of the main areas of potential incompatibility presented in Table 5-2.

¹⁰ It should be noted that the term water resources includes foul water treatment issues.

¹¹ It is recognised that sites within and adjacent to the settlement limits may be suitable for redevelopment However, because of its mining history Flintshire has a number of brownfield sites in the open Countryside and the Clwydian Range AONB and such sites may not be suitable for redevelopment. This issue has been acknowledged when assessing options/policies against this objective.


SA Objectives	Potential Incompatibility	Consideration
Objective 4 with objectives 13 – 23 Objective 8 with objectives 13 - 23	Economic development and the provision of new housing areas has the potential to be incompatible with environmental protection objectives.	The UDP should ensure that no development takes place where it could lead to an overall detrimental impact upon the environment. The objective should be to enhance the natural environment.
		If undertaken in a sustainable manner, new development has the potential to complement environmental enhancement.
Objective 13 and objective 17	There is the potential for incompatibility between protecting and enhancing biodiversity and re-using and regenerating brownfield sites. Brownfield sites can frequently be very biodiverse.	This is an issue that will need to be addressed on a site by site basis but nonetheless needs to be recognised during the SA.
Objective 20 and objectives 14 and 15	The promotion of renewable energy schemes could be in conflict with objectives seeking to preserve and enhance cultural heritage and landscape/townscape character and quality.	All renewable energy projects need to be assessed on a site by site basis to ensure that they are appropriate to the townscape and landscape character and setting of cultural heritage features.

Table 5-2 Objective Compatibility Summary

Identified incompatibility does not mean that the SA objectives need to be re-written. Some areas of potential conflict will always remain e.g. promoting a buoyant and diverse local economy may have adverse environmental impacts. However, the negative impacts can be limited through mitigation. New economic development may also provide opportunities to enhance the quality of the environment if sensitive and innovative design is promoted.

5.3 Development of Guide Questions, Indicators and Targets

The SA objectives were designed to be overarching and to test the likely social, economic and environmental effects of the plan. However, to ensure that issues of particular relevance to Flintshire were considered



during the assessment process, a series of guide questions were developed to support each SA objective. The purpose of the guide questions was to help the assessment team during their consideration of the likely impacts of a policy/spatial option on the achievement of the objective.

Indicators and targets were developed for each objective. The indicators assisted the assessment process because the supporting baseline evidence helps to determine how current trends might be influenced by a particular policy/spatial option. The future monitoring framework will also be indicator driven and it is essential to understand how to measure the achievement of a target. The indicators marked in *italics* in Table 5-3 highlight where it has not been possible to collate baseline data for the indicator or where there is a lack of trend data available. The monitoring of the significant effects of the UDP's implementation could provide an opportunity to overcome some of these gaps.

The targets in Table 5-3 will need to be reviewed as part of the monitoring of the UDP's implementation, particularly those that have been extracted from plans and programmes produced by Flintshire CC.

Table 5-3 SA	Objectives , Guide	Questions,	Indicators and	Targets
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SA Objective	Guide Questions	Indicators	Targets	Target Source
To reduce crime, disorder and fear of crime	 Will it reduce levels of crime? Will it reduce the fear of crime? Will it reduce levels of antisocial behaviour? Will it reduce alcohol and drug misuse? Will it encourage safety by design? 	Crime rates per 1000 population for different crimes Fear of crime statistics (based upon surveys undertaken as part of the Community Safety Strategy) Reports/Incidence of Anti- Social Behaviour	Reduce crime rates below current levels. Reduce reports of violent crime by 5-10% by March 2008 Reduce number of reports of anti-social behaviour by 10-15% by March 2008	Community Safety Strategy 2005/2008

SA Objective	Guide Questions	Indicators	Targets	Target Source
To maintain and improve levels of educational attainment for all sectors of society	Will it increase levels of participation and attainment in education for all sectors of society? Will it promote access to and involvement in lifelong/adult learning?	Number of people achieving NVQ Levels 2/3/4/5. Percentage of resident population aged 16-74 with no qualifications. Percentage of 16-17 year olds who have continued to participate in higher education. Percentage receiving job related training in the last four weeks Number of LSOAs in the bottom 10% Education Deprivation Domain	Increase the number of employed people holding NVQ2 or equivalent from 50% to 55% over the five year life of the Strategy. Increase the number of people holding a degree from 22% to 30% over the five year life of the Strategy. The literacy and innumeracy includes a number of targets, although many of these are out of date (2004). As the strategy is updated it is recommended that the SA framework is reviewed.	Flintshire Economic Development Strategy

SA Objective	Guide Questions	Indicators	Targets	Target Source
To maintain and improve levels of health for all and reduce health inequalities	Will it reduce health inequalities amongst different groups in the community? Will it improve levels of physical and mental health for all?	Life expectancy for males/females Percentage of the population with long-term limiting illness Number of LSOAs in the bottom 10% for health deprivation	Increase life expectancy in line with UK wide targets	
To provide access to good quality, affordable housing that meets the needs of the community	Will it increase the availability of affordable housing? Will it provide housing that meet the social/physical needs of the community? Will it improve the quality of housing and reduce the amount of unfit housing?	Average house prices compared to national averages House price/earnings affordability ratio Percentage of affordable housing completions on all large development sites Number and distribution of LSOAs in the bottom 10% most deprived for housing	Achieve 30% affordable housing on all large housing sites Reduce the number of wards in the bottom 10% Reduce the percentage of unfit homes below the current baseline	Flintshire UDP preliminary target

SA Objective	Guide Questions	Indicators	Targets	Target Source
To protect and enhance the Welsh language and cultural resources.	Will it provide development patterns which do not harm the linguistic character of Wales? Will it improve access to and the provision of Welsh cultural facilities?	Percentage of resident population with knowledge of the Welsh language. Number of in-migrants per year	Increase above current baseline	
To protect and enhance community spirit and cohesion	Will it develop opportunities for community involvement? Will it promote a sense of belonging and well-being? Will it promote good relationships with people of different backgrounds and communities?	Percentage of adults surveyed who feel they can influence decisions affecting their neighbourhood Percentage of people surveyed who feel that their neighbourhood is a place where people from different backgrounds can live together harmoniously Percentage of residents satisfied with their	Increase above current baseline	
		backgrounds can live together harmoniously		

SA Objective	Guide Questions	Indicators	Targets	Target Source
To maintain and improve access to basic goods, services and amenities for all groups	Will it improve access to essential services and facilities for people in rural areas? Will it improve access to cultural, sporting and leisure facilities for all groups? Will it improve access to essential facilities and services in urban areas?	Percentage of residents finding it easy to access key local services within their neighbourhood Number of LSOAs in the bottom 10% for geographic access to service by bus and walking deprivation	Increase above current baseline Reduce the number of LSOAs in the bottom 10%.	
To promote a sustainable economy and business development	Will it increase employment opportunities across the County? Will it diversify the County's economy and encourage new business start-ups? Will it promote the tourism sector in the County? Will it promote economic inclusion?	Employment in different sectors Economic activity rate Number of VAT registrations by sector <i>Annual tourist expenditure</i> Percentage employed in tourism related activities	An increase in the number of business starts from 32 firms per 1000 people to 40, over the life of the Strategy Increase in the annual tourist expenditure in the County from £106.6 million to £130 million	Flintshire Economic Development Strategy

SA Objective	Guide Questions	Indicators	Targets	Target Source
To develop and market the County's image as a place to live, work and visit.	Will it promote the County's image as a place to do business? Will it support the preservation and/or development of high quality built and natural environments within the County (e.g. town and village centres)? Will it promote the area as a destination for short and long-term visitors and new residents?	Number of VAT registrations/deregistrations (net) Number of tourist visitors (Indicators to support other objectives could also be referred to)	No targets identified	

SA Objective	Guide Questions	Indicators	Targets	Target Source
To maintain and improve the quality of	Will it support rural diversification?	Number of diversification schemes permitted	No targets identified	
life in rural areas	Will it encourage the growth of rural businesses?	Number of rural buildings converted to residential		
	Will it improve access to basic goods and services in rural areas?	Number of farmers markets		
	Will it promote the sustainable growth of market towns?			
	Will it encourage sustainable transport in rural areas?			
To deliver urban renaissance and	Will it deliver high quality urban design?	Peak Zone A Rental for towns in the County ¹² .	No targets identified	
improve the vitality and vibrancy in urban areas	Will it promote good access between employment and residential areas?			
	Will it promote sustainable transport in urban areas?			

¹² Peak Zone A Rental is an indicator advocated by Planning Policy Statement 6 'Planning for Town Centres and is a good indicator of vitality and viability. Peak Zone A Rental is the value of the first 6m depth of floorspace from the shop window in retail units and reflects retailers' perception of the town centre. It is currently unknown whether a similar indicators is used in Wales.

SA Objective	Guide Questions	Indicators	Targets	Target Source
To improve the effectiveness of	Will it encourage the expansion of ICT schemes?	Telecommunications masts permitted/shared		
communications links and infrastructure	Will it promote and maintain the quality of communications links to key growth areas?	Percentage of people living within 400m/8mins walk of a bus stop		
	Will it improve sustainable access to rural areas?			

SA Objective	Guide Questions	Indicators	Targets	Target Source
To ensure that biodiversity is valued, protected and enhanced	 Will it protect and enhance designated sites of nature conservation and geological importance? Will it protect and enhance habitats and wildlife corridors? Will it protect and enhance BAP species and habitats? Will it provide opportunities for people to access wildlife and open green spaces? Will it protect areas of ancient woodland? 	Number and condition of designated sites (data is available on the number and location of the sites but not their current condition) Area of land in active conservation management Distribution of BAP species and habitats. Woodland/farmland bird populations. Number of ancient woodland sites and their extent. Areas of parks and green spaces per 1,000 head of the population (Data for this indicator is being collated as part of the Community Strategy Partnership	No net loss in the number of sites, their extent and current features of interest There are a number of targets specific to each habitat and species action plan – although these may be too detailed for the UDP. Increase in the area of land in active conservation management No further declines in woodland/farmland bird populations. No net loss in the area or number of sites of ancient woodland. <i>A survey of open and green spaces has been undertaken for the County and was due for publication in July 2006 which could provide useful targets). This document has not been made available to date.</i>	CCW Flintshire County Council

SA Objective	Guide Questions	Indicators	Targets	Target Source
To ensure that landscapes and townscapes are properly valued, conserved and enhanced	 Will it protect areas designated as greenbarriers? Will it protect areas of high landscape character and quality e.g. AONBs? Will it promote sensitive design in development? Will it protect and enhance the enjoyment of geological resources e.g. RIGs? Will it protect common land? Will it protect landscape/townscape character and quality? 	Amount and type of new development in the open countryside/green barriers/AONB Number of applications permitted contrary to AONB/green barrier policy Contextual information based upon landscape character assessments Area and distribution of common land	Completion and implementation of Landmap No development in open countryside contrary to policy	Draft Deposit UDP

SA Objective	Guide Questions	Indicators	Targets	Target Source
To ensure that diversity, local distinctiveness and cultural heritage are valued, protected and enhanced	Will it protect and enhance buildings and sites of historic and archaeological importance? Will it protect and enhance sites of historic landscape/townscape value?	Number of Listed Buildings Number of applications for developments on land identified within the register of historic landscapes or within historic parklands Number of conservation areas and appraisals Number of Listed Buildings on the at risk register Applications for development in conservation areas permitted	No increase in the number of Listed Buildings on the at risk register No loss or damage through development to designated sites and buildings No loss of land within the register of historic landscapes or within historic parklands	CCW and Flintshire CC

SA Objective	Guide Questions	Indicators	Targets	Target Source
To protect and enhance water features and	Will it protect and enhance the quality of surface water features?	General Quality Assessment data for main rivers ¹³ .	Incorporation of SuDS in new development	
resources	Will it protect and enhance the quality of groundwater resources?			
	Will it ensure the sustainable use of water resources?			
To avoid, reduce and remediate contaminated soils and encourage the appropriate re-use of suitable brownfield sites ¹⁴	Will it reduce the amount of derelict, under-used and neglected land?	Percentage of derelict- underused and neglected land.	No targets identified	
	Will it encourage development of brownfield land?	Percentage of new homes built on brownfield land		
	Will it encourage remediation of contaminated land?			

¹³ The term main river refers to all watercourses as shown on the statutory main river maps held by the Environment Agency and formerly the Ministry of Agriculture, Fisheries and Food.

¹⁴ It is recognised that sites within and adjacent to the settlement limits may be suitable for redevelopment. However, because of its mining history Flintshire has a number of brownfield sites in the open Countryside and the Clywdian Range AONB and such sites may not be suitable for redevelopment. This issue has been acknowledged when assessing options/policies against this objective.

SA Objective	Guide Questions	Indicators	Targets	Target Source
To reduce greenhouse gas emissions and ensure that adequate adaptation measures to climate change are in place	Will it reduce and manage flood risk? Will it reduce greenhouse gas emissions? Will it encourage the inclusion of SuDS in new development?	Number of planning applications permitted contrary to EA advice on flooding Applications for development in flood risk areas.	No new development on land at risk of flooding (includes land at risk of coastal/riverine erosion) A reduction in carbon dioxide (CO ₂) emissions of some 60% from current levels by about 2050 with real progress by 2020 – UK wide target.	Provisional UDP target Energy White Paper – Creating a Low Carbon Economy
To protect and improve air quality	Will it protect and improve local air quality?	Number of Air Quality Management Areas (AQMAs)	No AQMAs in the County	
To increase energy efficiency and require the use of renewable energy resources	Will it increase energy efficiency? Will it increase the use of renewable energy?	Number of renewable energy projects permitted in the County Percentage of new buildings achieving high energy conservation ratings	Increase the percentage of new buildings achieving high energy conservation ratings above current baseline	
To ensure the sustainable use of natural resources	Will it increase the reuse of recycled aggregates? Will it ensure the sustainable use of mineral resources?	Percentage of recycled aggregates used in construction projects	Increase above current baseline (as identified for 2003)	

SA Objective	Guide Questions	Indicators	Targets	Target Source
To minimise waste, increase re-use and recycling	Will it increase the proportion of waste recycling and re-use? Will it reduce waste generation?	Total tonnage of municipal waste arisings, percentage landfilled Total tonnage of municipal waste arisings, percentage reused or recycled Total tonnage of municipal waste arisings, percentage composted	By 2010 at least 10% reduction in waste produced (compared to 1998 arisings) – National target By 2009/10 and beyond achieve at least 40% recycling/composting with a minimum of 15% composting and 15% recycling – National target	National Waste Strategy for Wales

SA Objective	Guide Questions	Indicators	Targets	Target Source
To promote the use of sustainable modes of transport	Will it reduce reliance on the private car? Will it promote sustainable modes of transport? Will it promote the uptake and use of ICT?	Journey to work by mode Percentage reduction in car trips Levels of public transport usage including taxis, private hire vehicles and community/voluntary transport Number of major applications for which a travel plan is supplied Extent of cycling network Length/condition of Public Rights of Way Percentage of dwellings approved and located within 400m of a regular transport service	Reduce travel by the private car/van below current baseline Preparation of School Travel Plans Number of Travel Plans prepared as part of new developments.	Flintshire County Council



5.4 Elements of the UDP Requiring Assessment

The UDP includes the following elements that were assessed as part of the SA:

- The strategic aims
- The spatial options i.e. where areas of growth and development restraint will occur in the County
- The plan policies

In 2003 a form of SA was undertaken on the UDP and this work was revisited and updated during this assessment.

5.4.1 Assessment of the Strategic Aims

Good practice guidance recommends that the strategic aims/objectives of the plan should be assessed against the SA objectives to test their compatibility and to determine whether they accord with broad sustainability principles. The assessment was undertaken using a simple compatibility matrix and the results are presented in Appendix F.

5.4.2 Assessment of the Spatial Options

The UDP considered 6 spatial development scenarios:

- Locating all development along public transport corridors i.e. the Wrexham-Bidston Line and North Wales Coast Railway Lines
- Spreading development evenly across settlements based on a rigid interpretation of the settlement growth bands
- Identification of a new settlement on a public transport corridor
- Locating development based on an assessment of capacity to accommodate new development
- Locating development only where it would bring regeneration
- Locating development only in areas of market demand

The above options were assessed against the SA Objectives. The aim of the assessment was to highlight the key strengths and weaknesses of each spatial option, to identify potential areas for improvement and to highlight the most sustainable spatial option. The matrix used for the assessment was designed to enable easy comparison of the options and an extract of this is presented in Table 5-4. The terms used in the assessment and their definition i.e. how a positive score was assigned is presented in Table 5-5.

The UDP should contribute to sustainable development and improve on the conditions in the County. Therefore a 'business as usual' option was also considered, to provide a benchmark against which the performance of other options could be judged and to determine the extent to which they would contribute to sustainable development patterns across the County.



SA Objective	Spatial Option 1					
	Performance (spatially)	Commentary				
To reduce crime, disorder and fear of crime	Does the option positively or negatively fulfil the objective.	Justification for the assessment including consideration of the likely timescale over which the impacts will be realised i.e. in the short, medium or long term.				
To maintain and improve levels of educational attainment for all sectors of society						

Table 5-4 Extract of the SA Matrix for the Assessment of Spatial Options

Table 5-5	Notation Used to Complete Matrix

Impact	Description	Symbol
Major Positive Impact	The policy/option contributes to the achievement of all elements of the SA objective.	++
Positive Impact	The policy/option contributes partially to the achievement of the SA objective but not completely.	+
No Impact/ Neutral	There is no clear relationship between the policy/option and/or the achievement of the SA objective or the relationship is negligible.	٥
Negative Impact	The policy/option detracts from the achievement of some elements of the SA objective.	-
Major Negative Impact	The policy/option detracts from the achievement of all elements of the SA objective.	
Uncertain impact – more information required	It is not possible to determine the nature of the impact as there may be too many external factors that would influence the appraisal or the impact may depend heavily upon implementation at the local level.	?
Positive and Negative Impacts	The policy/option has a combination of both positive and negative contributions to the achievement of the SA objective.	+/-

5.4.3 Assessment of the UDP Policies

The UDP includes a large number of policies and so they were rationalised for the assessment. A screening exercise was undertaken, whereby the policies that were considered unlikely to have a significant impact were not



subject to the full assessment using the SA matrix. This is an approach advocated in the Welsh guidance¹⁵ which states:

"The Regulations require the potential effects of all the policies need to be considered, however only likely significant effects need to be fully assessed and recorded. Therefore, it is possible to carry out an initial consideration of all the policies and identify those which are unlikely to have significant effects, and not subject them to the appraisal." (p. 30)

The removal of a policy from the assessment was justified to ensure the process was transparent. Some of the policies that were very similar or sought to achieve the same broad goal were also grouped to further streamline the process and to ensure it focused on the most pertinent issues. Full details of the screening/grouping process are presented in Section 8.2 and Appendix H.

Once the policies had been screened/grouped they were assessed against the SA Objectives presented in Table 5-1 using the symbols in Table 5-5 and the matrix in Table 5-6. When undertaking the assessment the symbols assigned in the matrix were justified in the commentary box along with any uncertainties and assumptions. The 'level of uncertainty' column clarified the confidence of the assessors in the accuracy of the predicted impact being realised The matrix included the identification of both direct and indirect effects.

UDP Policy	UDP Policy											
SA Objective					Scale)				Permanency		Commentary /
		Urba	n		Rura	I		Regior Isbou	n / ndary	uncertainty		Recommendations
	S-T (<5yr)	M-T (5- 10yr)	L-T (>10yr)	S-T (<5yr)	M-T (5- 10yr)	L-T (>10yr)	S-T (<5yr)	M-T (5- 10yr)	L-T (>10yr)	Temporary / Permanent	Low/ Medium / High	
To ensure that diversity, local distinctiveness and cultural heritage is valued, protected and enhanced.	+	+	+	0	-	-	0	0	0	Permanent	Low	Explanation of the assessment

Table 5-6 Policy Assessment Matrix

It should be noted that the policies assessed were those presented in the Draft Deposit UDP subject to any modifications that were made to the policies following the review of representations received since

Sustainability Appraisal and Strategic Environmental Assessment The Flintshire Unitary Development Plan K:\projects\NH50993\F-Reps\SA Report003-NH50993-NHR-01-SA Report-F.doc

¹⁵ Welsh Assembly Government (August 2004) Strategic Environmental Assessment of Unitary Development Plans Interim Guidance



September 2003. This was to ensure that the most up-to-date policies were assessed.

5.4.4 Key Assumptions

All new development will increase waste generation and water and energy consumption and this was not specifically addressed in each of the matrices with the focus being more on whether a particular policy would actually promote waste minimisation and contribute to the better management of water resources and seek to improve energy efficiency.

Although the policies were assessed individually it was recognised that the plan should be read as a whole and that all policies are supported by each other. This was taken into consideration when making recommendations to prevent overly onerous clauses being included in policies that were adequately supported by others in the plan. It was also identified that the potentially adverse impacts of some of the policies in isolation e.g. in relation to their nature conservation impacts could be adequately mitigated through other policies in the UDP.

5.4.5 Site Allocations

Some of the policies in the UDP make specific reference to site allocations and as noted in the Welsh SEA guidance¹⁶ it was necessary to consider these allocations during the policy assessment. The assessment did not investigate each site in detail, as the aim of the SA is not to provide justification for every individual allocation in the UDP but instead to identify key showstoppers e.g. allocated sites infringing on designated areas that might suggest that alternative sites should be pursued or that mitigation measures are required. To inform this element of the assessment GIS mapping was used and the location of the allocated sites reviewed in relation to the constraints that were mapped. The assessment also took into consideration the proximity of the development sites to public transport facilities and amenities along with other relevant social, economic and environmental issues.

Previous work undertaken by Flintshire CC during the development of the UDP that related to the suitability of housing and employment site allocations was utilised.

5.5 Appropriate Assessment

Under regulation 48(1) of the Conservation (Natural Habitats &c) Regulations 1994 as amended it was necessary to undertake a screening exercise to determine whether the UDP either alone or in combination with

¹⁶ Welsh Assembly Government (August 2004) Strategic Environmental Assessment of Unitary Development Plans



other plans would have a significant impact on Special Protection Areas (SPA) classified under the EC Birds Directive 1979 and Special Areas of Conservation (SAC) designated under the EC Habitats Directive 1992. The Welsh Assembly Government requires public authorities to treat potential SPAs, possible and candidate SACs and listed Ramsar sites in Wales as if they are fully designated European Sites for the purposes of considering development proposals that may affect them.

A meeting was held with CCW on 23 August 2006 to discuss how best to address the screening exercise owing to the fact that the SA has been a retrospective process and the decisions regarding the location of development have already largely been decided prior to the SA commencing. An approach was agreed with CCW and the emerging guidance¹⁷ to CCW was discussed.

Full details of the screening exercise are presented in a separate report¹⁸ the results of which have been cross-referenced in this report as appropriate.

A key element of the screening exercise was to define all the European designated sites and their conservation objectives and key features of importance. This exercise was undertaken in conjunction with CCW officers.

5.6 Assessment Workshops

The assessment of the spatial options and the UDP policies was informed by two workshops. The workshops disseminated information about the assessment process to officers at Flintshire CC and engaged a variety of people including policy officers, development control officers, sustainability officers and ecologists. The workshops therefore acted as a 'reality check' by enabling the assessment process to be verified by external parties.

5.7 Modifications to the UDP Based Upon SA Recommendations

At the end of each assessment section, the SA recommendations are clearly identified. These recommendations have been fed back to the planmakers on a regular basis and throughout this document we have highlighted how the SA recommendations have been taken into consideration and influenced the development of the UDP. Full details of how the policies in the UDP have been modified are presented in the 'Flintshire Unitary Development Plan – Pre Inquiry Changes Report.'

¹⁷ CCW (March 2006) The Appropriate Assessment of Plans in Wales, Draft Guidance produced by David Tyldesley and Associates on behalf of the Countryside Council for Wales.

¹⁸ Hyder Consulting (September 2006) Screening Under Regulation 48 of the conservation (Natural Habitats etc) Regulations 1994, Stage 1: Screening Report (005-NH50993-NHR-01).





6 Compatibility of the SA Objectives and UDP Strategic Aims

6.1 Requirements

The vision for the UDP is:

"To nurture sustainable development capable of improving the quality of life in Flintshire without causing long term social, economic, resource or environmental harm to existing or future generations."

The vision is supported by a series of strategic aims that provide the framework for deriving the policies in the UDP. Good practice guidance recommends that the strategic aims/objectives of the plan be assessed for their compatibility with the SA Objectives to test whether or not they accord with sustainability principles. The full compatibility assessment is presented in Appendix F.

6.2 Compatibility Results

Although no significant conflicts were identified, some areas of uncertainty were noted. Uncertainty was identified because it was unknown how the strategic aims might be translated into policy and how they would therefore affect the SA Objectives.

Strategic Aim 4 seeks to develop a thriving, diverse and sustainable economy and this has the potential to be in conflict with SA Objectives 13 to 23 that relate to environmental protection and enhancement. Without knowing the details of the location or design of the economic development it is not known whether they would enhance or detract from these objectives. For example new economic development sites could lead to the loss of greenspace, adversely affect biodiversity and landscape/townscape character and quality and increase travel by the private car. However, Strategic Aims 5, 6, 7, 8, 9, 10 and 12 should all have supporting policies that will help to ensure that any new development includes suitable mitigation measures to minimise these impacts. Similarly there is a potential conflict between SA Objective 4 that seeks to provide good quality and affordable housing and Strategic Aims 5 -10 because of the potential adverse environmental impacts that could arise through new housing developments.

Strategic Aim 11 seeks to promote and support a diverse local culture including the protection and development of the Welsh language, although this should be compatible with SA Objective 6 that seeks to enhance community spirit and cohesion, there may be a conflict if too much of a focus is placed upon the Welsh language and leads to the isolation of people from other ethnic groups.

Strategic Aim 7 encourages the use of renewable energy and whilst this could potentially have a number of environmental benefits there is a risk that this could be in conflict with SA Objective 14 which seeks to ensure that landscapes and townscapes are properly valued, conserved and



enhanced. The policies supporting this Strategic Aim must ensure that this issue is considered before new renewable energy schemes occur in the County.

6.3 Recommendations

Areas of potential incompatibility are inevitable and it will be through the supporting policies that conflicts and uncertainties might be overcome. Although no specific alterations are recommended based on the compatibility assessment, some minor alterations are proposed to further strengthen and clarify the plan's aims.

There are a number of housing policies in the UDP yet there is no specific strategic aim addressing housing, albeit a minor reference in Strategic Aim 2 'Social and Welfare.' A separate Strategic Aim is recommended because of the importance of housing issues in the County and the fact that the strategic aims are supposed to provide the framework for the UDP's policies.



7 Assessment of Spatial Options

7.1 SEA Directive Requirements

Box 4 presents the SEA Directive requirements for the assessment of alternatives.

Box 4 SEA Directive Requirements for the Assessment of Alternatives

The SEA Directive states:

"...an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated" (Article 5.1). Information to be provided in the Environmental Report includes "an outline of the reasons for selecting the alternatives dealt with" (Annex I (h)).

The assessment of alternatives for the UDP comprised the comparison of six spatial strategies for Flintshire to determine the most sustainable option and best way forward for the County. This was a retrospective assessment as the preferred strategy had already been selected prior to this SA commencing. However, the selection of the previous strategy had been informed to an extent by the earlier SA that was completed by Flintshire CC. Nonetheless this retrospective assessment was undertaken with the intention of providing full recommendations to the Council highlighting where modifications would be needed.

The full results of the assessment of the spatial options are presented in Appendix G. A summary of the key sustainability strengths and weaknesses of each of the spatial options is presented below.

7.2 Option 1

Locating all development along public transport corridors i.e. the Wrexham-Bidston and North Wales Coast railway lines.

7.2.1 Key Strengths

The wards located along the public transport corridor would experience social and economic benefits by improving job opportunities, housing provision and access to services and facilities. Some of the wards located along the North Wales coastline are some of the more deprived in the County and so there could be positive regeneration impacts. In the long term there could be reduced levels of crime and improved health and wellbeing if the regeneration is successful.



Focussing development along a public transport corridor should increase public transport use in those particular settlements along the transport corridors and this would have positive impacts for air quality and climate change by reducing vehicular emissions and pollution. However, this is assumed to be a long-term benefit, as a modal shift would be gradual. There could be transboundary impacts as people living outside of the County (i.e. those living along the Wrexham-Bidston line) might decide to commute for employment purposes rather than travelling by car.

The rural parts of the County would indirectly benefit as they would not be the focus for development and so landscape character, cultural heritage, water resources and biodiversity would be preserved. A lack of development in these areas would also help to protect Welsh language and culture and community spirit by ensuring that this is not diluted.

By concentrating development along two key transport routes it could be easier to develop and facilitate recycling and waste minimisation schemes.

7.2.2 Key Weaknesses

The lack of development outside of locations along public transport corridors could increase disparities across the County. Access to services is restricted in rural areas and this option would not help to improve this situation. People living in rural areas may not benefit from the economic development opportunities created along the transport corridors. Some sections of the community might also be more disadvantaged than others. Older people are recognised as being more vulnerable to social exclusion and they might be less able to access transport opportunities and so older people living in rural areas would be less likely to benefit.

The North Wales coastline is at risk of flooding and this risk could increase as a result of climate change. Development in this area would further exacerbate this risk by resulting in the cumulative loss of floodplain. Another significant weakness of this option is that development along the North Wales Coast corridor has the potential to have adverse impacts on the Dee Estuary Ramsar Site, pRamsar, pSAC, pSPA, SPA and SSSI.

Public transport accessibility is restricted in rural parts of the County and this situation would not be enhanced by this option.

Questions could also be raised about the capacity of the rail services to accommodate the scale of development proposed and whether there would be sufficient land available in the settlements for the new development. There may also be education and health facility capacity issues and these are services over which the UDP has no control.

Commercial development is essentially market driven and the success of the commercial development across the County will ultimately depend upon whether locations along these transport corridors are attractive to developers.



7.3 Option 2

Spreading development evenly across settlements based on rigid interpretation of the settlement growth bands.

7.3.1 Key Strengths

Spreading development across all settlements should, in theory ensure that housing needs are met for all and that all people would have the opportunity to benefit from new employment developments and new facilities. However, the viability of economic development in more remote parts of the County might be questioned owing to limited transport connections and the fact that clustering might not be as viable, potentially deterring inward investment.

In some parts of the County that have not previously benefited from new development there could be improvements to community cohesion if access to facilities improves. By ensuring that development is appropriate to the size of the settlement it should be possible to protect any existing community networks that have established and it is felt that this would be more of a benefit in the smaller, rural communities where community networks are likely to be better than in larger towns. In the long term if development stimulates regeneration then there could also be well-being and educational benefits and reduced crime levels in some areas.

7.3.2 Key Weaknesses

A more dispersed settlement pattern would be likely to arise and this would place increasing strain on the already limited public transport network particularly in the west of the County (the scoping stage identified that the bus and rail network is more comprehensive in the east). This could increase travel by private car and increase emissions of pollutants from vehicles with adverse impacts for air quality and climate change.

The long term economic benefits of this option might also be quite limited as the option could constrain opportunities and limit the potential for large, flagship investment sites to be developed.

Impacts upon biodiversity, cultural heritage and the water environment are uncertain because this will ultimately depend upon exactly which sites are developed. However, many urban-fringe sites are particularly biodiverse and so developments across all settlements could see a cumulative loss of this biodiversity resource.

Access to health and educational facilities could be constrained by this option as it is unknown exactly what capacity is currently available and whether facilities in certain settlements could actually accommodate that level of growth. Discussion at the workshop highlighted that health in particular is a more unknown entity because of there being less synergy between the Local Health Authority and the County Council.



A more dispersed settlement pattern could make the co-ordination of recycling schemes more complex.

7.4 Option 3

The identification of a new settlement on a public transport corridor.

It was unknown which transport corridor would be chosen or the precise form or components of the settlement. Although for the purposes of this assessment it was assumed to be a mixed-use settlement comprising residential, employment and amenity/recreational uses. It was assumed that there would not be a brownfield site large enough to accommodate the new settlement and so greenfield land would also be required.

7.4.1 Key Strengths

Within the settlement there would be a number of benefits because of the provision of housing, facilities and employment opportunities. The location along a public transport corridor should also reduce reliance on the private car, although depending upon the size of the settlement it would also be important to ensure that there were good public transport links within the settlement.

By focusing development solely at the settlement environmental resources of other parts of the County, for example areas of high landscape value, would be indirectly protected. Similarly by focusing all development in one area the distinctive characteristics and existing community networks of existing settlements would be indirectly preserved.

Focussing development primarily in one area would also provide the opportunity to more easily co-ordinate recycling initiatives.

7.4.2 Key Weaknesses

The major weakness of this option is that all benefits would be concentrated in one part of the County and this could increase disparities across the County and would not assist the regeneration of some of the more deprived areas. For example, it is questionable whether people living outside of the new settlement would benefit to the same extent from the potential job opportunities offered or benefit from the new facilities.

Community cohesion across the County could be adversely affected because of the perception of solely one area of the County being the focus for investment and development.

This development pattern would also fail to address the existing problems associated with access to facilities in the rural parts of the County and is likely to continue a reliance on the private car to access facilities with associated long term implications for climate change and air quality.

The new settlement would also result in the loss of greenfield land.



7.5 Option 4

Locating development based on an assessment of capacity to accommodate new development.

This assessment assumed that development sites would be allocated based on a full knowledge of environmental constraints and the need and demand for the different types of development within each settlement. It was also assumed that development would occur in areas requiring regeneration.

7.5.1 Key Strengths

The option has a number of strengths as development would be based upon a full understanding of the needs of the County and it therefore fulfils many of the SA Objectives. This would ensure that economic development occurs in the most appropriate locations and, therefore that individuals have equal access to job opportunities through their location at accessible sites. Ultimately a sustainable economy should be achieved. Promoting development in the most appropriate locations should help to market the County as a place to live, work and visit. This option is likely to have positive social impacts particularly in the long term as improved access to job opportunities and leisure facilities could help to reduce crime rates, improve educational attainment and overall well-being.

It is assumed that the rural and urban parts of the County would benefit equally from this spatial option, as urban areas in need of regeneration would be targeted with associated improvements for quality of life, whilst a full understanding of development constraints in rural parts of the County should ensure that development is appropriate, yet fulfils any development needs in these areas. However, a conflict may exist; for example a rural location may need additional facilities but there is a risk that other constraints could inhibit their development.

The environmental resources of the County should also benefit from this option as development would be directed away from sensitive locations e.g. flood risk areas, areas of high landscape and biodiversity value etc.

7.5.2 Key Weaknesses

Although the option would enable housing development to occur in the most suitable locations there is a possibility that all areas of the County where the housing is required would not be provided for, because of other constraints. This is an issue that would need to be resolved on a site-by-site basis and, therefore it is possible that the objective 'to provide access to good quality, affordable housing that meets the needs of the community' would not be fulfilled.

The option could also reduce the likelihood of major flagship economic development sites being brought forward because of other capacity and



constraint issues precluding their development. This could inhibit the County's economic growth and potentially its marketability to investors.

There are no other significant weaknesses but it is unknown at this stage how transport patterns and access would be affected and hence whether there would be either beneficial air quality or climate change impacts.

It is recommended that the location of public transport facilities and the likely future provision of additional facilities should be a key decision when deciding upon development locations across the County.

7.6 Option 5

Locating development only where it would bring about regeneration.

It was assumed that under this scenario development would primarily be located in the urban/former industrial parts of the County with isolated areas of development in more rural locations if it would stimulate regeneration.

7.6.1 Key Strengths

In the areas where development would occur, many of the objectives would be partially fulfilled. There are a number of wards along the North Wales Coast where development could offer a number of benefits, for example by providing access to better quality housing and new job opportunities. The areas where levels of deprivation tend to be highest are the areas where there have been significant closures or downsizing of major employers and, therefore new employment sites in these areas, providing they would seek to employ local people could potentially upskill the local workforce. There could be wider social benefits associated with development in these areas by reducing crime rates, improving well-being and potentially improving the skills base if people have improved access to educational establishments and training facilities. These benefits are more likely to be realised in the long term as improvements would be gradual and possibly influenced by the lead in time of new developments and regeneration projects.

In areas that would not benefit from development, there could be indirect benefits for Welsh culture and language as there would be a reduced risk of existing characteristics being diluted by new development. There could also be benefits in the areas targeted for development if new cultural resources are provided.

Although not of all of the County would benefit from new development, the focus upon delivering regeneration in the County should improve its overall marketability by improving the quality of the living environment and the reputation of a number of wards.

There are likely to be positive townscape/landscape benefits as it is considered unlikely that there would be significant development in rural areas with more of a focus upon urban areas which would benefit from



townscape enhancements providing the development is appropriate to the locality. The option is also likely to encourage the remediation of brownfield sites within the former industrial areas and could indirectly protect more rural parts of the County from development.

It is uncertain how travel patterns would be influenced by the option and hence how air quality would be affected. Although if more development occurs in urban areas then reliance on the private car might decrease in these areas as public transport networks are better developed in these parts of the County. However, issues of public transport accessibility would remain in rural parts.

7.6.2 Key Weaknesses

The major weakness of this option is its lack of focus upon the County as a whole, with it being very one-sided and solely focused upon regeneration. Whilst it is recognised that there might be some multiplier effects and benefits for the wider County, it is felt that there would be a risk that people in more rural locations would not benefit to the same extent from the job opportunities, nor would their housing needs be achieved. Similarly it is considered unlikely that there would be a reliance on the private car to access facilities and employment. Opportunities for rural diversification would also be limited.

There is a recognised housing affordability problem in rural parts of the County and it is unknown whether this option could address this issue.

7.7 Option 6

Locating development only in areas of market demand.

For this option the siting of development would be highly uncertain, as it would be dependent upon market forces. However, it was assumed that greenfield locations are often likely to be more preferable.

7.7.1 Key Strengths

No significant strengths have been identified. The option would probably stimulate benefits local to the areas where development occurs. Dependent upon the scale of development that occurred, in certain areas there might be improved access to facilities, employment opportunities and housing with associated community cohesion and social benefits.

New economic development, irrespective of its location should, contribute to the development of the County's economy although not all sectors of society might benefit from the employment opportunities generated.



7.7.2 Key Weaknesses

There are a number of weaknesses associated with this option because of the likelihood that it would not provide benefits for all living in the County. For example the type of housing developments that would occur might not be accessible to all people either in terms of their location or their affordability. It is also possible that the existing issue of house prices being driven up by wealthier in-migrants choosing to live in the County could continue because of the likelihood of greenfield sites being preferred by developers. This would also result in adverse impacts on landscape, the potential loss of areas of greenspace, adverse impacts to the character and distinctiveness of rural villages and potential threats to community cohesion.

It is anticipated that the use of brownfield sites in urban areas would be limited because of the costs associated with the remediation of the sites.

It is unknown how the option would influence travel patterns but a strategy that is entirely dependent upon market demand has the potential to lead to a more dispersed settlement pattern and increased development in rural areas where public transport links are already very limited.

Economic investment would occur in the County but these job opportunities are unlikely to be available for all and regeneration of the more deprived parts of the County are unlikely to be realised. This means that the wider social benefits that can occur as a result of development including improved well-being, educational attainment and reduced crime rates are unlikely to arise.

7.8 Option 7

Business as Usual scenario.

This scenario is essentially the continuation of current policies, following, which there would be no planning policy intervention at the County level and hence a reactive approach to development would occur.

In short, a continuation of the current baseline trends would be likely, as current planning policy would have influenced those trends. National policy would continue to apply and ongoing initiatives in Flintshire relating to the regeneration of some of the more deprived communities/wards would continue. Consequently it might be expected that there could be some economic improvements associated with any social and economic regeneration that occurs. The role of the statutory consultees (EA, CCW and Cadw) would still enable environmental protection and enforcement, along with their continued active role in planning applications. However, the business as usual approach would be far less pro-active with no forward thinking and the absence of a sustainable planning strategy. It is considered that without pro-active intervention, truly sustainable development is unlikely to be achieved in Flintshire with development being largely reliant upon free-market forces.



7.9 Recommendations and the Preferred Strategy

The spatial option identified in the draft deposit UDP was a hybrid of some of the above options and was justified as follows:

'The most sustainable option is clearly that which is based on a capacity assessment of each settlement or area. However, if the plan is to be deliverable it must also incorporate elements of regeneration, have regard to public transport corridors and satisfy both the market demand for and social need for housing. The plan, therefore adopts a hybrid spatial approach which is considered to represent a sustainable framework for the delivery of and control of development in the County over the Plan period.'(Draft Deposit Plan September 2003, p. 12).

The SA of the spatial options supports the approach adopted by the Council as none of the strategies in isolation would be entirely appropriate with each of them offering some sustainability benefits and disbenefits. Some of the key strengths emerging from each of the options are summarised below.

- The positive regenerative benefits for parts of the County offered by targeting development in regeneration areas. This could achieve long term improvements to the towns along the North Wales coast which are identified as suffering from deprivation on the WIMD.
- The beneficial impacts from an accessibility and environmental perspective offered by locating all development along public transport corridors. Although the capacity of these transport corridors to accommodate the level of development proposed is unknown.
 However, there are risks associated with extensive development along the North Wales Coast Railway line because of the large amount of land which lies in the floodplain and the presence of the Dee Estuary SPA, pSPA, SSSI, pSAC, Ramsar and pRamsar Site.
- Balanced development across the County i.e. appropriate to the settlement size and character should help to protect existing community networks and ensure that access to facilities is not compromised.
- There is a need for some flagship investment sites to be developed to drive forward investment in the County and to achieve economic growth.
- The allocation of sites should be based on some knowledge of the existing social, economic and environmental constraints in that area to ensure that adverse impacts are avoided. This is particularly important in view of the high quality environmental resources in the County and the risk of incremental development having a cumulative adverse impact on these sites.

The key elements of the preferred hybrid UDP strategy are:

- Creating a settlement pattern whereby:
 - a Most new development will be directed to the main towns (category A settlements which have an indicative potential



growth band of 10%-20% which have existing infrastructure, jobs, services, subject to environmental and other constraints.

- **b** New development will be directed to those semi-urban villages (category B settlements which have an indicative growth potential band of 8%-15%) which have exiting facilities, jobs, services subject to environmental and other constraints.
- **c** New housing is restricted in rural villages (category C settlements have an indicative potential growth band of a maximum of 10%) due to the general lack of existing facilities, jobs, services and presence of environmental and other constraints.
- Resisting pressure for sporadic unnecessary development in the open countryside, particularly along the A55(T) corridor and the undeveloped coast.
- Adopting a sequential approach to the identification of land for development whereby derelict and redundant land and buildings is utilised in preference to greenfield land.
- Encouraging efficient use of land through higher densities, particularly in locations close to existing services and public transport routes.
- Protecting and enhancing the landscape character and quality of the Clywdian Range AONB
- Protecting and enhancing the environmental quality of the County generally in terms of landscape, nature conservation and biodiversity as well as important green spaces within towns and villages
- Protecting and enhancing those aspects of the built environment which are of architectural or historic importance including listed buildings, conservation areas, archaeology and historic parks and gardens.
- Designating green barriers only where additional policy protection is necessary to protect the open character and appearance of sensitive and strategic areas of land and prevent settlements from merging.
- Promoting the revitalisation of town centres and other local/district centres which offer a range of everyday shopping, community and employment opportunities.
- Promoting the regeneration of older and run down settlements and built up areas.
- Directing employment development to existing employment sites and buildings, allocating new sites which are well related to the existing population, services and public transport and promoting the diversification of the rural economy.
- Improving major transport corridors through the County including the Wrexham-Bidston and North Wales Coast railway lines and the A55(T), A494(T) and the A548.
- Locating major generators of travel demand in existing centres which are highly accessible by means other than the private car.



The hybrid option was subject to an assessment against the SA objectives and the full details are provided in Appendix G.

This hybrid option should enable balanced development to be achieved although this will have to supported by a strong suite of policies that ensure that development is appropriate to the existing social, cultural, economic and environmental resources. This is particularly important for issues that are not explicitly covered in the strategy, for example the avoidance of development in the floodplain and the need to protect Welsh cultural resources. The hybrid option could be further strengthened by it clearly stating that significant adverse impacts on sites of international and national importance would not be acceptable.

7.9.1 Recommendations for the Local Development Plan (LDP)

Owing to the late commencement of the SA in relation to the UDP's development it was not possible to influence the development of the spatial strategy from the outset. There are a number of issues that could be carried forward to the LDP development.

The spatial options reviewed as part of this assessment solely looked at the spatial distribution of development and not the level of growth that is necessarily appropriate. This is an omission of the UDP and it is recommended that when the LDP is taken forward a full economic need and capacity study is undertaken.

The spatial strategy for the LDP should also be based upon an understanding of the capacity of the transport networks in the County to accommodate a particular level of development to ensure that new development would not be placing unnecessary pressure on existing networks. A close working relationship is needed between the transport and the land-use planners to try and work towards more sustainable landuse and travel patterns.


8 Assessment of UDP Policies

8.1 SEA Directive Requirements

The SEA Directive requirements in relation to assessment are presented in Box 5.

Box 5 SEA Directive Requirements for Assessment

The SEA Directive states:

Information to be provided in the Environmental Report includes:

"the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, materials assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. These effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, positive and negative effects" (Annex I (f) and footnote).

Although the UDP policies were assessed individually, when considering the mitigation and recommendations for improvement, the other plan policies were taken into consideration as the plan should be read as a whole.

8.2 Policy Screening Exercise

Prior to assessing all of the policies, a screening exercise was undertaken to determine whether or not they would be likely to have significant effects and therefore need to be subject to a full assessment using the matrix. The table in Appendix H indicates which policies were screened out and those that have been grouped to further streamline the process. Full justification for screening/grouping is provided in the table.

This section of the report should be read in conjunction with the policies presented in the Pre Inquiry Changes Report.

The completed matrices supporting this section of the report are presented in Appendix I.

8.3 Part 1 Policies

There are 11 Part 1 policies which are the strategic plan policies and set the framework for the more detailed policies of the UDP. Although each of the policies was subject to an individual assessment, in reality they all support each other and cannot be treated in isolation. This was acknowledged in the assessment.

Sustainability Appraisal and Strategic Environmental Assessment The Flintshire Unitary Development Plan K:\projects\NH50993\F-Reps\SA Report\003-NH50993-NHR-01-SA Report-F.doc



8.3.1 Key Strengths

All of the policies positively contribute to the achievement of most of the SA objectives. Policy STR1 sets the framework for all new development across the County and its reference to the need to adopt a precautionary approach and to refuse developments that would have significant adverse environmental, social, economic or cultural impacts ensure that many of the sustainability objectives are fulfilled. Whilst it could be argued that this sort of stringent policy could deter a lot of development and hence the wider economic growth of the County it recognises that the County has important distinctive components that need to be protected and hence must be appropriately considered in all applications.

Policy STR2 seeks to ensure that an efficient and integrated transport system is developed and this positively fulfils the objectives 'To improve the effectiveness of communications links and infrastructure' and 'To promote the use of sustainable modes of transport.' There could also be indirect benefits for the wider environment in the long term if a modal shift occurs and reliance on the private car decreases.

Policy STR3 positively fulfils the objective 'To promote a sustainable economy and business development' as it requires the provision of a variety of employment sites and as well as promoting development in existing settlements and principal employment areas recognises the need for rural diversification and hence should ensure that a range of job opportunities across the County are created. This will have wider benefits for the marketability of the County as a place to live, work and visit.

The focus of policy STR4 on ensuring that new housing distribution is based on the existing settlement hierarchy should ensure that existing levels of community cohesion are not adversely affected and that issues associated with the capacity of educational and health facilities to serve the new housing allocations are avoided. Similarly STR5 is strong in its requirement for commercial development to be appropriate to the existing settlements and for it not to adversely affect their vitality and vibrancy.

The tourism policy (STR6) has the potential to stimulate/contribute to economic growth and this could be particularly important for the County as this was identified as an area of the County's economy that is relatively underdeveloped. Risks to the area where new tourist developments might occur should be avoided as the policy clearly states that they should be appropriate to the locality. Tourism development presents an opportunity to develop and increase understanding of the Welsh language and culture.

Policy STR7 and STR8 positively fulfil most of the SA objectives that focus upon environmental protection and enhancement and only a couple of minor omissions were identified (see Section 8.3.2 below).

Policy STR9 is focused upon Welsh language and culture and the policy positively fulfils the SA objectives that seek to protect and enhance Welsh language and cultural resources, improve community spirit and cohesion and develop and market the County's image.



Policy STR10 positively contributes to the achievement of the objectives relating to energy efficiency, waste minimisation, the use of natural resources and the protection of water resources.

Policy STR11 could contribute to long term health benefits, improve access to recreational facilities, contribute to the development of the economy and help to market the County as a place to live and do business. The policy is also clear that such development should be appropriate to the locality and seeks to protect existing areas of open space and the Dee Estuary.

8.3.2 Key Weaknesses

The main weakness of policy STR1 could be the wording 'have regard to' in clauses d and e as this does not necessarily suggest that the new developments should not have an adverse impact on standards of residential and other amenity, community identity, social cohesion or community facilities. However, criterion g of the policy is very strong in its requirements for their to be no adverse impacts and so overrides any potential weakness of this wording.

Although policies STR3, STR4 and STR5 do not specifically mention that such developments should not adversely impact upon the environment, when undertaking the matrix assessment this was not identified as a specific weakness as environmental protection and enhancement issues are assessed in other Part 1 policies: STR1, STR7 and STR8. Employment and commercial developments could potentially threaten the Welsh language or existing levels of community spirit and cohesion and this issue is not specifically identified as a clause in either of the policies. However, it is addressed in policies STR9 and STR1 and so is not a specific weakness.

Policy STR7 fails to mention the need to protect either air or land quality, both of which are important element of the natural environment. The policy could also seek to enhance as well as protect the water environment, as it may be possible for some developments to incorporate planting regimes that could enhance nearby water features.

Although policy STR9 seeks to protect the Welsh language and culture its wording is a little weak as it states that development proposals should only 'have regard to' Welsh language and culture. As this policy should ensure that the employment, commercial, housing and tourism developments proposed by the other Part 1 policies do not lead to an erosion of this culture its wording could be strengthened.

Policy STR10 infers that sustainable sourcing of materials i.e. the use of recycled or secondary materials should be pursued in new developments but this could be made more explicit through the inclusion of an additional clause specifically addressing this issue.

A recurring issue when assessing policies STR3, STR4, STR5, STR6, and STR11 was the potential climate change impacts as all such development have the potential to increase travel and use of the private car within the



County. The policies go some way to addressing this issue as STR5 'Shopping Centres and Commercial Development' promotes town and district centre locations where public transport links are likely to be better. This is an issue faced by all local authorities as the need to develop and provide new facilities, inevitably generates wider issues. Policy STR2 goes some way to reducing the risk of adverse climate change impacts by being very clear in its requirements for improvements to public transport, walking and cycling provision and ultimately reducing reliance on the private car. The requirements of STR10 should also encourage developers to consider renewable energy sources and sustainable energy generation systems.

8.3.3 Recommendations

Based upon the assessment the following modifications are recommended:

- Policy STR1 No recommendations.
- Policy STR2 No recommendations.
- Policy STR3 No recommendations.
- Policy STR4 No recommendations.
- Policy STR5 The policy could be strengthened by it making specific reference to the need for commercial development to utilise brownfield sites. Although it is recognised that this issue is covered in policy STR8.
- Policy STR6 No recommendations.
- Policy STR7 An additional clause stating that impacts on soil/land quality and air quality should be minimised would ensure that all elements of the natural environment are addressed. Clause f of the policy could be re-worded to 'protection and *enhancement* of the water environment.'
- Policy STR8 No recommendations.
- Policy STR9 No recommendations.
- Policy STR10 An additional clause could be included in the policy stating that new developments should seek where possible to utilise secondary and recycled materials in their construction. This policy could also be consolidated by Supplementary Planning Guidance (SPG) specifically addressing resource issues. This document could include specific targets that developers should work towards. This would provide developers with a very clear message that the County is striving to be sustainable.
- Policy STR11 No recommendations.



8.3.4 How Have Recommendations Been Taken Forward?

Policy STR 5 – no amendments have been made as policy STR8 covers brownfield developments.

Policy - STR7 – Policy has been modified in line with the recommendations.

Policy STR10 – Policy has been modified in line with the recommendations.

8.4 General Development Considerations

There are six policies in this part of the UDP which were subject to an assessment.

8.4.1 Key Strengths

Policy GEN1 relates to the overall design of new developments and the need for them to be well designed in relation to their surroundings. The policy contributes positively to the achievement of a number of the SA objectives, particularly those seeking to protect biodiversity, landscape, cultural heritage, water resources and air quality. The policy also indirectly promotes the use of more sustainable modes of transport because of clause g which states that development should be accessible to public transport and where possible well related to pedestrian and cycle routes. The policy should also work towards the achievement of urban renaissance in the long term as high quality, well designed developments should improve the quality of the urban form. The policy also requires that new developments to the objective 'to reduce crime and fear of crime.'

By focussing development within settlement boundaries (Policy GEN2) there could be long term benefits for urban renaissance by improving the vitality and vibrancy of urban areas and improving the fabric of the urban environment. There could also be improvements for access to facilities in the settlements where development occurs. Policy GEN2 could also indirectly protect the character and quality of the rural parts of the County and this coupled with the provision of new facilities and development within urban areas could contribute to the image of the County as a place to work and live.

Policy GEN3 permits development outside of settlement boundaries in exceptional circumstances. The policy is clear that rural diversification schemes and the provision of new facilities e.g. leisure will be permitted provided there would be no adverse impacts on the social, natural and built



environment. This should ensure that opportunities exist to develop the rural economy and improve access to facilities whilst at the same time protecting the environment. The policy also includes provision for affordable housing schemes in rural areas. This is an important clause in the policy because this is a recognised issue in the County. The policy requirements relating to the protection of the natural and built environment result in a positive contribution to the achievement of a number of the SA objectives.

Policy GEN4 which designates green barriers positively contributes to the objective ' to deliver urban renaissance and improve the vitality and vibrancy in urban areas' as it should focus development within urban areas and could also encourage the re-use of brownfield sites. There would also be benefits for the natural environment where green barriers are located by protecting the existing landscape and other features of importance from development and so should have benefits for the County's image and also rural quality of life. The policy establishes that development may be appropriate in green barriers and so does not necessarily preclude development that would be essential to improve rural quality of life e.g. rural diversification schemes.

Protecting Welsh language and cultural identity (Policy GEN6) positively fulfils the objectives 'to protect and enhance the Welsh language and cultural resources' and ' to protect and enhance community spirit and cohesion.' There are also likely to be benefits for rural quality of life and the image of the County by ensuring that distinctive features of the County's culture are preserved.

Policy GEN5 (Environmental Assessment) should, theoretically protect environmental resources by ensuring that the potential impacts of a development are thoroughly assessed. There is, however no guarantee that there would be no significant adverse impacts and so performance against the objectives was largely uncertain. Nonetheless this is a strong, essential policy that needs to be included in the UDP.

8.4.2 Key Weaknesses

There are no significant weaknesses associated with Policy GEN1 but the policy could be used as an opportunity to encourage the use of clean, renewable and sustainable energy sources, to minimise waste production and to promote the use of sustainable construction materials. Clause c of the policy uses the term 'should not have an unacceptably harmful effect' in relation to the protection of environmental resources. The term could be interpreted in a number of ways and this could be clarified further. This weakness was also identified for policy GEN3.

8.4.3 Recommendations

Based upon the assessment the following modifications are recommended:



- Policy GEN1 The policy could include an additional clause promoting the use of sustainable construction materials, sustainable energy sources and encouraging waste minimisation. Clause c of the policy could be re-worded as follows: 'the development should not have a *significant adverse effect* on recognised wildlife species and habitats, woodlands, other landscape features, townscapes, built heritage, features of archaeological interest, nor the general natural and historic environment. The development would be expected to include mitigation measures to address any potentially significant impacts.'
- Policy GEN2 No modifications recommended
- Policy GEN3 The term 'no unacceptable impact' in clause g of the policy could be re-worded in line with the recommendations for policy GEN1.
- Policy GEN4 No modifications recommended.
- Policy GEN5 No modifications recommended.
- Policy GEN6 No modifications recommended.

8.4.4 How Have Recommendations Been Taken Forward?

Policy GEN1 – Issues relating to sustainable construction, sustainable energy sources and waste minimisation can be addressed through the Energy, Waste and Pollution policies. The wording of the policy has been modified to state: 'the development should not have a significant adverse effect...'

Policy GEN3 – policy has been re-worded in line with recommendation.

8.5 Design

The UDP includes eight policies addressing development design: of which seven were grouped together and one was screened out of the assessment.

8.5.1 Key Strengths

These policies contribute positively to the achievement of a number of the objectives as they seek to ensure that new development is suitably located, designed, constructed and treated in terms of its landscaping and lighting provision. By ensuring that development is of a high quality it should be possible to improve the vitality and vibrancy of urban centres and ensure that development is appropriate to the setting and character of rural



locations. The policies also recognise the need to preserve local distinctiveness.

There are environmental benefits offered by these policies as policy D2 advocates the need to minimise travel, recognises the importance of protecting the landscape, making efficient use of the land and policy D3 places an emphasis upon protecting the character and amenity of the locality and adding to the quality and distinctiveness of the local area.

Lighting would influence the impacts of a new development on landscape and townscape character and this is particularly important in the rural parts of the County. This issue is addressed in policy D5 and should ensure that lighting provision is appropriate, whilst at the same time ensuring that safety issues are adequately considered.

Policy D6 seeks to ensure that developments are designed to minimise the risk of crime and this should help to reduce fear of crime and so has a major positive impact when assessed against the impact ' to reduce crime, disorder and fear of crime.'

In the long term high quality design should increase the marketability of the County as a place to live, work and visit and the provision of high quality developments within the County might in the long term help to encourage inward investment and have positive impacts for the County's economy.

8.5.2 Key Weaknesses

A number of other potential benefits included siting development to avoid detrimental effects in features of significant nature conservation, historic or architectural value, encouraging the re-use of existing buildings and materials and reducing energy consumption are identified as elements of the policies in the supporting explanatory text. However, these are not translated into specific requirements in the policies themselves and this is a major weakness of these policies. The influence of the policies could be much greater if some of these issues are translated into specific clauses of the policies.

Despite the above weakness, the policies should provide a holistic means of ensuring that high quality design is delivered across the County.

8.5.3 Recommendations

Based upon the assessment the following modifications are recommended to the policies:

- Policy D1 No modifications.
- Policy D2 An additional clause could be added to the policy relating to the need to site development such that it will not have an adverse impact on features of significant nature conservation, historic or architectural value.



- Policy D3 This could be further enhanced to encourage the incorporation of renewable energy schemes into new developments, for example the use of photovoltaic panels on new houses where appropriate. The explanatory text of this policy also suggests that the re-use of existing buildings and materials should be encouraged and it is recommended that this becomes a specific clause in the policy. The policy could also cross-reference policy EWP2 of the UDP which addresses energy efficiency in new development.
- Policy D4 No modifications recommended.
- Policy D5 No modifications to the policy itself, although the policy could refer to Policy L1 – Landscape Character as lighting associated with new developments can influence landscape character.
- Policy D6 No modifications recommended.
- Policy D7 No modifications recommended.
- Policy D8 Although Policy D8 was screened out of the assessment it is recommended that an additional requirement is added to this policy such that it is clear that new outdoor advertisements would not be permitted where they would adversely impact upon landscape/townscape character.

8.5.4 How Have Recommendations Been Taken Forward?

Policy D2 – The policy is focused on design issues and heritage and nature conservation issue are adequately addressed in the Historic Environment and Wildlife and Biodiversity chapters of the UDP.

Policy D3 – The policy has been amended to cross-reference policies EWP2 and EWP9. The word 'buildings' has been deleted from the policy title as it concerns all types of developments.

Policy D5 – A cross-reference to policy L1 is not regarded as necessary.

Policy D8 – the policy has been clarified in line with the recommendation.

8.6 Trees, Woodlands and Hedgerows

There are four policies in this chapter of the UDP, three of which were grouped together for the assessment.

8.6.1 Key Strengths

All of the policies in this chapter would positively fulfil objectives relating to the protection of biodiversity and landscape/townscape character and quality. The protection of hedgerows would also have benefits for the



cultural resources of the County as they are frequently important for their historic or archaeological value. The preservation of such features could also have long term benefits for health and well-being and community cohesion when combined with other policies of the UDP that seek to protect areas of open space. Policy TWH4 also seeks to build upon the existing woodland assets of the County by promoting new woodland management and planting.

8.6.2 Key Weaknesses

No significant weaknesses were identified. Although clause c of policy TWH2 could be clarified by stating that replacements trees should be appropriate to the character and ecology of the area.

The first two policies are very similar and it might be argued that the provision of one overarching policy addressing development and trees would be sufficient.

8.6.3 Recommendations

Based upon the assessment the following modifications are recommended;

- Policy TWH1 This policy could be combined with policy TWH2 to create one overarching policy.
- Policy TWH2 Clause c of the policy could make reference to the need for replacement trees to be suitable to the *ecology* of an area. This policy could be combined with policy TWH1.
- Policy TWH3 No modifications recommended.
- Policy TWH4 No modifications recommended.

8.6.4 How Have Recommendations Been Taken Forward?

Policy TWH1 – this has been combined with policy TWH2 to create one overarching policy.

Policy TWH2 – the policy has been combined with policy TWH1.

8.7 Landscapes

There are six policies within the landscapes chapter of the UDP, all of which were assessed separately.

8.7.1 Key Strengths

All of the policies seek to protect and enhance the County's landscapes including those of national (the AONB) through to those of more local importance (green spaces). The protection of these areas should also offer



protection to cultural heritage and biodiversity resources and so positively contributes to the achievements of these objectives. The policies should improve the overall quality of the County's environment and help contribute to improving the vitality of urban areas; particularly through policy L5, which encourages the use of environmental improvement schemes to regenerate areas of currently under-used and neglected land. There could also be local community benefits by introducing such schemes and increased civic pride if high quality environments are delivered. There are also long-term economic benefits associated with these policies because the attractive landscape of the AONB should contribute towards the tourist revenue generated in the County and improvement schemes in urban areas could help to market some of the urban parts of the County as an attractive place to live, work and visit.

There is also the possibility that by seeking to protect green spaces, common land and the coastline that there could be indirect benefits for brownfield site regeneration because of the constraints of developing in areas designated for their landscape importance.

All of the sites of landscape value are of recreational importance and so there could be indirect benefits for health and well-being by maintaining access and ensuring that such sites are protected from inappropriate development.

Policy L6 addressing the coastline is also particularly stringent in its requirements and, therefore positively fulfils objectives relating to biodiversity, water resources, landscape character and climate change (reducing flood risk) because these issues are explicitly addressed in the policy wording.

8.7.2 Key Weaknesses

One of the most significant weaknesses is the failure of Policy L1 to discuss townscape. The policy is merely focused upon landscape character and there are no other policies in the UDP, with the exception of Policy HE1 – Development Affecting Conservation Areas that consider the townscape or built environment. It is vital that all new development is in keeping with the urban townscape and hence this is something that needs to be addressed in a specific policy.

Issues of tranquillity are also very important when addressing landscape character. A UK Government Study in 2001 identified that tranquillity was a positive feature people mentioned most in describing why they visited the countryside. Tranquillity is not easily defined but is linked to noise levels and visual disturbance and as it is so important it is suggested that this issue is raised in Policy L1 and L2.

The Clwydian Range AONB Management Plan 2004 states that key components of the 'natural beauty' of the AONB are the flora, fauna, geological as well as the landscape features. These issues need to be further emphasised in Policy L2 or within the explanatory text.



Policy L6 is comprehensive in its coverage of issues that need to be considered in advance of any development occurring along the County's coastline. However, flood risk and climate change are very real and longterm issues that could have potentially significant consequences for the County's coastline and as such it is recommended that policy EWP16 Flood Risk is cross-referenced in this policy.

8.7.3 Recommendations

Based upon the assessment the following modifications are recommended to the policies:

- Policy L1 The policy needs to be expanded, or an additional policy created to address townscape character and quality. The policy wording or explanation should also make reference to the need to preserve the tranquillity of rural parts of the County.
- Policy L2 The policy wording should be expanded to state that development will only be permitted where it would not adversely affect the nature conservation, geological, heritage and cultural functions of the AONB. The need to preserve the tranquillity of the AONB should also be included.
- Policy L3 The policy could be clarified further to state that development will only be permitted in green spaces which "does not undermine their function or value as a green space, *nor threaten their value to the community*". This is recommended because green spaces can frequently be an important element of villages and their communities.
- Policy L4 No modifications recommended.
- Policy L5 No modifications recommended.
- Policy L6 Owing to the significant climate change and flood risk implications for this stretch of coastline it is recommended that policy EWP16 is cross-referenced to ensure that developers are aware of the need to fully and adequately assess flood risk.

8.7.4 How Have Recommendations Been Taken Forward?

Policy L1 – The recommendations regarding townscape and the need to consider tranquillity have been incorporated into the policy wording and the explanatory text supporting the policy.

Policy L2 –The explanatory text makes reference to the AONB management plan which can be read in conjunction with the UDP. The text of the policy has been revised to reflect the recommendations.

Policy L3 – The recommendations have been included in the policy.

Policy L6 – A cross reference to the flood risk policy has been included.



8.8 Wildlife and Biodiversity

There are six policies in this chapter of the UDP, of which three were grouped together for the assessment.

8.8.1 Key Strengths

The major strength of these policies is their protection of the biodiversity resources across the County. This would also result in positive transboundary impacts, for example the Dee Estuary and the River Dee designations extend into other authority areas. The policies would also result in indirect benefits for landscape/townscape and water resources. The protection of sites would have positive impacts for the quality of the County's environment which could have knock on benefits for its image as a place to work, live and do business. Policy WB6 is an enhancement policy and so positively fulfils all elements of the policy 'to protect and enhance biodiversity.' By protecting the County's wildlife and biodiversity resources there could be indirect benefits for the long-term well-being of the County's population.

8.8.2 Key Weaknesses

There could potentially be a conflict between these policies and the re-use and redevelopment of brownfield sites as they can be highly biodiverse. This is an issue that would need to be explored on a site by site basis with appropriate mitigation measures incorporated into any development proposals on such sites.

Policy WB1 could be clarified as the term 'important species' is quite ambiguous i.e. is the policy referring specifically to Biodiversity Action Plan species?

All of the policies use different wording when referring to the need to protect the sites, habitats or species. Policy WB1 uses the term 'to secure their long term protection...' policy WB2 states '...adversely affect the integrity...,' WB3 states '...have an adverse effect on...' and WB4 states '...that is likely to destroy or seriously affect...' There is an opportunity for a consistent approach to be adopted and for the provisions of the policy WB2 to be strengthened because the policy is protecting sites of international importance. The policy needs to make it clear that cumulative effects on Ramsar and Natura 2000 sites must also be assessed.

8.8.3 Recommendations

Based upon the assessment the following modifications are recommended.

 Policy WB1 – The policy could be clarified by defining exactly what is meant by the term 'important species', for example is this referring to



Biodiversity Action Plan species? It is also recommended that the term 'significant adverse effect' is used and this is recommended for all of the wildlife and biodiversity policies to ensure they all use consistent terminology.

- Policy WB2 This policy is one of the most important policies in the UDP because of the number of Natura 2000 sites in the County. The policy could be improved as follows: 'No development will be permitted unless either it is established that it is not likely to have a significant effect on any Ramsar site or Natura 2000 site (including Special Protection Areas, potential Special Protection areas, Special Areas of Conservation, candidate or possible Special Areas of Conservation or it is ascertained, following appropriate assessment, that it will not adversely affect the integrity of any Ramsar site or Natura 2000 site." This policy would provide sufficient protection to the sites and ensure that development undertaken in furtherance of the UDP would not have a significant adverse effect on a European Site.
- Policy WB3 As for policy WB1 the term significant adverse effect should be used.
- Policy WB4 The policy should be re-worded as follows: 'Wildlife Sites and Regionally Important Geological Sites will be protected. Planning permissions will not be granted for development that would have a significant adverse effect on their nature conservation or geological value.
- Policy WB5 The policy should be re-worded as follows:
 'Development will be permitted that will not have a significant adverse effect on wildlife and habitats of local importance.'
- Policy WB6 No modifications recommended.

8.9 Historic Environment

The historic environment chapter of the UDP comprises eight policies, of which some were grouped together for the assessment because they were very similar.

8.9.1 Key Strengths

These policies are very specific to cultural heritage and so do not impact upon many of the SA objectives. All of the policies would positively contribute towards the objective 'To protect and enhance the cultural heritage resource.' Cultural heritage features can also be important elements of the landscape/townscape and so there could be benefits for landscape/townscape character and quality. Some Conservation Areas or cultural heritage resources may also be distinctive Welsh cultural resources. Policy HE1 specifically refers to the enhancement of the character or appearance of Conservation Areas and this is a particularly positive element of this policy as it actively seeks to improve upon the existing quality of these areas.



Cultural heritage resources can be important recreational resources and are occasionally a source of tourist revenue and hence their protection and enhancement could have indirect positive social and economic impacts.

8.9.2 Key Weaknesses

There were no significant weaknesses noted although policies HE6 and HE7 which seek to protect archaeological monuments and features of national through to local importance could indirectly hinder the redevelopment of brownfield sites if they are present. This issue would have to be addressed on a site-by-site basis. However, policy HE8 states that development will be permitted where there is adequate recording of historic features likely to be affected by development.

8.9.3 Recommendations

There are no recommendations to improve any of the heritage policies.

8.10 Access and Communications

There are twenty-four policies within this chapter of the UDP of which five were screened out and a number were combined because they are very similar.

8.10.1 Key Strengths

Policies AC4, AC5, AC7 to AC11, AC13 to AC17 and AC22 all contribute to the achievement of the objective relating to communications links and infrastructure, through the protection and enhancement of transport links and telecommunications installations. As a result, indirect beneficial impacts could be generated upon business development and a sustainable economy.

The majority of the policies have the potential to promote the use of sustainable modes of transport, through the provision of new pedestrian and cyclist facilities, travel plans, enhanced public transport links, enhanced freight links, and the protection of existing public transport facilities. All of these measures could contribute to the achievement of a modal shift in the long term which could generate positive impacts upon climate change emissions, air quality, the use of renewable energy sources and have indirect benefits for biodiversity resources, water and land quality. Improved accessibility across Flintshire is also likely to have benefits for business development and could contribute towards the development of a sustainable economy.

Policies AC2 to AC8, AC10, AC11 and AC16/17 would all fulfil the objective relating to health, either by ensuring new provision for pedestrians and cyclists or by seeking to protect existing public transport facilities that



encourage physical fitness. Policies AC13 to AC15 would also generate positive benefits upon this objective through improvements to road safety.

The expansion of the Mostyn Docks (Policy AC10) could have adverse impacts on the Dee Estuary environmental designations both directly through landtake and indirectly as a result of emissions and any dredging works that would need to be undertaken in the Estuary to accommodate increased use of the docks. However, provision for protecting this asset is noted in the policy and this is a key policy strength. The plan should also be read as a whole and so policy WB2 would adequately protect the sites.

Maintenance of, or improvements to, access and health could help to generate positive benefits to issues such as crime, community spirit and cohesion and landscape/townscape.

Policies AC9 to AC12 and AC22 relate to the protection of existing, or provision of new, freight transport services, all positively contributing to the objective relating to business development and a sustainable economy as a result of an enhanced and more efficient transport system that is preferable to travel by road.

Policy AC20 addresses the provision of lorry parks and includes a number of clauses which should ensure that pollution impacts particularly air and water do not occur as a result of the new facilities. A further key strength is the clear requirements for the lorry parks to be in keeping with the character and appearance of the locality and for the access and egress to the sites to avoid passing through residential areas.

8.10.2 Key Weaknesses

Policy AC4 (Major Traffic Generating Developments) is promoting the use of travel plans and so it could be argued that the policy name is slightly misleading. When undertaking the assessment the provision of travel plans was the main consideration and this should help to reduce the likelihood of adverse transportation impacts generated by large new developments which could have a number of indirect benefits for other receptors if a modal shift occurs. Conversely the policy could be seen as being a little weak as the implementation of a travel plan is unlikely to entirely offset the potential adverse traffic impacts likely to be generated by large scale development. It is recommended that the policy also clearly states that a transportation assessment should accompany any planning applications for such developments.

Whilst policy AC9 (Provision of New Rail Freight Facilities) has a number of positive impacts because it is promoting a more sustainable mode of transport there could be a risk that new development in close proximity to the new facilities could actually lead to further traffic growth.

One of the most significant weaknesses is that policies AC10 and AC11 fail to recognise that the expansion of the Mostyn Docks and other jetties could have very significant adverse impacts on flooding and water quality. This should be addressed in the policy.



Policies AC16 and AC17 also promote road transport. Whilst the reasoning is clear i.e. to alleviate congestion and therefore improve communications, these policies do not contribute positively to encouraging sustainable transport or work towards addressing the long term issue of climate change.

Policies AC18 (Parking Provision at New Developments) has the potential to negatively impact upon a number of objectives, for example relating to sustainable transport as it actively encourages the use of cars. Nonetheless it is recognised that some parking provision is essential as part of new developments to ensure that the existing road network continues to function effectively e.g. by reducing the risk of on-street parking. It is recommended that the use of public transport and travel plans should be encouraged in all new developments where applicable.

Policy AC20 includes a number of clauses and this should help to prevent adverse impacts arising from the provision of new lorry parks. One of the main issues is likely to be the potential for land contamination as a result of spillages and leaks of diesels and oils. Including a clause in relation to this issue would strengthen the policy.

Improved access and transportation links could encourage increased commuting and therefore potential negative impacts upon the Welsh language, particularly in rural areas. This should be considered at project level assessment.

For any policies which could result in new transport infrastructure there will always be a risk that localised adverse impacts upon features of nature conservation interest e.g. protected species could occur and these would have to be addressed on a site by site basis with suitable mitigation measures implemented. The policies are, however very clear through the inclusion of specific clauses within the polices that developments would have to include suitable mitigation and not result in adverse impacts on nature conservation resources.

8.10.3 Recommendations

Based upon the assessment the following modifications are recommended.

- Policy AC1 No modifications recommended.
- Policy AC2 No modifications recommended.
- Policy AC3 No modifications recommended.
- Policy AC4 The policy could be re-named 'Travel Plans for Major Traffic Generating Developments' as this appears to be the focus of the policy.
- Policy AC5 The following clause should be added to the policy: 'designed to protect the existing built and natural environment'.
- Policy AC6 No modifications recommended.



- Policy AC7 No modifications recommended.
- Policy AC8 No modifications recommended.
- Policy AC9 The following clause should be added to the policy to ensure that biodiversity, landscape/townscape, cultural heritage and water resources are adequately protected: 'it would not harm features of areas of landscape, nature conservation, historic value or water quality, or where adverse impacts would occur they are mitigated'.
- Policy AC10 Clause 'c' of the policy should be re-worded to make reference to the protection of water quality, and a clause should be added to the policy highlighting the need for mitigation to reduce any potential impacts upon flooding. The policy should also make specific reference to the various designations of the Dee Estuary i.e. the Ramsar site, pRamsar, pSPA, SPA, pSAC and SSSI.
- Policy AC11 Clause 'b' of the policy should be re-worded in line with the recommendations for policy AC10.
- Policy AC12 No modifications recommended.
- Policy AC13 No modifications recommended.
- Policy AC14 No modifications recommended.
- Policy AC15 No modifications recommended.
- Policy AC16 No modifications recommended.
- Policy AC17 No modifications recommended.
- Policy AC18 No modifications recommended.
- Policy AC19 No modifications recommended.
- Policy AC20 No modifications recommended.
- Policy AC21 No modifications recommended.
- Policy AC22 No modifications recommended.
- Policy AC23 No modifications recommended.
- Policy AC24 No modifications recommended.



8.10.4 How Have Recommendations Been Taken Forward?

Policy AC4 - The policy title has been modified.

Policy AC5 – The additional clause has not been added as it is intended that the UDP should be read as a whole.

Policy AC9 – Additional criterion has been added to the policy.

Policy AC10 – A cross-reference has been included in the policy to the flood risk policy and an additional criterion has been included.

AC11 – The policy has been modified in line with the recommendations.

8.11 Housing

There are 15 policies in this chapter of the UDP of which two were screened out of the assessment. Policy HSG1 identifies sites for housing allocations and so each of these sites were reviewed at a high level to identify their potential sustainability strengths and weaknesses. Policy HSG2 addresses housing at Croes Atti which has received planning permission and as such the SA cannot influence this particular UDP allocation.

8.11.1 Key Strengths

The housing allocations in Policy HSG1 would ensure the provision of good quality and affordable housing across the County although it is currently unknown if all of the sites would be suitable for affordable housing provision, particularly in some of the rural parts of the County. Housing affordability is a recognised problem in rural parts of the County and so it is important that affordable housing is provided in those areas where it is most needed. Some of the housing allocations would utilise brownfield sites and result in the remediation of contaminated sites and so would positively contribute to the objective ' to avoid, reduce and remediate contaminated soils and encourage the appropriate re-use of brownfield sites.' This could have indirect benefits for adjacent environmental resources by removing a contamination source. Other specific strengths of sites are addressed in Section 8.11.3. The redevelopment of currently derelict sites could also help to improve the quality of the townscape.

The Croes Atti development (HSG2) on the edges of Flint has the potential to contribute to regeneration in this area and as this is a large prominent development it could help to improve the County's image. The policy also clearly states that a mix of housing types will be provided on the site. There could be positive benefits for the vitality and vibrancy of Flint



although this will depend upon how the new development impacts upon existing businesses, community networks and access to amenities.

Policy HSG2A (Strategic Mixed Use Development: land North West of Garden City) positively fulfils a number of the SA objectives. The site is situated close to other principal employment centres and so there could be positive impacts for the County's economy through inertia effects. The site will include housing land and 30% of the housing provided will be affordable and so the objective 'to provide access to good quality, affordable housing that meets the needs of the community' is positively fulfilled. A development like this has the potential to generate increased traffic movements but the policy is very clear that good public transport, pedestrian and cycle links need to be established and this offers some degree of mitigation. The development would include new community facilities and so would not place undue pressure on facilities in other centres. The policy states that a development brief would have to be produced for the site and this would ensure that the layout and design of the site are carefully considered. A number of other relevant UDP policies are listed at the end of the policy, for example WB2 (Sites of International Importance) and so clearly highlights the need for prospective developers to ensure that there will be no adverse impacts on sites of international importance.

Policy HSG2B promotes a high quality development on a former textile mill site. The policy is very clear in its requirements for there to be no adverse impacts on the landscape, nature conservation and historic value of the adjacent area. This is a very important clause in the policy because of the site being within the Greenfield Valley which is an important cultural resource. The site would include torusim development and this presents an opportunity to further develop the tourist facilities in that part of Flintshire which could have associated economic benefits. The review of the existing economic conditions in Flintshire indicated that the tourism potential of the County is underdeveloped. The policy states that there must be good pedestrian and cycle links with the surrounding area and this is another policy strength. The requirement for a development brief to be produced is another strength of the policy as it should help to ensure that a high quality site is delivered.

Policy HSG3 only affects very few of the SA objectives and should ensure that the provision of housing across the rest of the County would not be compromised.

Policies HSG4, HSG5 and HSG6 all address the provision of dwellings in the open countryside and seek to ensure that where dwellings are permitted they are appropriate to the locality and would not adversely impact upon the character of the area or the landscape. The policies are all very stringent in their requirements, particularly HSG5 which includes clauses addressing the protection of the landscape, nature conservation, historic and other amenity interests. By limiting the amount and type of housing development that can occur in rural areas there could be indirect benefits for community cohesion by ensuring that dilution of existing community networks does not occur and should ensure that access to



facilities and amenities can be maintained at current levels. Policy HSG6 could also be indirectly reducing the use of natural resources by discouraging the construction of replacement dwellings in the countryside unless absolutely necessary.

Policy HSG7 seems to be deterring the conversion of barns to residential dwellings and this helps to positively contribute to objectives relating to the protection of rural quality of life, the protection of community cohesion, the maintenance of access to facilities and amenities and protection of the Welsh language and culture. Discussion at the workshop highlighted that barn conversions are quite popular with a number of planning applications for such development being received each year. Therefore, limiting such development would seem to be particularly important. The policy states that any housing permitted as part of this policy should contribute to an identified local housing need and so work towards the achievement of the objective; 'to provide access to good quality, affordable housing that meets the needs of the community.' There could also be indirect biodiversity benefits as barns can frequently support species like barn owls and bats. The policy permits residential conversions if they are subordinate to a business use and this presents an opportunity to diversify and improve the rural economy.

Policy HSG8 positively fulfils the objective 'to provide good access to good quality, affordable housing that meets the needs of the community' by ensuring that the density of new development makes the best use of land and is in keeping with the surrounding area. There should also be indirect benefits for community cohesion and access to facilities and the wider environment, particularly biodiversity and the local landscape/townscape by ensuring development is of an appropriate scale and utilises high quality design principles.

Policy HSG9 relating to housing mix and type has very little impact on many of the SA objectives although it should work towards providing housing that meets the needs of the community.

HSG10 and HSG11 are very important because both address affordable housing needs, which is an issue across the County. Neither have significant impacts on many of the other SA objectives but there could be adverse impacts for community spirit and cohesion because of the perceptions of affordable housing amongst other members of the community. This is not something that can be overcome by the UDP alone but by ensuring that it is well integrated into developments, impacts should be minimised. Similarly there could be uncertain impacts upon fear of crime, again because of public perceptions of affordable housing schemes. Policy HSG11 is very clear in its requirements for the housing developments to be well designed and landscaped.

Although policy HSG14 'Gypsy Sites' might be regarded as a controversial policy it would provide for the travelling sector of society by ensuring that they had access to social and shopping facilities and a suitable site to live.

Policy HSG15 has the potential to stimulate economic development in the rural parts of the County as the policy states that proposals for the



conversion of large house into dwellings would first have to demonstrate that employment uses would not be appropriate and so could be regarded as indirectly contributing to the development of the rural economy. The text supporting the policy suggests that this policy could help to fulfil rural affordable housing needs but this is not brought out in the actual policy wording. The policy clearly states that the development must be appropriate to the locality and so would positively contribute to the objective addressing landscape protection and would also ensure the preservation of buildings of architectural/historic interest.

8.11.2 Key Weaknesses

The impact of the housing allocations on community spirit and cohesion and Welsh language and culture are unknown as they will ultimately depend upon the character of the existing villages, the size of the new developments and who lives at the sites. This risk is considered to be greater in more rural villages. There is the potential for the housing allocations to have a number of adverse impacts upon environmental resources. A number of the sites selected are greenfield and so the allocations will result in the cumulative loss of greenfield sites across the County which is likely to impact upon runoff patterns and have adverse impacts on soil functions. Some of these sites are agricultural land and so would result in the loss of this resource. A number of the sites have been identified as having biodiversity value and some of the sites are located adjacent to sites of international and national importance (further details are provided in Table 8-1). It should be possible to retain the biodiversity features as part of the designation of the site but it is not recommended that sites adjacent to sites of significant nature conservation importance are developed unless there would be no adverse impacts on their integrity. Policy WB2 of the UDP will provide adequate protection of the sites.

Some of the sites are situated in areas of landscape importance where new housing developments could adversely impact upon local views. At these locations sensitive site design will be essential.

Although some of the sites are situated close to public transport links and employment opportunities and this could help to reduce reliance on the private car the overall increase in population and the lack of facilities in some of the sites allocated for housing it is likely that there would be a continued reliance on car use which would have adverse impacts on climate change in the long term.

Some of the sites are situated in the floodplain and this is considered very unsustainable and it is recommended that other sites are identified unless long-term flood impact and storage issues can be fully addressed. Any sites in the floodplain would need to be subject to a Flood Consequences Assessment.

Policy HSG2 relating to the provision of Housing at Croes Atti has some potential weaknesses as the housing would be part of a mixed use development and so could result in increased travel by the private car which would have associated adverse impacts for climate change and air



quality. It is unknown how the development would impact upon community spirit or crime levels. The site is also situated within 200m of the Dee Estuary SPA, pSPA, Ramsar, pRamsar, pSAC and SSSI and so has the potential to affect the site. Before the development could occur it would have to be demonstrated that there would be no significant adverse impacts on the Dee Estuary.

The allocation established as part of policy HSG2A is sited in the floodplain and so cannot be regarded as a truly sustainable location. However, the policy clearly states that detailed proposals will be needed to demonstrate that the acceptable flood risk mitigation measures are included in the design.

Very few specific weaknesses were identified for policy HSG2B. Any new mixed-use development is likely to increase vehicle travel but the policy seeks to mitigate this impact through ensuring good pedestrian and cycle links there may, however be some adverse air quality impacts.

Very few significant weaknesses have been identified with the other housing policies as they are very specific in the issues that they cover and so have a limited impact on many of the SA objectives. The most significant issues include the perceptions of affordable housing but this is not necessarily a weakness of the policies themselves but a much wider social perception issue that the UDP alone cannot address.

Policy HSG14 (Gypsy Sites) is possibly one of the more controversial and contentious of the policies, largely because of public perceptions of gypsy sites. The SA identified potentially significant issues associated with fear of crime, community cohesion, pollution and local economic prosperity. These are not necessarily issues that the UDP can address and the policy is clear in its requirements for these sites. However, it could make reference to pollution and state that there should be no significant adverse impact on the neighbourhood or locality as a result of pollution from the sites.

The conversion of large house/institutional buildings into dwellings could have a variety of impacts on community cohesion, Welsh language and culture and access to facilities depending upon where the conversion occurs and who moves into the new dwellings. The policy could be regarded as making a positive contribution to rural quality of life if new economic opportunities are stimulated or if affordable housing needs are fulfilled. Conversely, the distinctiveness of rural settlements could be compromised.

8.11.3 Housing Allocations in Policy HSG1

All of the housing allocations in policy HSG1 were subject to a high level review to identify their main strengths and weaknesses and to determine the cumulative impacts that are likely to result from their development. This review was also supplemented by previous work undertaken by Flintshire CC on each of the allocations when undertaking the earlier SA. Full details are presented in Table 8-1. None of the sites were visited and so specific



information about species and habitats on site is not known. However, some of the work undertaken by Flintshire did provide some site specific information and this has been incorporated into the assessment.

It should be noted that some of the sites have already received planning permission and these sites have subsequently been removed from the UDP.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
Buckley HSG1 (1)	 Located approximately 1200m from the town centre potentially offering good access to facilities. Borders an area of greenspace and so would offer recreational benefits. The location could potentially reduce travel by car because of the proximity to the town centre. Re-use of a brownfield site. Opportunity to remediate an area of contamination. 	Borders the Deeside and Buckley Newt site SAC and the Buckley Claypits and Commons SSSI but does not encroach directly onto it. Existing business on the site would be lost which could generate localised adverse impacts although there may be an opportunity to relocate the business.	There should be no adverse impacts on the integrity of the designated sites. It is recommended that a buffer is developed around the housing allocation site to reduce the risk of adverse impacts. Site planning brief should be developed. Opportunity for integration with the recreation/educational facility at Mount Pool.	Potential for cumulative adverse impacts on the SAC and SSSI. [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].
Buckley HSG1 (2)	 Housing would be provided in reasonable proximity to the town centre. The site would incorporate open space. Potential opportunity to enhance the existing depot site. The location could potentially reduce travel by car because 	Loss of a greenfield site which could result in adverse impacts on drainage patterns and alter current soil functions e.g. percolation/infiltration. There are potential Sewage Treatment Work (STW) capacity issues which would need to be addressed.	SuDS should be utilised on site. Site planning brief recommended.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources. There is likely to be a cumulative impact on the Mold STW as a result of a number of allocations that would rely on this facility.

Table 8-1 Key Sustainability Strengths and Weaknesses of the Allocations in Policy HSG1

Sustainability Appraisal and Strategic Environmental Assessment The Flintshire Unitary Development Plan K:\projects\NH50993\F-Reps\SA Report003-NH50993-NHR-01-SA Report-F.doc

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	of the proximity to the town centre.			
Buckley HSG1 (3)	The site could provide a range of housing types including affordable. Located close to the town centre potentially offering good access to facilities. The location could potentially reduce travel by car because of the proximity to the town centre. The site would incorporate open space and provide easy access to the countryside.	Potential for the new housing development to have localised landscape impacts. The development would result in loss of a greenfield site which could result in adverse impacts on drainage patterns and alter current soil functions e.g. percolation/infiltration. Potential for hedgerows on site to be adversely affected. There are potential Sewage Treatment Work (STW) capacity issues which would need to be addressed.	Site planning brief recommended. The STW capacity issues need to be investigated and overcome. All features of biodiversity importance on the site should be retained. SuDS should be utilised on site.	There is likely to be a cumulative impact on the Mold STW as a result of a number of allocations that would rely on this facility. Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Buckley HSG1 (4)	 Located in the town centre so would provide access to facilities and could reduce travel by car. High density site that would include affordable housing. Located close to an open space allocation. 	Loss of some greenfield land which could result in adverse impacts on drainage patterns and alter current soil functions e.g. percolation/infiltration.	SuDS should be utilised on site. The STW capacity issues need to be investigated and overcome.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources. There is likely to be a cumulative impact on the Mold STW as a result of a

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	Opportunity to enhance the appearance of the townscape (currently a derelict site).			number of allocations that would rely on this facility.
Connah's Quay HSG1 (5)	The site is well-suited to high density affordable housing. Very close to the town centre and the transport/amenity benefits that are offered by a central location. Opportunity to enhance an existing derelict site and potentially clear up any contamination. Situated close to employment sites. Located in an area that would benefit from regeneration.	Located in the floodplain. Close to the railway line – potential nuisance issues and associated contamination risks on the site.	The EA should be consulted on flood risk issues. Locating in the floodplain is not particularly sustainable and so would not be recommended. The site needs to be well designed to minimise nuisance issues to future residents.	There could be a cumulative loss of floodplain associated with the development of multiple sites in the floodplain.
Connah's Quay HSG1 (6)	of the range of housing provided on the site. Close to a local shopping centre and its facilities. Reasonably close to employment areas.	Located a considerable distance from the town centre which could increase dependence on the car to access facilities. However, the site is close to a district shopping centre. Currently greenfield agricultural land and so there	SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	benefit from regeneration.	would be modified drainage patterns and altered soil functions.		
Connah's Quay HSG1 (7)	Likely to be flexible in terms of the range of housing provided on the site. Close to a local shopping centre. Reasonably close to employment areas. Located in an area that would benefit from regeneration.	which could increase dependence on the car to access facilities. Currently greenfield agricultural land and so there would be water resource/soil	There should be no adverse impacts on the integrity of the SAC and SSSI. A buffer around the housing site could be developed to avoid or reduce the likelihood of adverse impacts on the designated sites. SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources. Potential for there to be cumulative adverse impacts on the SSSI and SAC. [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].
Connah's Quay HSG1 (8)	Likely to be flexible in terms of the range of housing provided on the site. Close to a local shopping centre. Reasonably close to employment areas.	Currently greenfield agricultural land and so there would be modified drainage patterns and altered soil functions. Protected species (great crested newt) could be present on the site.	SuDS should be utilised on site. Full protected species surveys should be undertaken and mitigation developed as appropriate for the site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	Located in an area that would benefit from regeneration.	distance from a larger town		
	Situated adjacent to open green space.	centre which could increase dependence on the car to access facilities.		
Connah's Quay HSG1 (9)	Suitable for high density affordable housing.	Would result in the loss of a greenfield site which would	SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which
	Adjacent to green space and a local shopping centre.	have associated water resource/soil function issues.		could have cumulative impacts upon runoff and soil resources.
	Some distance from the town centre and so could increase car travel.			
	Urban infill location.			
	Situated reasonably close to employment areas.			
	The housing development could help to screen the rear of a shopping centre.			
	Located in an area that would benefit from regeneration.			
	No specific biodiversity constraints identified for this site by the Flintshire CC ecologist.			

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
Flint HSG1 (10)	 Should contribute to local housing needs Close to existing facilities and public transport. Located in an area that would benefit from regeneration. Adjacent to a school so the site would be close to existing amenities. 	The development would result in the loss of a greenfield site which would have associated water resource/soil function issues. The site lies within 500m of a pond known to support great crested newt.	SuDS should be utilised on site. Full protected species surveys should be undertaken and mitigation developed as appropriate for the site. Nearby stream, vegetation and trees should be retained and enhanced as part of the scheme.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Flint HSG1 (11)	 Located in an area that would benefit from regeneration. The large size of the site should enable a range of housing to be developed including affordable. Within walking distance of the town centre and amenities. Adjacent to a bus route. The site will incorporate green space and provide access to the countryside. Accessible to local employment opportunities. A new distributor road would 	landscape impacts There could be adverse impacts on the stream e.g. pollution and alterations to existing drainage patterns.	Site planning brief should be developed to ensure appropriate landscaping and because it is a large site. SuDS should be utilised on site. Nearby stream, vegetation and trees should be retained and enhanced as part of the scheme.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	be included in the development to ease town centre congestion.			
Holywell HSG1 (12)	Located in an area that would benefit from regeneration. The development would enable the regeneration of a former hospital site and brownfield land. Close to town centre and public transport.	The hospital may have heritage value. Potential for protected species to be located on the site.	Liaison with Conservation Officer regarding heritage value of hospital. Full protected species surveys should be undertaken and mitigation developed as appropriate for the site. Seek to incorporate heritage value where possible e.g. conversion into the new development.	Potential for cumulative regeneration benefits associated with other developments that occur In Holywell.
Holywell HSG1 (13)	Located in an area that would benefit from regeneration. Increased range of housing available in the locality. Close to town centre and public transport facilities. Accessible to local employment.	Potential for loss of trees and hedgerows. Could have adverse impacts on local views. The development would result in loss of a greenfield site with associated drainage and soil function modifications.	Ensure the retention of trees and hedgerows on site. Take account of landscape and nature conservation issues in the new development. SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources. Potential for cumulative regeneration benefits associated with other developments that occur In Holywell.
Mold HSG1 (14)	Size of the site should enable a range of housing types	Adjacent to open landscape, potential for adverse impacts.	The development should have regard to the open character of	Potential for a cumulative loss of greenfield sites which

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
Mold HSG1 (15)	 including affordable. Close to the town centre, amenities and public transport. Redevelopment of a brownfield site Close to a variety of employment opportunities. Town centre location suitable to high density/affordable housing. Very close to local facilities 	Adjacent to but not within a floodplain. There are also localised flooding problems in Mold. There are capacity issues at the Mold STW. Within a Conservation Area. There are capacity issues at the Mold STW.	adjoining land. SuDS should be utilised on site. The STW capacity issues need to be investigated and overcome. The housing should be designed to complement the existing architecture and the character of the Conservation Area.	could have cumulative impacts upon runoff and soil resources. There is likely to be a cumulative impact on the Mold STW as a result of a number of allocations that would rely on this facility.
	and public transport. The development will use a brownfield site. Accessible to several employment areas. The development would contribute to town centre regeneration.		The Sewage Treatment Work capacity issues need to be investigated and overcome.	
Mold HSG1 (16)	Town centre location suitable to high density/affordable housing. Very close to local facilities	There are capacity issues at the Mold STW. Situated in an area of flood risk.	The STW capacity issues need to be investigated and overcome. Flood risk issues need to be	There is likely to be a cumulative impact on the Mold STW as a result of a number of allocations that would rely on this facility.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	and public transport. The development would contribute to town centre regeneration. Would re-use a brownfield		discussed in more detail with the Environment Agency.	Potential for cumulative loss of the floodplain.
Mold HSG1 (17)	site and contribute to town centre regeneration. The site should be able to accommodate a range of housing types including affordable. Reasonably close to the town centre and public transport links. The development will incorporate open space. The development would contribute to town centre regeneration. Close to job opportunities.	Potential impacts to hedgerows on sites. Potential for localised landscape impacts. Loss of a greenfield site with associated drainage and soil function impacts e.g. modified percolation patterns. There are capacity issues at the Mold STW.	Hedgerows should be retained and enhanced where possible. STW capacity issues need to be resolved. SuDS should be utilised on site in view of the low lying nature of the site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources. There is likely to be a cumulative impact on the Mold STW as a result of a number of allocations that would rely on this facility.
Mold HSG1 (18)	The site should be able to accommodate a range of housing types including affordable. Reasonably close to the town	Potential impacts to hedgerows and mature trees on sites. Potential for localised landscape impacts.	Hedgerows and trees should be retained and enhanced where possible. STW capacity issues need to be resolved.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	centre and public transport links. The development will incorporate open space. The development would contribute to town centre regeneration. Close to job opportunities.	Loss of a greenfield site with associated drainage and soil function modifications. adverse soil function and water resource impacts. There are capacity issues at the Mold STW.	SuDS should be utilised on site.	There is likely to be a cumulative impact on the Mold STW as a result of a number of allocations that would rely on this facility.
Mold HSG1 (19)	Accessible to the town centre and public transport. Close to job opportunities/employment allocation.	Unlikely to be suitable for high density or affordable housing due to site size. Potential impacts upon the stream and woodland corridor of biodiversity value. Would result in the loss of a greenfield site with associated drainage and soil function impacts. Potential localised flooding risks associated with the stream.	A buffer zone should be developed adjacent to the stream. Retain and enhance the biodiversity corridor. SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Shotton HSG1 (20)	Located in close proximity to retail facilities and town centre. The size should enable a	Loss of a greenfield site which would modify drainage patterns and soil functions at that location e.g.	SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	range of housing types including affordable.	percolation/infiltration.		resources.
	Local regeneration opportunities.			
Shotton HSG1 (21)	Within a reasonable distance of public transport and local	Unlikely to be suitable for high density housing.	Retention of features of biodiversity value.	Potential for a cumulative loss of greenfield sites which
	facilities.	Potential risks to biodiversity on site		could have cumulative impacts upon runoff and soil resources.
		Loss of urban green space with associated drainage and soil function modifications.	ted drainage and modifications. ot particularly	
		The site is not particularly accessible to employment areas.		
Bagillt HSG1 (22)	The size of the site should enable flexibility in terms of	Borders but not within a floodplain.	SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which
	providing a range of housing types including affordable.	The development would result in loss of a greenfield	The site should be well landscaped to ensure effective integration with the adjacent open landscape area.	could have cumulative impacts upon runoff and soil
	Close to the village centre which should provide good access to facilities.	site with associated drainage and soil function modifications.		resources.
	Close to public transport links,			
	Adjacent to an area of open space which could have			

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	recreational benefits. Located reasonably close to employment opportunities.			
Bagillt HSG1 (23)	The site is situated in close proximity to local amenities. In close proximity to employment opportunities. The development will incorporate open space.	Potential loss of greenfield site with associated impacts for water resources and soil functions. This site is situated very close to a landfill which is likely to reduce its attractiveness to potential residents. The site is situated in close proximity to a landfill.	SuDS should be utilised on site. There are hedgerows and trees on site which need to retained.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Bagillt HSG1 (24)	The size of the site should enable flexibility in terms of providing a range of housing types including affordable. The site is situated in close proximity to local amenities and employment areas.	The development would result in loss of a greenfield site which could have associated soil function and drainage impacts. The site would need to be carefully integrated with the adjacent green barrier allocation.	The size of the site should enable flexibility in terms of providing a range of housing types including affordable. The site should be designed to be well integrated with the adjacent landscape. SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Broughton HSG1 (25)	The size of the site should	The site is located close to	The size of the site should	
Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
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	enable flexibility in terms of providing a range of housing types including affordable.	the A55(T) and so there could be adverse impacts in terms of the quality of the	enable flexibility in terms of providing a range of housing types including affordable.	
	The site is close to shopping facilities and employment opportunities and this should reduce the need to travel by car to access amenities. There are good transport links including bus services and open space/pedestrian/cycle links.	environment created for the local residents. The development would result in the loss of a greenfield site which would have water resource/soil function impacts. The development would result in loss of agricultural land. The site is within 500m of ponds supporting great crested newt and the land adjacent to the ponds is likely to be used for foraging,	Full protected species surveys need to be undertaken in advance of developing the site and suitable mitigation measures incorporated	
Caerwys HSG1 (26)	The development would re- use a brownfield site and offer the opportunity to enhance the townscape – the site is currently under a farming/poultry use.	shelter and hibernation. The site lies partially within a Conservation Area and so the site should be designed to complement the existing character of this area.	Ensure the design of the new site complements and enhances the Conservation Area.	
	The development of housing on the site could reduce the	There are also Listed Buildings in close proximity to the allocation.		



Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	current nuisance caused to other residents by the current land uses. The site is likely to be large enough to permit the provision of affordable housing.	A limited number of facilities in the settlement could result in increased use of the private car. It will be important for the site to deliver affordable housing as Caerwys is an important rural settlement serving a large hinterland.		
Carmel HSG1 (27)	 The site is located in close proximity to local facilities and services. The site is reasonably close to employment areas at Greenfield, Mostyn and Flint. The development of housing in this settlement might help to support the development of additional facilities and services. 	There could be the potential for localised landscaping issues because of the presence of open land beyond the site with views across to the Dee Estuary. The development would result in the loss of a greenfield site which would have water resource/soil function impacts.	The site needs to be well landscaped to ensure it is well integrated with the landscape. SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Drury and Burntwood HSG1 (28)	Situated in close proximity to the school and village centre. There are good public transport links to Buckley which could reduce the need to travel by private car to	Potential loss of trees and hedgerows on the site. The development would result in the loss of a greenfield site which would have drainage and soil	The hedgerows and trees should be integrated into the housing development. The site should be carefully landscaped. SuDS should be utilised on	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	access facilities. The site is accessible to a range of job opportunities by public transport.	function impacts. Land to the east of the site is open land and so there is the potential for adverse impacts on the local landscape. There are high power electricity lines parallel to the site.	site.	
Ewloe HSG1 (29)	The site is situated on a bus route which should provide access to facilities. Opportunity to incorporate open space into the development. The site is located close to a school. There are a small number of facilities near the site.	The site itself could have nuisance issues for the new residents because of the proximity of the A494(T)	The site needs to be well landscaped and potentially screened to ensure good integration with adjacent open land and to prevent nuisance issues associated with the A494 (T). SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Ewloe HSG1 (30)	Close to the facilities in the centre of Ewloe. Situated close to a bus route and an adjacent business park and so there may be job opportunity benefits. The development is likely to	There could be adverse economic impacts because the site was previously allocated as part of the business park.	The site needs to be well integrated and carefully designed because of the adjacent residential and business park land uses. SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	incorporate an area of open space.			
	This is a former opencast site that would benefit from redevelopment.			
	The development borders an area of greenspace and so there may be recreational opportunities for the people living at the site.			
Ewloe HSG1 (31) and (32)	The sites are allocated for sheltered housing and so would fulfil a specific housing need.	It could be argued that the sites are a little isolated because of the lack of amenities in the centre of	SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil
	This is a former opencast site that would benefit from redevelopment.	Ewloe although there are allocations for shopping and community facilities proposed.		resources.
	There are also adjacent allocations for shopping and community facilities that would provide valuable facilities for the housing.			
	The sites are both situated adjacent to areas of green space and so could provide recreational opportunities.			

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	The sites are reasonably close to the centre of Ewloe which offers access to limited facilities/amenities.			
Ewloe HSG1 (33)	The site is reasonably well located to the employment opportunities at St David's Park.	The limited facilities in Ewloe are a considerable distance from the site and this could increase travel by the private car. There could be adverse impacts from the noise of the A55(T) at this site that are likely to require mitigation. The site is situated close to the Deeside and Buckley Newt Sites SAC and the Buckley Claypits and Commons SSSI. The site borders an area of open space and therefore the site should be well- landscaped. The development would result in the loss of a greenfield site which would have drainage and soil	The site should have no adverse impacts on the nearby SAC and SSSI. A buffer could be developed around the site to reduce the likelihood of impacts occurring. The site is likely to need screening to prevent adverse noise impacts from the A55 (T). Full protected species surveys need to be undertaken and mitigation incorporated into the scheme design as appropriate.	Potential for cumulative adverse impacts on the SAC as a result of multiple housing developments. [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].



Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
		function impacts		
Ewloe HSG1 (34)	The site is reasonably close to the centre of Ewloe and its facilities.	There are hedgerows on the site which could be adversely impacted.	The site should incorporate and enhance existing hedgerows on the site.	Potential for a cumulative loss of greenfield sites which could have cumulative
	The site is close to a bus stop. Situated adjacent to green barrier which could	Loss of a greenfield site which would have drainage and soil function impacts.	SuDS should be utilised on site.	impacts upon runoff and soil resources.
	have localised landscape and recreational benefits.	The site could result in increased travel by the private car because of the lack of access to commercial facilities.		
Ewloe HSG1 (35)	Located adjacent to green barrier, potential landscape and recreational benefits for residents. The site is adjacent to a school and on a bus route. The site should be of a sufficient size to enable affordable housing development.	Relatively detached from the limited facilities in Ewloe because of the A494(T) interchange. This could increase use of the private car to access facilities. The site could have localised impacts on adjacent landscape depending upon the design of the site/boundary treatments.	The site needs to be well landscaped. SuDS should be utilised on site. Protected species surveys should be undertaken and appropriate mitigation measures include with the site's development.	Potential for cumulative loss of agricultural land across the County as a result of multiple housing allocations on greenfield sites.
		The development would result in the loss of a greenfield site which would		



Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
		have water resource/soil function impacts and result in loss of agricultural land.		
		The site is situated within 500m of a pond known to support great crested newt and the land adjacent could be used for foraging, shelter and hibernation.		
Greenfield HSG1 (36)	Located in a reasonably central part of greenfield in close proximity to other residential areas. Close to a tourism allocation so could provide recreational benefits for new residents. Close to a significant employment area with potential benefits for job	Potential for there to be a lack of facilities within the immediate vicinity of the site which could increase travel by the private car.	The site should be well deigned to ensure that the new development is in keeping with the adjacent townscape.	There could be cumulative regeneration benefits in association with other developments that occur in greenfield.
	opportunities. Close to an area of green space which could offer recreational benefits.			
	The site appears to be the re- use of a brownfield site and so should have positive			

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	townscape impacts.			
	The allocation would provide housing in an area in need of regeneration.			
Greenfield HSG1 (37)	The allocation is adjacent to a green space allocation which could offer recreational benefits for new residents. The allocation would provide housing in an area in need of regeneration.	The development would result in the loss of a greenfield site which would have drainage and soil function impacts. There is the potential for there to be adverse impacts on the local landscape character because of the open landscape beyond the allocation. The allocation appears to result in the loss of agricultural land.	SuDS should be utilised on site. The site needs to be carefully landscaped.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Gronant HSG1 (38)	The allocation is adjacent to a green space allocation which could offer recreational benefits for new residents. The allocation would ensure the provision of housing in the rural northern part of the County.	Potential adverse impacts on an adjacent wooded copse adjacent to the site. The site could potentially be visible from coastal areas and so needs to be carefully designed and landscaped. Owing to the rural location of	The site needs to be carefully landscaped and all biodiversity features of value on the site retained where possible or mitigation measures implemented to compensate for their loss.	



Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	The site is close to community facilities including a school. Opportunities to walk to the village centre. There are good transport links to other centres in Flintshire.	Gronant there could be increased travel by private car although this will depend upon public transport use. The development would result in the loss of a greenfield site which would have adverse drainage and soil function impacts.		
Hope HSG1 (39)	 Provision of housing close to the village centre. In close proximity to village facilities. The site is well connected to other centres by public transport links which could reduce reliance on the private car. The public transport links provide access to nearby employment sites. 	There is a pond to the north of the site which has the potential to support amphibians. Potential for localised adverse landscape impacts. The development would result in the loss of a greenfield site which would have adverse drainage and soil function impacts.	All appropriate protected species surveys should be undertaken in advance of bringing the site forward for development. The site needs to be well landscape and designed. SuDS should be utilised on site.	The development of all three sites could help to bring forward the provision of new facilities in Hope. Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Hope HSG1 (40)	Provision of housing close to the village centre. In close proximity to village facilities.	In close proximity to a Scheduled Ancient Monument SAM. The development would result in the loss of a	Full liaison with Cadw and the Conservation Officer should occur. Site should be carefully landscaped and biodiversity	

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	The site is well connected to other centres by public transport links which could reduce reliance on the private car. The public transport links provide access to nearby employment sites.	greenfield site which would have localised drainage and soil function impacts. Potential loss of hedgerows associated with the development.	features of importance retained.	
Hope HSG1 (41)	Close to community facilities including a school. Located along a key public transport corridor. The site is well connected to other centres by public transport links which could reduce reliance on the private car.	The development would result in the loss of a greenfield site which would have localised drainage and soil function impacts. The development would result in the loss of agricultural land. In close proximity to the lower Hope Mountain and so could have adverse landscape impacts.	SuDS should be utilised on site. Site should be carefully landscaped and biodiversity features of importance retained.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Leeswood HSG1 (42)	The allocation is adjacent to a green space allocation which could offer recreational benefits for new residents.	The site is very visible from the surrounding area and so needs to be very carefully landscaped.	A comprehensive landscaping plan should be developed for the site.	
	The development would utilise a brownfield site.	There would be a loss of an industrial site although there		

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	The allocation would provide housing in a larger rural settlement.	is the possibility that this could be relocated.		
	The site is close to existing facilities and services.			
	Situated on a bus route which could help to reduce travel by the private car although some degree of commuting likely to be necessary to access employment opportunities.			
Mancot HSG1 (43)	The large housing site would be able to provide a range of housing. Sited in close proximity to facilities in Mancot. Close to employment opportunities.	Potential for there to be biodiversity interest on the site. Potential for there to be loss of farm buildings – these could be of importance to the local landscape and should be retained where possible. The development would result in the loss of a greenfield site which would alter drainage patterns and soil functions local to the site.	A design brief should be developed for the site that ensures the retention of all features of biodiversity value. Retention of buildings of local importance. SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Mostyn HSG1 (44) and HSG1 (45)	Both of the allocations are large and could provide a	There are limited facilities in Mostyn which means that car	Development briefs should be prepared for both sites	Potential for adverse cumulative impacts on the

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	significant amount of housing in Mostyn.	travel to access opportunities would be necessary.	because of the recognised landscape value of the area.	natural and historic landscape.
	The allocations would provide for significant housing development needs in other coastal locations where there are constraints e.g. flooding.	The sizeable development in Mostyn could have adverse impacts on community cohesion. There could be significant	Features of biodiversity interest should be retained.	
	Sites are located in close proximity to employment opportunities.	landscape impacts – recognised as being a high quality landscape.		
	The housing development could stimulate further economic investment but there is a risk that this could increase development in areas at risk of flooding.	Topographical constraints are likely to prevent significant walking/cycling opportunities. There could be biodiversity constraints at the site.		
Mynydd Isa HSG1 (46)	Situated close to community facilities including a school and the amenities of the village centre.	Loss of a greenfield site which would modify drainage patterns and alter soil functions.	Features of biodiversity interest should be retained. Site should be well landscaped.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
	Well situated in relation to public transport links which could help to reduce use of the private car.	Potential for adverse landscape impacts. There could be biodiversity constraints at the site.	STW requirements need to be addressed in more detail and overcome before the site can be developed.	
		There are potential capacity	SuDS should be utilised on	

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
		issues at the Mold STW which must be addressed.	site.	
New Brighton HSG1 (47) and (48)	Likely to provide for a range of housing needs although it is uncertain whether affordable housing would be secured. Site 47 would involve the re- use of some brownfield land. Close to village centre and public transport links which could reduce travel by the private car. Close to green barrier which could have recreational benefits for the residents. Close to employment opportunities. There could be economic benefits for the adjacent car sales business.	Areas of contamination will need to be remediated because of the previous petrol station use at site 47. The allocations would result in loss of greenfield land with associated drainage and soil function impacts. Potential for adverse employment impacts associated with the closure of the service station. Loss of agricultural land associated with site 48. There are potential capacity issues at the Mold STW which must be addressed. Situated within 500m of a pond known to support great crested newts.	A suitable remediation plan will need to be developed for the site before it can be developed. SuDS should be incorporated into the site. Careful landscaping of the sites to ensure good integration with the adjacent landscape. STW requirements need to be addressed in more detail and overcome before the site can be developed. All appropriate protected species surveys should be undertaken in advance of bringing the site forward for development.	Potential for cumulative impacts upon STW capacity at Mold. Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Northop HSG1 (49)	The development of the site will result in remediation of a brownfield site.	The site is in very close proximity to a Conservation Area and so the site will have to be very carefully designed	Consult with the Conservation Officer regarding design issues.	Cumulative loss of agricultural land. Cumulative loss of greenfield

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	The sites are situated close to the village centre and its amenities. Situated in close proximity to a golf course which would provide recreational opportunities for residents. The site would meet the policy threshold for affordable housing.	and in keeping with the adjacent townscape. The development would result in the loss of greenfield land with associated drainage and soil function impacts. The development would result in the loss of agricultural land. The location of the site could result in commuting to larger centres to access facilities. There is the potential for biodiversity constraints on the site.	A site development brief should be produced in view of the Conservation Area to the west and the potential biodiversity issues on the site. SuDS should be utilised on site. All appropriate protected species surveys should be undertaken in advance of bringing the site forward for development.	land.
Northop Hall HSG1 (50)	Situated within the village centre close to the village facilities and bus service. The site is accessible to employment opportunities via public transport. The site would meet the policy threshold for affordable housing.	The development would result in loss of agricultural land. Loss of greenfield land with associated drainage and soil function impacts. The location of the site could result in commuting to larger centres to access facilities. The development would	The site needs to be carefully designed and landscaped to ensure appropriate integration with the townscape and surrounding landscape. SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
		result in the loss of an agricultural landscape.		
Penyffordd HSG1 (51)	 The site would provide a range of housing needs including affordable requirements. The site is currently viewed as an eyesore and so the housing development has the opportunity to improve the local quality of the townscape. There is a small area of brownfield land on the site that would be re-used. The site is reasonably well located in relation to the village amenities. There are rail and bus links close to the site. 	Ponds on the site have the potential to support amphibians. Loss of greenfield land with associated drainage and soil function modifications. The location of the site could result in commuting to larger centres to access facilities.	Full protected species must be undertaken and suitable mitigation measures developed SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.
Penyffordd HSG1 (52)	The site would provide a range of housing needs including affordable requirements.	The location of the site could result in commuting to larger centres to access facilities. Loss of greenfield land with	SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.



Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	There are rail and bus links close to the site.	associated drainage and soil function impacts.		
	The site is reasonably well located in relation to the village amenities.	Loss of agricultural land. This is a large site that needs to be well integrated with the		
	The site is reasonably close to employment opportunities including the Warren Hall Business Park.	surrounding residential areas.		
	The allocation is adjacent to land designated for outdoor playing space which would provide recreational opportunities for residents.			
Sychdyn HSG1 (53)	 Re-uses a brownfield site Site is accessible by public transport to a number of employment opportunities. Located close to village centre and its facilities which may reduce need to travel by private car. Located close to bus links. 	There could be potential impacts on Wats Dyke which would need to be addressed. Situated in close proximity to agricultural land and so the site needs to be suitably designed and landscaped. There is a species rich hedgerow that could be adversely affected.	The site needs to be landscaped to ensure that the development is well integrated with the adjacent landscape. All features of biodiversity importance should be retained and mitigation measures developed as appropriate	
	The site would be large enough to meet the policy	The site is known to be of		



Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	threshold for affordable housing.	interest locally for reptiles.		
Brynford HSG1 (54)	Situated close to the village centre but this has very limited facilities. Situated close to community facilities including a school. The development would re- use an already developed site. Potential for the allocation to fulfil housing needs in wider area because of the constraints at other locations.	Site borders the Halkyn Mountain SAC and the Halkyn Common and Holywell Grasslands SSSI. Owing to the rural nature of the village there could be adverse impacts on community cohesion. The area around Halkyn is designated as a historic landscape of importance (Holywell Common and Halkyn Mountain) so the site needs to be well designed to prevent any adverse impacts. Potential for the school buildings to support bats. The location of the site could result in commuting to larger centres to access facilities. Limited access to employment opportunities.	There should be no adverse impacts on the designated sites. The site needs to be carefully design and landscaped to ensure appropriate integration with the landscape. Protected species surveys must be undertaken. Housing is not a good land-use given the sensitivity of the surroundings.	Potential for cumulative adverse impacts on the SAC associated with multiple developments. [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].
Coed Talon HSG1 (55)	Adjacent to a green space allocation which could offer	The location of the site could result in commuting to larger	Liaise with the EA with regard to flood risk issues.	Cumulative loss of floodplain associated with multiple

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	 recreational benefits. Re-use of previously developed land. Close to a bus route but limited access to employment opportunities. Improved amenity for visitors because of remediation of sites. 	centres to access facilities. There is a wildlife corridor adjacent to the site and this could be adversely affected. Part of the site is at risk of flooding. The development would result in the loss of an employment site.	The site needs to include suitable ecological mitigation measures to prevent adverse impacts on the adjacent wildlife corridor.	housing developments.
	Disused railway line through the site could offer recreational opportunities in the future e.g. cycle route.			
Dobshill HSG1 (56)	Unlikely to provide for affordable housing needs because of the size of the site. Re-use of a brownfield site.	Limited facilities are likely to lead to use of the car to access facilities. Loss of a commercial site.		
	The site is reasonably well situated in relation to employment opportunities. Situated close to Buckley railway station.			
	Potential for beneficial landscape/townscape			

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	impacts associated with the removal of a depot site and replacement with housing.			
	Remediation of contaminated soils.			
Higher Kinnerton HSG1 (57)	Well situated in relation to village facilities. Situated in close proximity to key employment areas e.g. Chester. The adjacent former railway line could offer future recreational benefits.	Location of the development likely to increase car based travel. Loss of agricultural land. Loss of greenfield land with associated water drainage and soil function modifications. Treebelt buffer between the site and the railway line should not be adversely affected. Could adversely affect views of Beeston Castle (although these are only limited to a small part of the site).	Incorporate treebelt into the development if the site. Site should be well designed to ensure high quality integration with existing townscape/landscape. SuDS should be utilised on site.	Cumulative loss of greenfield land in conjunction with other housing allocations.
Pen-y-Ffordd HSG1 (58)	The site would provide housing in a rural part of the County. Close to school and village	Location of the development likely to increase car based travel to access facilities. Potential adverse impacts on	All features of biodiversity interest should be retained. SuDS should be utilised on site.	Potential for a cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	facilities. Site in close proximity to employment opportunities at Mostyn Docks. Provision of new housing could help to encourage regeneration of the coastal strip.	trees which line the border of the site. Loss of greenfield land with associated drainage and soil function modifications.		
Hope (North Abermorddu School)	Close to community facilities including a school. Located along a key public transport corridor The site is well connected to other centres by public transport links which could reduce reliance on the private car.	The development would result in the loss of a greenfield site which would have localised drainage and soil function impacts. The development would result in the loss of agricultural land. In close proximity to the lower Hope Mountain and so could have adverse landscape impacts. The site is situated close to a Conservation Area and so new development should be designed to be sensitive to the locality.	Site should be carefully landscaped and biodiversity features of importance retained. SuDS should be utilised on site.	Potential for cumulative loss of greenfield sites which could have cumulative impacts upon runoff and soil resources.



Some of the sites have the potential to have adverse impacts on designated sites which form part of the Natura 2000 network either because they abut or located in very close proximity to the sites. Those sites where this issue arises are:

- HSG 1 (1) Buckley
- HSG1 (7) Connah's Quay
- HSG1 (33) Ewloe
- HSG1 (54) Brynford

The individual impacts that might be generated at these sites could result in a cumulative adverse impact on biodiversity resources across the County. However, policy WB2 (Sites of International Importance) will ensure that sites do not receive planning permission if they could have an adverse impact on these sites.

There are also allocations in the floodplain and they are not sustainable because they would result in the loss of valuable floodplain and so could increase the risk of flooding at other locations.

There are a number of greenfield allocations and the combination of all the allocations would result in a significant cumulative loss of areas of open space, land of agricultural value (in some circumstances) and alter runoff patterns and affect soil function in terms of water percolation.

There is a recognised capacity problem at the Mold STW and multiple allocations in the County are going to exacerbate existing problems.

There are cumulative benefits offered by the housing allocations in terms of positively contributing to the regeneration of some of the towns in the County including Holywell and Flint and providing an improved range of housing developments and housing opportunities. It is also possible that the provision of new housing could improve the provision of facilities across the County by increasing demand for new amenities and facilities.

Based upon the assessment the following actions are recommended:

- The sites in the floodplain are re-considered as housing allocations as they are not sustainable in the long term.
- All sites should seek to use SuDS in their design to help mitigate the loss of greenfield land and to ensure the more sustainable management of runoff from the sites.
- The allocations should not adversely affect sites of international importance. There is a policy in the plan addressing this issue but it is also recommended that these sites be reconsidered for their suitability as housing allocations. If these housing allocations remain in the UDP a buffer could be created around the site to minimise the likelihood of adverse impacts occurring.



- Some of the sites have the potential to adversely affect biodiversity resources and therefore protected species should be undertaken as appropriate.
- The careful design of all of the sites will be necessary to reduce the risk of adverse impacts and to maximise the potential enhancement opportunities associated with some of the sites e.g. those that involve the remediation of brownfield sites.
- Capacity issues at the Mold STW must be addressed.

8.11.4 Recommendations

Based upon the assessment the following modifications are recommended.

- Policy HSG1 See comments in Section 8.11.3. It is also recommended that the wildlife and biodiversity policies are crossreferenced because of the potential for some of the sites to impact upon the Natura 2000 network.
- Policy HSG2 it is recommended that an additional clause is added into the policy referencing the need to ensure that the site is as accessible as possible by public transport. The biodiversity policies in the plan could also be cross-referenced to ensure that developers are aware that there should be no significant adverse impacts on the integrity of the Dee Estuary.
- Policy HSG3 No modifications recommended.
- Policy HSG4 No modifications recommended.
- Policy HSG5 No modifications recommended.
- Policy HSG6 No modifications recommended.
- Policy HSG7 No modifications recommended.
- Policy HSG8 No modifications recommended.
- Policy HSG9 No modifications recommended.
- Policy HSG10 The policy could be improved by highlighting that the affordable housing component of any new development would have to be very well designed and integrated into the existing townscape.
- Policy HSG11 No modifications recommended.
- Policy HSG12 No modifications recommended.
- Policy HSG13 No modifications recommended.
- Policy HSG14 Clause f of the policy could be re-worded to state: 'there is no unacceptable impact on the amenity and character of surrounding areas due to noise, *pollution*, traffic or parking problems.'
- Policy HSG15 No modifications recommended.



8.11.5 How Have Recommendations Been Taken Forward?

Policy HSG1 –It is not considered necessary for the policy to be cross-referenced to wildlife and biodiversity policies, as the UDP should be read as a whole. The housing allocations that have the potential to impact upon the Natura 2000 network remain in the plan but policy WB2 clearly identifies requirements that must be fulfilled in relation to the designated sites of international importance.

In terms of housing allocations the following have been removed from the plan or are proposed for deletion based upon objections to the UDP, the SA process and the fact that some sites have already been granted planning permission or developed:

HSG1 (5)

HSG1 (7)

HSG1 (11)

HSG1 (16)

HSG1 (20)

HSG1 (21)

HSG1 (22)

HSG1 (23)

HSG1 (29)

HSG1 (34)

HSG1 (37)

HSG1 (40)

HSG1 (45)

Policy HSG2 – Croes Atti now has planning permission and has been subject to a section 106 agreement and so no modifications are to be implemented.

HSG10 – The recommendation has been incorporated into the policy.

HSG14 – The policy has been amended in line with the



8.12 Shopping Centres and Commercial Development

There are 12 policies within this section of the UDP, of which five were screened out of the detailed policy assessment because they were very specific and considered unlikely to have significant sustainability impacts.

8.12.1 Key Strengths

The commercial allocations policy (S1) has the potential to have a number of beneficial sustainability impacts as new commercial development could attract inward investment and improve the range of job opportunities and facilities in certain parts of the County. The policy proposes new commercial development in Connah's Quay and Holywell and this could help to drive forward regeneration in these areas by increasing their vitality and vibrancy which in the long term could have indirect benefits for reducing crime and improving community spirit and cohesion. New commercial developments in these areas could also help to regenerate and improve parts of the physical environment which could have benefits for quality of life.

The scoping stage of the SA identified that a significant amount of retail expenditure is lost to areas outside of the County like Chester and Wrexham and so increasing the provision of facilities in the County should help to encourage more people to do their shopping in Flintshire.

The commercial allocations in Policy S1 are primarily located in district and urban centres and so it is assumed that the benefits associated with these developments would largely be realised in the more urban parts of the County. However, any improvement to commercial facilities should have the potential to benefit all in the County, although their accessibility to different areas may vary. However, there are other policies that recognise the need to both provide for and retain commercial facilities in smaller more local centres (Policies S4 and S11). Local facilities like a shop or a post office can be important elements of rural life and their retention is likely to ensure that people living in rural areas continue to be able to access basic facilities.

Policy S5 states that retail proposals outside settlement boundaries would be permitted and this could help to encourage rural diversification which could have indirect benefits for rural quality of life.

Policy S9 states that non-retail commercial development would be permitted in town, district and local centres and this has the potential to increase job opportunities, contribute to urban renaissance and have long term positive impacts for the economy and the vitality and vibrancy of the centres where the development is located. This would be further complemented by the conversion of upper floors of town and district centre properties as stated in Policy S9. By promoting a mix of land-uses in the centres there could be opportunities to reduce the use of the private car as



public transport links are better in the urban centres which could have benefits for air quality and climate change. However, once again it might be questioned to what extent people living in the more rural parts of the County would benefit from this non-retail commercial development.

Policy S6 addresses large shopping developments and suggests that such developments would be subject to very stringent clauses within the policy. A key strength of large shopping developments in the County would be the potential for them to improve the retail facilities and to encourage more retail spending within the County, although there are inevitability risks that there could be adverse impacts upon existing centres within the County as well as other associated weaknesses (see Section 8.12.2 below).

Although policy S7 (Retail frontages within Town Centre Core Retail Areas) was screened out of the detailed matrix assessment the policy would complement many of the other policies within this chapter of the UDP and should ensure that retail frontages are retained and this is likely to positively influence the vibrancy of town centres.

All of the policies emphasise the need for any new commercial development to be 'on a scale appropriate to the locality' and so inappropriate development in terms of the impact on townscape and local distinctiveness should be avoided. Policies S2 and S3 add further weight to this statement by stating that shop frontages should be sensitive to the architectural design and style of the adjacent buildings and Policy S3 states that commercial proposals should pay full regard to the design policies of the plan. The design policies of the plan are very specific in their requirements and so there should also be opportunities to design out crime, ensure appropriate alignment of buildings and suitable lighting and landscaping where appropriate.

8.12.2 Key Weaknesses

Any new commercial development has the potential to have impacts upon the cultural heritage resources, local biodiversity, air quality, water resources, generate increased waste and introduce traffic congestion. Impacts would ultimately depend upon the scale of the development, its location and final design and so were assessed as largely uncertain in the assessments unless specific clauses relating to these issues were included within the policies. The other policies in the plan addressing issues of pollution, the need to protect biodiversity resources and cultural heritage could be cross-referenced in this chapter of the UDP to ensure that potential developers are aware of the need for any new developments to incorporate suitable mitigation for any potential adverse environmental impacts.

Policy S6 (Large Shopping Developments) has the potential to have a number of adverse impacts, although the clauses of the policy are clear that developments would not be permitted where they could adversely affect existing town centres, or have any adverse impact on the local environment. New large developments would increase travel by car which would have adverse climate change impacts associated with increased



carbon dioxide emissions. Although the provision of such shopping centres within the County may help to reduce vehicle movements outside of the County.

Policy S3 (Integrating New Commercial Development) states that the development should be located within easy walking distance of existing commercial developments and facilities which should help to encourage walking between facilities. The policy could be strengthened to encourage the siting of facilities in close proximity to public transport links and walking and cycling routes to reduce the need for people to access the facilities by private car.

An overall weakness of this element of the UDP is the likely geographical spread of the benefits that could be realised by the policy. Although some of the policies do address the provision of commercial facilities in rural locations and smaller centres, the extent to which the rural areas would benefit from the other commercial developments would ultimately depend upon their accessibility. This is an issue that was identified at the scoping stage and the provision of improved public transport connections and facilities is an issue that is outside the scope of the UDP and would need to be addressed through the LTP.

8.12.3 Review of Allocations in Policy S1

In addition to assessing Policy S1 using the standard policy matrix, a high level review of some of the key sustainability strengths and weaknesses of each allocation was undertaken and is presented in Table 8-2.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
Buckley (0.2ha)	The site is within the town centre and therefore has the potential to improve the vitality and vibrancy of the centre depending upon the type of development that occurs.	With any commercial development there are likely to be new trips generated and this could have traffic impacts with associated environmental impacts.	Any new commercial development needs to have its transport impacts fully investigated in a transportation assessment.	Potential for cumulative economic benefits through increased spending within the County associated with the new commercial development.
	The town centre site should be well connected by public transport links.			
	The allocation is close to residential properties and so should be able to serve this population.			
	The development could potentially contribute to the regeneration of the physical environment.			
	There are issues associated with employment deprivation in some wards of Buckley and so new commercial development could provide			

Table 8-2 Key Sustainability Strengths and Weaknesses of the Allocations in Policy S1

Sustainability Appraisal and Strategic Environmental Assessment The Flintshire Unitary Development Plan K:\projects\NH50993\F-Reps\SA Report003-NH50993-NHR-01-SA ReportF.doc

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	job opportunities. The allocation would re-use an area of previously developed land.			
Connah's Quay (1.3ha)	 A central location in Connah's Quay where there are good public transport links. The site is within the town centre and therefore has the potential to improve the vitality and vibrancy of the centre depending upon the type of development that occurs. Connah's Quay is in need of regeneration as identified by some of the baseline deprivation data and so positive social impacts could result. No significant strategic environmental constraints have been identified. The development could 	The site is currently a car park and this could create impacts depending upon how the loss of car parking spaces is addressed. There is a green space allocation adjacent to the site and the integration with this site needs to be carefully considered. With any commercial development there are likely to be new trips generated and this could have traffic impacts with associated environmental impacts.	Careful landscaping of the site needs to be considered for any application to ensure effective integration with any adjacent areas of greenspace. A transportation assessment would need to be completed.	Potential for cumulative economic benefits through increased spending within the County associated with the new commercial development.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	potentially contribute to the regeneration of the physical environment.			
	The new commercial development could provide employment opportunities.			
Holywell (1.0ha)	It is a central location and so access by public transport might be better. There are social and economic regeneration issues in Holywell and the provision of new commercial development could help to drive forward regeneration. The allocation is located within the existing commercial centre and so could help to support and improve the vibrancy of the centre depending upon what development occurs.	The site is currently car parking and there could be issues associated with developing the site and the loss of car parking within the town centre. Part of the allocated site is located within a Conservation Area and therefore the new commercial development would need to be very carefully designed to ensure no adverse impacts on the character of the Conservation Area. With any commercial development there are likely to be new trips generated and this could	This site does have more complex issues than the others allocated under this policy. If this site were to be developed it would need to be very carefully designed to ensure that it did not adversely impact upon the Greenfield Valley or the Conservation Area. A transportation assessment would also need to be undertaken.	Potential for cumulative economic benefits through increased spending within the County associated with the new commercial development.

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
		associated environmental impacts.		
		The site is located adjacent to the Greenfield Valley, an important tourism and recreational resource and that also contributes to the cultural resources of an area.		
		Part of the allocation is registered as common land.		
Mold (0.8ha) and Mold (0.7ha)	These allocations would both re-use brownfield sites.	The sites appear to be located a short distance outside of the core retail	A transportation assessment would need to be undertaken.	Potential for cumulative economic benefits through increased spending within
Both of the sites allocated in Mold have been considered together as they are located very close to each other.	There could be social and economic regeneration benefits offered by the commercial development. The development of both sites could offer greater cumulative benefits for Mold.	area and this could be to the detriment of this area. Impacts will depend ultimately upon the type of development that occurs.	Further consultation should be undertaken with the Environment Agency about the redevelopment of the 0.7ha site because of it	Ild the County associated with the new commercial development.
		With any commercial development there are likely to be new trips generated and this could have traffic impacts with associated environmental impacts.	lying within a floodplain. Developers should be encouraged to use sustainable drainage principles in the design of the new sites.	conjunction with other developments across the County.
		The 0.7ha site is located in		

Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
		the floodplain.		
Ewloe (0.3ha)	The commercial allocation should complement the adjacent community facility and housing designations.	This is a very small site and no significant strategic weaknesses have been identified.	No specific recommendations.	Potential for cumulative economic benefits through increased spending within the County associated with the new commercial development.
Flint (0.3ha)	This allocation would provide commercial facilities for the residential properties proposed as part of this mixed use site. Other issues relating to the overall location of this mixed use development and other potential constraints have been addressed as part of Policy HSG2.			Potential for cumulative economic benefits through increased spending within the County associated with the new commercial development.
Broughton (2.1ha)	The commercial development would complement the existing retail allocations at Broughton. There would be employment benefits.	This site is situated in the floodplain. There could be traffic issues associated with the allocation. Adjacent to nature reserve for Great Crested Newts.	A transportation assessment should be undertaken to determine and suitably mitigate the potential traffic impacts. Further consultation should be undertaken with the EA about the location of the	Potential for cumulative economic benefits through increased spending within the County associated with the new commercial development.



Site Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Impacts
	This is a well-known location in Flintshire and so could be attractive for new businesses.		site in the floodplain. Appropriate mitigation will need to be designed into the scheme to prevent any adverse impacts on the adjacent newt population and nature reserve.	



Based upon the above strategic review it is recommended that the sites within the floodplain are subject to further scrutiny as a floodplain location is not sustainable. The allocation in Holywell is also particularly sensitive and it is recommended that the type of development permitted is carefully selected to prevent any adverse impacts on the Conservation Area and the Greenfield Valley. The loss of registered common land associated with the development of the Holywell site would also be an adverse impact

8.12.4 Recommendations

Based upon the assessment the following modifications are recommended:

Policy S1 - No specific recommendations other than those identified for the individual site allocations in Section 8.12.3 above.

Policy S2 – The policy could be improved by strengthening the requirement for appropriate design of shop fronts within Conservation Areas.

Policy S3 – The need for commercial development to be well located in relation to public transport facilities could be included within the policy.

Policy S4 – No modifications recommended.

Policy S5 – No modifications recommended.

Policy S6 – Clause f of the policy needs to be re-worded to "the development would not, through the generation of traffic, have an adverse impact upon the local highway network or the quality of the local environment that *could not be mitigated or appropriately managed.*"

Policy S7 – No modifications recommended.

Policy S8 – No modifications recommended.

Policy S9 – No modifications recommended.

Policy S10 – No modifications recommended.

Policy S11 - No modifications recommended.

Policy S12 - No modifications recommended.



8.12.5 How Have Recommendations Been Taken Forward?

Policy S2 – No modification has been made to the policy as there is a cross reference to policy HE1 Development Affecting a Conservation Area.

Policy S3 – Public transport is addressed in the explanatory text to the policy and so no modification has been made to the policy itself.

Policy S6 – The policy has been strengthened in line with the recommendation.

8.13 Employment

There are seven polices in this chapter of the UDP of which two specifically allocate areas of land for development. These policies (EM1 and EM2) were therefore assessed using the matrix and the individual allocations were subject to a high level review to determine their key sustainability strengths and weaknesses.

8.13.1 Key Strengths

The key strengths of policies EM1, EM2 and EM3 are addressed in Sections 8.13.3, 8.13.4 and 8.13.5 respectively.

Policy EMP4 and EMP5 would offer the opportunity for new businesses to develop in rural parts of the County and so should help to ensure that the County's economy as a whole can develop. This policy therefore contributes to the objective 'to maintain and improve the quality of life in rural areas' as the policy also makes it clear that the development should be appropriate to the location and so should ensure the development does not adversely affect the built and natural environment. There could be indirect benefits for the provision of services in areas where new employment development occurs because there may be an increased demand for new facilities e.g. local shops.

Policy EM4 includes a clause addressing the need to protect the landscape, nature conservation and features of historic importance and is a policy strength. The policy also indicates that development on brownfield, underused or vacant sites will be permitted which could have localised benefits for townscape and lead to the re-development of sites in need of regeneration. This should hopefully prevent the use of greenfield sites for such development.

Policy EM6, which protects the use of existing or allocated employment land from other types of development, should have economic benefits by



maximising the amount of land that is retained for employment purposes. From an entirely different perspective this policy could also be beneficial in the sense that it would also provide the opportunity for some of the more inappropriate allocations to be reconsidered and put to an alternative use. For example there are a significant number of allocations in the floodplain and a recreational/nature conservation use might be far better suited to such sites. Therefore, there could be positive biodiversity, water resource, landscape, heritage and soil function benefits generated by this policy if some sites were not used for employment purposes.

The Bad Neighbour policy (EM7) is very clear in its requirements as it includes a number of clauses regarding the need for there to be no unacceptable harm to landscape, townscape, the historic or natural environment, residential amenity or public health and safety. There could be some differing interpretations of the term 'unacceptable' and an alternative wording could be used as recommended for a number of other policies in the plan.

8.13.2 Key Weaknesses

The key weaknesses of policies EM1, EM2 and EM3 are addressed in Sections 8.13.3, 8.13.4 and 8.13.5 respectively.

Any new or extensions to existing industrial or commercial sites have the potential to increase traffic which could have adverse climate change, air quality and noise impacts.

Whilst policy EM4 includes clauses relating to the protection of the environment, policy EM5 fails to and this is considered a significant weakness because extensions to existing sites could be just as damaging as new sites. There appears to be a lack of consistency in the employment policies in relation to appropriate clauses regarding the protection of environmental resources i.e. some include the relevant clauses and others do not.

Both policies EM4 and EM5 have the potential to adversely impact on the water environment by increasing water demand, potentially causing pollution and adding to existing pressure on the wastewater disposal network.

There are no significant weaknesses associated with policies EM6 and EM7.

8.13.3 Assessment of Allocations in Policy EM1

Table 8-3 presents the key sustainability strengths and weaknesses of the employment allocations.

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
Broughton EM1(1)	Redeveloping a brownfield site Adjacent to existing industry and the Hawarden Airport. Close to highway network.	Within area of flood risk. Approximately 2km from the River Dee which is designated SSSI and a SAC at that location. There could be risks to the Dee because of pollution and modified water levels depending upon abstraction requirements.	Flood risk issues have been assessed as part of the Broughton Multi Modal Transport Study. There should be no significant adverse impacts on the integrity of the River Dee as a result of the development.	Potential for cumulative effects with EM1(2) upon local area; these could be positive in terms of employment generation but also potentially negative. Potential cumulative adverse effects on nearby River Dee SSSI and SAC.
		Potential for the site to support protected species.	Transportation assessment recommended because of size of site and proximity to other industrial/employment allocations. Full protected species surveys should be undertaken and suitable mitigation included within the site design. Potential need for an EIA in view of size and sensitive location.	[Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP]. Potential for cumulative loss of floodplain. Potential for cumulative adverse transport impacts with other employment/housing and commercial developments.
Broughton EM1 (2)	Redeveloping a brownfield site Adjacent to existing industry and the Hawarden Airport. Close to highway network.	Within area of flood risk. Approximately 2km from the River Dee which is designated SSSI and a SAC at that location. This could result in adverse	Flood risk issues have been assessed as part of the Broughton Multi Modal Transport Study. There should be no significant	As for EM1 (1)

Table 8-3 Key Sustainability Strengths and Weaknesses of the Allocations in Policy EM1

Sustainability Appraisal and Strategic Environmental Assessment The Flintshire Unitary Development Plan K:\projects\NH50993\F-Reps\SA Report003-NH50993-NHR-01-SA ReportF.doc Hyder Consulting (UK) Ltd 2212959 22/09/06 12:04 88
Mould enable improved econo			
Would enable improved access to EM1. The site would build upon	impacts in terms of potential for pollution and potentially upon water levels depending upon abstraction requirements.	adverse impacts on the integrity of the River Dee as a result of the development.	
existing aerospace strengths across the County.	Potential for the site to support protected species.	I ransportation assessment recommended because of size of site and proximity to other industrial/employment allocations.	
		Full protected species surveys should be undertaken and suitable mitigation included within the site design.	
		Potential need for an EIA in view of size and sensitive location.	
Sited within a principal employment area. Buckley is in need of	SAC and SSSI designation to the north, north east and east of the site (Buckley Clay Pits and Commons SSSI and Deeside	There should be no significant adverse impacts on the integrity of the designated sites.	Potential for cumulative adverse impacts on the Buckley area including transportation and associated environmental
regeneration, new employment opportunities could offer social and economic benefits.	and Buckley Newt Sites SAC).	Need for a transportation assessment.	impacts.
	Potential for presence of protected species on site (amphibians) Close to green space designation, potential for adverse landscape impacts.	Potential need for an EIA.	The adverse environmental impacts of these developments
		Full protected species surveys should be undertaken and suitable mitigation included within the site design.	could affect the SSSI and SAC. It will be essential to ensure that there would be no significant adverse impact cumulatively with other allocated sites on the integrity of the designated sites.
	existing aerospace strengths across the County. Sited within a principal employment area. Buckley is in need of regeneration, new employment opportunities could offer social	 The site would build upon existing aerospace strengths across the County. Sited within a principal employment area. Buckley is in need of regeneration, new employment opportunities could offer social and economic benefits. SAC and SSSI designation to the north, north east and east of the site (Buckley Clay Pits and Commons SSSI and Deeside and Buckley Newt Sites SAC). Potential for presence of protected species on site (amphibians) Close to green space designation, potential for 	The site would build upon existing aerospace strengths across the County.abstraction requirements. Potential for the site to support protected species.Transportation assessment recommended because of size of site and proximity to other industrial/employment allocations.Sited within a principal employment area.SAC and SSSI designation to the north, north east and east of the site (Buckley Clay Pits and Commons SSSI and Deeside and economic benefits.There should be no significant adverse landscape impacts.Sited within a principal employment area.SAC and SSSI designation to the north, north east and east of the site (Buckley Clay Pits and Commons SSSI and Deeside and Buckley Newt Sites SAC).There should be no significant adverse impacts on the integrity of the designated sites.Need for a transportation assessment.Need for an EIA.Full protected species surveys should be undertaken and suitable mitigation included within the site design.



Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
		potential for air, noise, nuisance and traffic issues.		[Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].
				There would be cumulative positive economic/regeneration impacts.
Buckley EM1 (4)	Sited within a principal employment area. Buckley is in need of regeneration, new employment opportunities could offer social and economic benefits.	 SAC and SSSI designation to the north, north east and east of the site (Buckley Clay Pits and Commons SSSI and Deeside and Buckley Newt Sites SAC). Potential for presence of protected species on site (amphibians). Close to green space designation, potential for adverse landscape impacts. Close to residential areas and potential for air, noise, nuisance and traffic issues. 	There should be no significant adverse impacts on the integrity of the designated sites. Need for a transportation assessment. Potential need for an EIA. Full protected species surveys should be undertaken and suitable mitigation included within the site design.	Cumulative impacts as for EM1 (3)
Buckley EM1 (5)	Sited within a principal employment area. Buckley is in need of	Close to residential areas and potential for air, noise, nuisance and traffic issues.	There should be no significant adverse impacts on the integrity of the designated sites.	Cumulative impacts as for EM1 (3). [Policy WB2 should prevent the

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
	regeneration, new employment opportunities could offer social and economic benefits. Situated adjacent to a station, opportunities for people to access the site by public transport.	Approximately 200m from the Deeside and Buckley Newt Sites SAC and Buckley Clay Pits and Commons SSSI.	Need for a transportation assessment. Potential need for an EIA.	occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].
Buckley EM1 (6)	Sited within a principal employment area. Buckley is in need of regeneration, new employment opportunities could offer social and economic benefits. Situated within 500m of the station, opportunities for people to access the site by public transport.	Abuts the Deeside and Buckley Newt sites SAC and the Buckley Claypits and Commons SSSI. Close to residential areas and potential for air, noise, nuisance and traffic issues. Potential for presence of protected species on site (amphibians) The site is separated from the adjacent residential area by a wooded embankment i.e. former trackbed.	There should be no significant adverse impacts on the integrity of the designated sites. Full protected species surveys should be undertaken and suitable mitigation included within the site design. Need for a transportation assessment. Potential for a need for an EIA.	Cumulative impacts as for EM1 (3). [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].
Chester EM1 (7)	Potential for positive transboundary impacts with neighbouring authorities. Located on existing industrial park with established communications links.	In the floodplain On the edge of green barrier, important to ensure that it would not adversely affect its character. Within 2km of the River Dee	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable.	Potential for adverse and positive incremental cumulative adverse impacts in conjunction with the existing industrial park uses. Potential for adverse cumulative

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
		SSSI and SAC.	There should be no significant adverse impacts on the integrity of the designated site.	impacts on the River Dee. [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP]. Potential for cumulative loss of floodplain.
Connahs' Quay EM1 (8)	Easy access to the highway network. Re-use of a brownfield site. Connah's Quay is in need of regeneration, new employment opportunities could provide social and economic benefits. Located in reasonable proximity to the Deeside Industrial Zone.	Partially within the floodplain. Abuts the Dee Estuary SSSI, SPA, pSPA, Ramsar, pRamsar and pSAC. Landscape/green space designation on opposite side of railway. On fringes of a residential area.	There should be no significant adverse impacts on the integrity of the designated site. Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. Likely need for an EIA.	Potential for adverse cumulative impacts on the Dee Estuary associated with nearby EM1 (9) and EM1(10) allocations and all others located along the Dee Estuary. [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP]. Potential for cumulative loss of floodplain.
Connah's Quay EM1 (9) and (10)	Re-use of brownfield site for EM1(10). Connah's Quay is in need of	Within 150m of the Dee Estuary SSSI, SPA, pSPA, Ramsar, pRamsar and pSAC.	There should be no significant adverse impacts on the integrity of the designated site.	As above.

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
	regeneration, new employment opportunities could provide social and economic benefit. Located in reasonable proximity to the Deeside Industrial Zone. Easy access to the highway network.	EM1 (9) and (10) within the floodplain.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. Likely need for an EIA.	
Deeside EM1 (11), (12) and (13)	Good transport links Already in an established industrial area. Capitalising upon a well- established industrial site.	All situated in the floodplain. Close to the Dee Estuary, particularly (12) and so there is the potential for adverse impacts on the designations of international and national importance.	There should be no significant adverse impacts on the integrity of the designated site. Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable.	Potential for there to be cumulative adverse impacts on the Dee Estuary. [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].
			All sites likely to need an EIA (smallest is 11ha).	Potential for cumulative loss of floodplain.
				Potential for cumulative transportation impacts.
Deeside EM1 (14)	Potential for significant economic benefits owing to the size of the site. This could have knock-on	Entirely within the floodplain. Abuts the River Dee SSSI and SAC.	Likely to need an EIA (138ha) Issues of developing in the floodplain must be discussed	Potential for cumulative loss of floodplain. Potential for cumulative adverse
	social benefits in centres needing regeneration depending	At its nearest point it is within	with the EA. From an adaptation	impacts on designated sites.

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
	upon who takes the employment opportunities. Close to highway and rail	100m of the Dee Estuary SSSI, pRamsar, Ramsar Site, pSAC, pSPA and SPA.	to climate change perspective this location would not be sustainable.	[Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be
	network.	Adjoins residential areas of Garden City.	There should be no significant adverse impacts on the integrity of the designated site.	read as a whole and each policy in the context of others in the UDP].
		Appears to be partly greenfield site so there could be adverse drainage and soil function impacts.	Development brief recommended because of the size of the site.	
		Potential for significant landscape impacts because of the site topography, its size and current open nature.	Potential for major adverse impacts on floodplain and indirectly on designated sites of nature conservation value.	
			Transportation assessment recommended.	
Flint EM1 (15)	 Adjacent to other industrial sites. Rail links to Flint town centre Located in close proximity to the Croes Atti Mixed-Use allocation and so could offer job opportunities for people living on this site. Potential for there to be job creation opportunities in Flint but this depends upon how many 	Near to floodplain but not within it. Close to the Dee Estuary and so there is potential for the development to have indirect adverse impacts on the SPA, pSPA, Ramsar Site, pRamsar, SSSI and pSAC. Potential for significant water resource issues because of increased water consumption	Likely to require an EIA. Water resource/abstraction issues need to be fully investigated. Transportation assessment recommended.	Potential for cumulative adverse impacts on designated sites. [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
	jobs are created and who takes them.	associated with the paper industry.		
Greenfield EM1 (16), (17), (18), (19)	Within or adjacent to an existing business park. Adjacent to the rail network and safeguarded highway route so communications links should be good.	All situated in the floodplain EM1 19 appears to be a greenfield site. Either adjacent to or in close proximity to the Dee Estuary and so there is the potential for adverse impacts on the designated features particularly EM19. Potential for adverse impacts on the adjacent tourism allocation (T9). Although the policy itself clearly states that adverse effects would not be permitted.	Transportation assessment recommended. Water resource and abstraction issues need to be fully investigated. Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site. Potential for adverse impacts on the tourism allocation need to be considered.	Potential for cumulative loss of floodplain and cumulative adverse impacts on the Dee Estuary. Potential for cumulative adverse impacts on designated sites. [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].
Mold EM1 (20)	Within an existing industrial location. The site could contribute to employment and regeneration opportunities in Mold.	Partially within the floodplain. Located adjacent to residential areas Potential for increased traffic	EIA might not be required owing to the size of the site and at this level no significant environmental constraints. Traffic impacts should be fully	Potential for cumulative transportation impacts with EM1 (21) and EM2 (4). Potential for cumulative loss of floodplain.

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
			investigated.	
			The development of the site in the floodplain would need to be discussed further with the EA.	
Mold EM1 (21)	The site could contribute to employment and regeneration opportunities in Mold.	Adjacent to green barrier and landscape (green space) allocations.	SuDS should be promoted to address loss of greenfield site.	Potential for cumulative transportation impacts with EM1 (20) and EM2 (4).
	Close to highway network.	Potential for increased traffic.		
		Appears to be greenfield site which could have adverse water resource and soil function issues.		
		Potential for adverse impacts on local drainage network.		
		An urban fringe site which could have adverse biodiversity impacts (such sites are known to be particularly biodiverse in Flintshire).		
Mostyn EM1 (22)	Adjacent to Mostyn Docks. The allocation could contribute to port expansion and economic	Situated adjacent to and partially within Dee Estuary SPA, SSSI, pSAC, pSPA, pRamsar and	Recommend that the section of the site within the Dee Estuary is removed from the allocation.	Potential for cumulative loss of floodplain and adverse impacts on the Dee Estuary.
	growth. Partly brownfield land.	Ramsar site boundary. Within the floodplain.	EIA is likely to be required (size and sensitivity of the allocation). Issues of developing in the	[Policy WB2 should prevent the occurrence of the adverse nature conservation impacts as the plan

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
	Adjacent to railway and highway network. Potential to increase freight transport by water (although this could have adverse environmental issues associated with the dredging of the Estuary). The development could offer regenerative benefits to Mostyn.		floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site.	should be read as a whole and each policy in the context of others in the UDP].
Queensferry EM1 (23)	Located in an established industrial area. Adjacent to railway and highway links. Potential for offer regenerative benefits to Queensferry.	Within the floodplain Within 200m of the River Dee SSSI and SAC.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site. Transportation study should be completed. Likely to require an EIA.	The allocation could cumulatively contribute to economic development in the local area. Potential for cumulative transportation impacts in conjunction with other sites and existing land uses. Potential for cumulative adverse impacts on the River Dee. [Policy WB2 should prevent the occurrence of these adverse impacts as the plan should be read as a whole and each policy in the context of others in the UDP].

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
Queensferry EM1 (24)	Adjacent to an established industrial area. Adjacent to railway and highway links. Potential for offer regenerative benefits to Queensferry.	Within the floodplain. Within 450m of the River Dee SSSI and SAC. Located on an undeveloped site which could have adverse water and soil function impacts. Adjacent to a green barrier designation with the potential for adverse landscape impacts.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site. Transportation study should be completed.	The allocation could cumulatively contribute to economic development in the local area. Potential for cumulative transportation impacts in conjunction with other sites and existing land uses. Potential for adverse cumulative impacts on the River Dee SSSI and SAC in conjunction with other employment allocations. [Policy WB2 should prevent the occurrence of the adverse nature conservation impacts as the plan should be read as a whole and each policy in the context of others in the UDP].
Rhydymwyn EM1 (25)	In an existing established industrial estate. Opportunities for economic benefits in the local area through job creation.	All within the floodplain. Potential for transportation issues. In close proximity to the Alyn and so there is a pollution risk cumulatively with the other developments located on the site.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. Transportation study should be completed.	Potential for cumulative loss of floodplain in conjunction with other developments across the County.

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
Saltney EM1 (26)	Extension of an existing industrial estate. Potential for positive transboundary impacts associated with job opportunities for neighbouring authorities, close to Cheshire border	Within the floodplain. Abuts the River Dee SSSI and SAC.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site. Transportation study should be completed.	Potential for cumulative adverse impacts on the River Dee SSSI and SAC in conjunction with other sites. [Policy WB2 should prevent the occurrence of the adverse nature conservation impacts as the plan should be read as a whole and each policy in the context of others in the UDP]. Cumulative loss of floodplain because of other allocations.
Sandycroft EM1 (27)	Adjacent to the railway Expansion of an existing industrial area.	 Within the floodplain. Within 300m of the River Dee SSSI and SAC. Adjacent to green barrier designation and so there is the potential for adverse impacts on landscape amenity. Appears to be a greenfield site with potential impacts on drainage patterns and soil functions. Potential for adverse transportation impacts. 	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site. Transportation study should be completed.	Potential for cumulative adverse impacts on the River Dee SSSI and SAC in conjunction with other sites. [Policy WB2 should prevent the occurrence of the adverse nature conservation impacts as the plan should be read as a whole and each policy in the context of others in the UDP]. Potential for cumulative loss of floodplain

Employment Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative Effects
Shotton EM1 (28)	Expansion of an existing industrial area. Potential to provide job opportunities to nearby residential areas. There could be wider regenerative benefits for Shotton.	Within the floodplain. Potential for adverse transportation impacts. Potential for adverse impacts on neighbouring population associated with nuisance, pollution and traffic impacts. Within 400m of River Dee SSSI and SAC and the Dee Estuary SPA, pSPA, pSAC, pRamsar, Ramsar and SSSI.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site. Transportation study should be completed.	Potential for cumulative adverse impacts on the River Dee SSSI, SAC and Dee Estuary SPA, pSAC, pSPA, pRamsar, Ramsar site and SSSI in conjunction with other sites. [Policy WB2 should prevent the occurrence of the adverse nature conservation impacts as the plan should be read as a whole and each policy in the context of others in the UDP]. Potential for cumulative loss of floodplain



Table 8-3 identifies that there are a number of sustainability strengths and weaknesses associated with each of the employment land allocations. One of the most significant issues is the potential for cumulative and synergistic impacts to result from the development of multiple allocations across the County.

One of the most significant outcomes from an environmental perspective is the potential for the plan to result in significant adverse impacts on Natura 2000 sites because of the allocations contained within policy EM1. A number of the allocations either abut or lie within close proximity to the Dee Estuary Ramsar site, pRamsar, SPA, pSPA, pSAC, SSSI; the Deeside and Buckley Newt Sites SAC and the River Dee SAC and SSSI. A variety of factors could adversely impact upon the integrity of the sites including: land, water or air pollution; abstraction of water altering water levels in the sites; and the direct loss of habitats. It should be noted that multiple sites affect each of the Natura 2000 sites and therefore there is a significant risk of cumulative adverse impacts. Table 8-4 below identifies the number of employment allocations that could impact upon the Natura 2000 sites.

Natura 2000 Site	Employment Allocations
Dee Estuary Ramsar Site, pRamsar,	Connah's Quay (8)
pSPA, SPA, pSAC and SSSI	Connah's Quay (9)
	Connah's Quay (10)
	Deeside (11)
	Deeside (12)
	Deeside (13)
	Deeside (14)
	Flint (15)
	Greenfield (16)
	Greenfield (17)
	Greenfield (18)
	Greenfield (19)
	Mostyn (22)
	Shotton (28)
Deeside and Buckley Newt Sites SAC	Buckley EM1 (3)
and SSSI	Buckley EM1 (4)
	Buckley EM1 (5)
	Buckley EM1 (6)

 Table 8-4
 Employment Allocations potentially affecting Natura 2000 sites



Natura 2000 Site	Employment Allocations
River Dee and Llyn Tegid SSSI and	Broughton EM1 (1)
SAC	Broughton EM1 (2)
	Chester EM1 (7)
	Deeside EM1 (14)
	Queensferry EM1 (23)
	Queensferry EM1 (24)
	Saltney EM1 (26)
	Sandycroft EM1 (27)
	Shotton EM1 (28)

Article 6(3) of the Habitats Directive¹⁹ states that:

'Any plan of project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives."

It was evident that the allocations needed to be reviewed in more detail owing to their potentially significant consequences both directly and indirectly for the Natura 2000 sites. Indeed it is the intention of the SEA process that development is guided away from inappropriate locations to ensure more informed and better decision-making. The most preferable mitigation was, therefore the review of the sites and the selection of less environmentally sensitive sites. However, it is not intended that the UDP policies are read in isolation and Chapter 8 'Wildlife and Biodiversity' includes policies regarding the need to protect the integrity of sites of nature conservation importance. The most important policy in relation to the sites is WB2 and this will ensure that the Natura 2000 sites are not adversely affected.

The water resource requirements of new developments would also be significant if all the land is brought forward for development. The abstraction of water and increased water use could potentially have very significant consequences for both the Dee Estuary and the River Dee should problems like drought be stimulated. However, there is a policy in the UDP EWP15 which addresses the need for development to have no adverse impacts on water resources and to ensure that sufficient supply and treatment facilities are available.

A number of the employment allocations lie in the floodplain as many of them are situated long the coast. Over time there will be a gradual loss of

¹⁹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora



the floodplain area across the County which is considered very unsustainable and a significant adverse impact of this policy. The Environment Agency document 'Policy and Practice for the Protection of Floodplains²⁰ is very clear that floodplains should be safeguarded where possible to protect their natural role in allowing for the storage of water. Although each of the employment sites individually may only result in a slight increase in flood risk the effect will become more and more significant in the long term as incremental, cumulative effects arise with additional development. There is also the risk that in the future, in view of the potential consequences of climate change, that a managed retreat option for the eastern coast of Flintshire may be deemed appropriate and hence many of the employment allocations currently included in the plan may not be viable.

A number of the allocations would also result in the loss of greenfield sites and this would have further adverse impacts for water resources as a result of increased runoff rates, with subsequent impacts for groundwater flows. This issue could be mitigated to some degree through the use of sustainable drainage systems.

All employment development has the potential to increase travel by car which will increase carbon dioxide emissions having significant climate change impacts in the future. A number of the allocations are well situated in relation to public transport links and this should hopefully reduce the need for people to travel by car and is evidence that Flintshire CC are aware of the need for land use patterns to be as sustainable as possible from an access perspective. The Part 1 policy STR2 is also very clear in its requirements for new development to be as accessible as possible by public transport.

Despite the above adverse environmental impacts, the employment allocations have the potential to offer a number of significant economic and social benefits. A number of the towns where employment development is proposed are in need of regeneration. If regeneration is stimulated then there could be indirect benefits for social issues like crime reduction and educational attainment if the aspirations of the people living in these settlements is raised. The allocations would also cumulatively benefit the County's economy and the establishment of successful companies building upon existing successes like the aerospace industry could improve the image of the County as a place to do live, work and do business. Owing to the location of some of the allocations in close proximity to the Cheshire border there could be positive transboundary economic impacts.

All of the allocations would increase energy demand, resource use and waste generation. The presence of strong policies in the UDP in relation to these issues is considered particularly important to try and reduce these potential adverse impacts.

²⁰ Environment Agency Policy and Practice for the Protection of Floodplains



8.13.4 Assessment of Site Allocations in Policy EM2

Table 8-5 presents the key sustainability strengths and weaknesses of the four allocations included in this policy.

In comparison to the allocations proposed in policy EM1 these sites are more sustainable from an environmental perspective. None of the sites would be deemed to have an adverse impact on the integrity of Natura 2000 sites and only one allocation (the DARA Site at Sealand) is located within the floodplain.

These sites are considered to be high quality employment allocations that could help to drive forward investment and so should help to develop the County's economy and market the County as a place to live and do business. There could be knock on social benefits if the allocations help to deliver regeneration.

All of the sites are allocated for high quality employment uses (B1) rather than potentially more polluting industrial uses (B2) and so are likely to be less environmentally damaging. There is also a clause included in the policy requiring that landscaping measures which retain any existing features of landscape, historic or nature conservation interest are retained. However, all of the sites are likely to be significant traffic generators which would have adverse climate change and air quality impacts. Maximising public transport connections and links will be particularly important in reducing this impact. The developments would result in some loss of greenfield sites which will affect runoff patterns. The use of sustainable drainage systems would help to reduce this impact.

Key Sustainability Allocation Key Sustainability Strengths Recommendations Cumulative Weaknesses Warren Hall, Broughton Good access to the highway Located on greenfield land SuDS should be utilised on Potential for cumulative network which could be so there would be adverse economic benefits site. attractive to investors. impacts on drainage patterns associated with existing Full protected species and soil functions e.g. aerospace industry. surveys should be In close proximity to existing infiltration/percolation. aerospace industry and undertaken and mitigation Potential for cumulative could help to develop the Potential for adverse integrated as appropriate. transport impacts associated image of this industry further. biodiversity and landscape with other housing, A traffic impact assessment issues because of loss of an employment and commercial Potential for economic has been undertaken as part area of open space. allocations. benefits as a result of job of the Broughton Multi Modal Study and as a part of a opportunities. Potential for significant recent planning application. transportation impacts

Table 8-5 Key Sustainability Strengths and Weaknesses of the Allocations in Policy EM2

Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative
DARA Site, Sealand	 Redevelopment of an existing site. Important gateway site with potential benefits for the economy both locally and across the County. Adjacent to safeguarded road and rail corridors. Potential for transboundary impacts with Cheshire in terms of economic opportunity. Adjacent to the Deeside Industrial Park. 	Within the floodplain. Adjacent to green barrier but it is already an industrial site. Potential for adverse traffic impacts. The site is close to residential properties and so the site will have to be carefully designed to minimise adverse impacts.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. A transportation assessment should be undertaken. A development brief should be prepared for the site.	Potential for positive cumulative economic impacts associated with the Deeside Industrial Park and other adjacent aerospace industries. Potential for cumulative loss of floodplain associated with other developments.
St David's Park, Ewloe	Existing industrial park close to the A55.Located adjacent to a residential area with the potential for economic benefits for local residents.	Potential for localised traffic impacts. Green space allocated nearby.	A transportation assessment should be undertaken.	

Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative
Mold Business Park Extension	The site could contribute to employment and regeneration opportunities in Mold. Close to highway network. Could help contribute to urban renaissance if appropriately designed.	Adjacent to green barrier and landscape (green space) allocations. Potential for increased traffic which would have adverse air quality and climate change impacts. Appears to be greenfield site which could have adverse water resource/drainage and soil function issues. Potential for adverse impacts on local drainage network. An urban fringe site which could have adverse biodiversity impacts (such sites are known to be particularly biodiverse in Flintshire).	SuDS should be promoted to address loss of greenfield site. New public transport facilities should be developed to serve the site. Full protected species surveys should be undertaken and mitigation implemented as appropriate.	Potential for cumulative transportation impacts with other employment allocations.



8.13.5 Development Zones and Principal Employment Areas (EM3)

Table 8-6 presents the key sustainability strengths and weaknesses of the Development Zones and Principal Employment Areas.

As identified for policy EM1 the continued development in some of the areas identified in the UDP as Development Zones and Principal Employment Areas has the potential to adversely impact upon Natura 2000 sites including the Dee Estuary Ramsar site, pRamsar, pSPA, SPA, pSAC and SSSI, the Deeside and Buckley Newt Sites SAC and the River Dee and Bala Lake SAC and SSSI. This issue is particularly significant for the Port Development Zone at Mostyn Port which actually lies within the Dee Estuary. From an environmental perspective this option is not sustainable, particularly as any increase in port traffic is likely to require further dredging of the Estuary which has serious environmental implications. However, at this stage of planning, the details of the sites' development and design are not known, nor is the potential mitigation that could be incorporated. Following the precautionary principle, these allocations have been assessed as major negative, with the recommendation that more sustainable sites are found. However, the UDP needs to be read as a whole, and in reality, the provision of policy WB2 would prevent a site being taken forward if it were shown to have significant adverse effects on the integrity of Natura 2000 sites.

A number of the Development Zones are also located in the floodplain and so there would be a cumulative loss of floodplain across the County. The areas of floodplain that are located along the coast are likely to be of high nature conservation value because of the Dee Estuary designations and so would be better as an open space use from an environmental/conservation perspective. In advance of any of the floodplain locations being further developed, liaison with the Environment Agency would be necessary and a Flood Consequences Assessment required. Policy EWP17 of the UDP does make this issue clear to developers.

As identified for policies EM1 and EM2 there are likely to be significant economic and social benefits generated by this policy. There could also be transboundary economic benefits because a number of the sites are situated close to the Cheshire border.

Policy EM3 does include clauses which emphasise the need for all development on these sites to be appropriate in type and scale to the locality.

Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative
Deeside Development Zone	Situated in an area where other businesses and industries already exist and so there are opportunities to build upon existing development and attract new investment. Recognised as a site of strategic importance within the sub-region of East Flintshire, west Cheshire and the Wirral and forms the 'Northern Gateway' to the County. There are good transport links to the site.	Any further development in this area is likely to increase traffic flows. All of the Development Zone lies within the floodplain and this could increase flood risk and is not sustainable in the long term. The allocation borders the River Dee SSSI and SAC and development which could include industrial uses could adversely impact upon its integrity. There could also be adverse impacts on the Dee Estuary Ramsar, pRamsar, pSPA, SPA, pSAC and SSSI.	There should be no adverse impacts on the integrity of the River Dee SAC or the Dee Estuary Ramsar site, pRamsar, pSAC, pSPA and SPA. Situating further development in a floodplain is not sustainable in the long term and liaison with the Environment Agency would be required and Flood Consequences Assessment for development in this area.	Potential for cumulative loss of the floodplain associated with the development of numerous sites within this development zone, combined with other allocations proposed in EM1. Potential for cumulative incremental effects on the River Dee SSSI and SAC in combination with other housing and employment allocations. [Policy WB2 should prevent the occurrence of the adverse nature conservation impacts as the plan should be read as a whole and each policy in the context of others in the UDP].

Table 8-6 Key Sustainability Strengths and Weaknesses of the Allocations in Policy EM3

Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative
Airport Development Zone	 The zone comprises existing employment uses and industrial estates and so would build upon and develop existing opportunities. The zone includes the Hawarden Airfield which could make it a particularly attractive site for businesses. Situated close to the border so may also be regarded as an important sub-regional site. The site is currently important for the aerospace sector and spin-offs from this industry could be highly beneficial to the County's economy. 	There is the potential for adverse impacts on the River Dee SAC and SSSI. All of the development zone lies within the floodplain and this could increase flood risk and is not sustainable in the long term.	There should be no adverse impacts on the integrity of the River Dee SAC and SSSI. Situating further development in a floodplain is not sustainable in the long term and liaison with the Environment Agency would be required and Flood Consequences Assessment for development in this area.	Potential for cumulative loss of the floodplain associated with the development of lots of sites within this development zone, combined with other allocations proposed in EM1. Potential for cumulative incremental effects on the River Dee SSSI and SAC in combination with other housing and employment allocations. [Policy WB2 should prevent the occurrence of the adverse nature conservation impacts as the plan should be read as a whole and each policy in the context of others in the UDP].

Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative
Port Development Zone	This is a recognised area of importance for sea/road and rail and the good transport links are likely to be attractive to investors.	The allocation extends into the Dee Estuary Ramsar site, pRamsar, SSSI, pSPA, SPA and pSAC and so has the potential to have very significant adverse impacts on the integrity of the site. The site is also situated in the floodplain and this could increase flood risk and is not sustainable in the long term.	There should be no adverse impacts on the integrity of the Dee Estuary. Situating further development in a floodplain is not sustainable in the long term and liaison with the Environment Agency would be required and Flood Consequences Assessments for development in this area.	Potential for cumulative loss of the floodplain associated with the development of lots of sites within this development zone, combined with other allocations. Potential for cumulative adverse incremental effects on the Dee Estuary.
Principal Employment Area Designations to the north of Buckley	There are two principal employment allocations to the north of Buckley, both of which are well situated in relation to the road network.	One site abuts and another site is in close proximity to the Deeside and Buckley Newt Sites SAC and the Buckley Clay Pits and Commons SSSI.	There should be no adverse impacts on the integrity of the designated sites.	Potential for cumulative adverse impacts on the designated sites.
		Both sites are reasonably close to the Alltami Brook and so there could be a risk of pollution.		

Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative
Principal Employment Area adjacent to the Deva Stadium	The site is situated very close to the border and so may be attractive to companies from outside Flintshire. The site is already used for employment/industrial purposes and so could be attractive to investors because of potential links with existing businesses.	The site is located partially within the floodplain.	Situating further development in a floodplain is not sustainable in the long term and liaison with the Environment Agency would be required and Flood Consequence Assessments for development in this area.	Potential for cumulative loss of the floodplain associated with the development of lots of sites within this development zone, combined with other allocations.

Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative
Principal Employment Area in Flint	The area is situated close to Flint town centre and so could help support the wider regeneration process. There would be benefits for an area that is in need of regeneration.	The site is located within the floodplain. The employment zone is close to a Conservation Area and so there could be adverse impacts on the wider setting of the Conservation Area. The site is situated within 70m of the Dee Estuary and so there could be potential adverse impacts on the integrity of the site.	Situating further development in a floodplain is not sustainable in the long term and liaison with the Environment Agency would be required and Flood Consequence Assessments for development in this area. There should be no adverse impacts on the integrity of the site.	Potential for cumulative loss of the floodplain associated with the development of lots of sites within this development zone, combined with other allocations. Potential for cumulative adverse impacts on the Dee Estuary. [Policy WB2 should prevent the occurrence of the adverse nature conservation impacts as the plan should be read as a whole and each policy in the context of others in the UDP].

Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative
Principal Employment Area in Saltney	The area is situated close to the town centre and so could have positive impacts for the vitality and vibrancy of the site. The site is close to the border and so could be an attractive strategic site.	The site is located within the floodplain. There is the potential for there to be adverse impacts on the River Dee SSSI and SAC.	Situating further development in a floodplain is not sustainable in the long term and liaison with the Environment Agency would be required and Flood Consequences Assessments for development in this area.	Potential for cumulative loss of the floodplain associated with the development of lots of sites within this development zone, combined with other allocations. Potential for cumulative adverse impacts on the River Dee SSSI and SAC. [Policy WB2 should prevent the occurrence of the adverse nature conservation impacts as the plan should be read as a whole and each policy in the context of others in the UDP].
Principal Employment Area in Rhydymwyn	Additional development in the area could benefit existing companies and businesses.	The site is located within the floodplain.	Situating further development in a floodplain is not sustainable in the long term and liaison with the Environment Agency would be required and Flood Consequences Assessments for development in this area.	Potential for cumulative loss of the floodplain associated with the development of lots of sites within this development zone, combined with other allocations.

Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative
All Principal Employment Areas in Mold	The siting of employment land in Mold could benefit the wider vitality and vibrancy of the town and offer economic benefits to the residents. All areas are on the fringes of the town and so are well situated in relation to road links.	One of the sites is partially located in the floodplain.	Situating further development in a floodplain is not sustainable in the long term and liaison with the Environment Agency would be required and Flood Consequences Assessments for development in this area.	Potential for cumulative loss of the floodplain associated with the development of lots of sites within this development zone, combined with other allocations.
All Principal Employment Areas in Greenfield	Impacts as for the assessment of sites EM1 (16), (17), (18) and (19).			
Principal Employment Areas in Drury and Burntwood	Further employment development would consolidate the existing industrial/employment sites. Situated in close proximity to residential areas. Situated in reasonable proximity to rail links.	The areas abut SSSIs and SACs and so the development could adversely impact upon the integrity of the sites. Potential for there to be adverse impacts on adjacent areas of green space.	There should be no adverse impacts on the integrity of the sites.	Potential for cumulative adverse impacts on the integrity of the Deeside and Buckley Newt Site SAC and the Buckley Clay Pits and Commons SSSI. [Policy WB2 should prevent the occurrence of the adverse nature conservation impacts as the plan should be read as a whole and each policy in the context of others in the UDP].



Allocation	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations	Cumulative
Principal Employment Areas in Connah's Quay	Impacts as for the assessment of sites EM1 (8), (9) and (10).			
Principal Employment Areas in Buckley	Impacts as per assessment for EM1 (3), EM1 (4), EM1 (5) and EM1 (6).			



8.13.6 Recommendations

- Policy EM1 It is recommended that some of the allocations are reconsidered because of their potential to have significant adverse sustainability impacts. The biodiversity and wildlife policies should also be cross-referenced to make it very clear to prospective developers that any adverse impacts on the integrity of the Natura 2000 sites would be unacceptable.
- Policy EM2 No specific modifications to the policy wording recommended but the DARA site at Sealand is situated in the floodplain and any development that occurs on this site would need to be agreed with the Environment Agency.
- Policy EM3 It is recommended that the sites which could have adverse impacts on the Natura 2000 sites are reconsidered. There are also sites in the floodplain which are not sustainable in the long term. The policy includes clauses that require the development to be appropriate in type and scale to the locality. The policy could be further strengthened by stating that no proposal should have a significant adverse impact on the integrity of nature conservation sites, the landscape, or historic features.
- Policy EM4 The policy could be strengthened by stating that there should be no significant adverse impacts on the water environment.
- Policy EM5 The policy fails to include a clause addressing the need to protect the natural environment, unlike EM4. From a consistency perspective it is recommended that such a clause is included.
- Policy EM6 No modifications recommended.
- Policy EM7 The term 'unacceptable' could be replaced with 'no significant adverse impact on' to try and remove some of the ambiguity in clause iv of the policy.



8.13.7 How Have the Recommendations Been Taken Forward?

Policy EM1 – A new paragraph has been added to the explanatory text of the policy regarding risks to the internationally designated sites and the need for Appropriate Assessment at the individual project level. The following allocations are also to be deleted from the plan:

- EM1 (3) Catheralls' Industrial Estate
- EM1 (15) Adjacent Paper Mill, Oakenholt

Policy EM3 - An additional criterion has been added to the policy.

Policy EM4 - No modification has been made as water issues are adequately addressed as part of policies EWP15 and EWP16.

Policy EM5 – An additional criterion has been added to the policy.

Policy EM7 – The policy wording has been modified in line with the recommendation.

8.14 Rural Enterprise and Agriculture

There are five policies in this chapter of the UDP of which two policies relating to small scale farm diversification and small-scale rural enterprises were grouped together for the purposes of the assessment.

8.14.1 Key Strengths

The main strengths associated with all of these policies is that they could all help to maintain and further develop the rural economy which could have benefits in the long term for rural quality of life. These impacts would be more likely to be realised for policies RE4 and RE5 that would permit new rural enterprises or farm diversification.

Policy RE1 seeks to protect the better quality agricultural land in the County (i.e. Grades 1, 2 or 3A) and this could indirectly encourage the use of brownfield sites for new development, particularly as the need to consider derelict sites for development is raised in the policy.

Any new agricultural development in rural areas has the potential to have an adverse impact on landscape character and quality depending upon the form of the development. However, a strength of policies RE2, 3, 4 and 5 is their reference to the need to carefully design new buildings so as to minimise the impact on the character and appearance of the site and its surroundings. However, even with the inclusion of this 'mitigation clause' in the policy there is the potential for the policies to have negative impacts as they would still introduce new development into rural parts of the County.



A key strength of policies RE4 and RE5 is their identification of the need to maximise the use of alternative means to the private car to access the new farm businesses created.

8.14.2 Key Weaknesses

The most significant weakness associated with all of these policies, with the exception of RE1 Protection of Agricultural Land is the potential for adverse impacts on the environment. Policies RE4 and RE5 state that in all cases development should 'not unacceptably harm features or areas of landscape, nature conservation or historic value' and although this statement could, in theory offer some form of protection, there is no clear definition of the term' unacceptable' making the policies slightly ambiguous. A strengthening of the policy wording is, therefore recommended (see Section 8.14.3 below) to ensure that impacts upon biodiversity, landscape and cultural heritage are thoroughly considered and, where appropriate mitigated in advance of such development occurring.

All forms of farm diversification could lead to pollution or introduce new sources of contamination and a key weakness of the policies, particularly RE3 is a failure to acknowledge this issue or cross-reference other pollution related policies.

New isolated agricultural and forestry buildings are unlikely to have significant impacts. However, the provision of a number of small developments could cumulatively have a significant impact upon the rural parts of the County and this will be an important consideration when making development control decisions.

8.14.3 Recommendations

Based upon the assessment the following amendments are recommended to the policies:

- Policy RE1 No modifications recommended.
- Policy RE2 No specific recommendations to the policy wording are required, although development control staff need to be aware of the potential for an adverse cumulative impact to result from the creation of multiple new agricultural and forestry buildings across the County.
- Policy RE3 It is recommended that the clauses in this policy are expanded to recognise that pollution and impacts upon the wider environment i.e. biodiversity need to be recognised and mitigated prior to livestock units being developed. The following additional clause could be added: "Development should not be permitted where it would have a significant adverse impact on the existing character of the environment and the locality."
- Policy RE4 The word unacceptable could be removed from the statement 'not unacceptably harm features or areas of landscape, nature conservation or historic value' and be replaced with the following statement 'not harm features or areas of landscape, nature



conservation or historic value or where adverse impacts would occur they are mitigated' as this would afford greater protection to the environment and remove some of the ambiguity from the policy.

Policy RE5 – Recommendations are the same as for policy RE4.

8.14.4 How Have Recommendations Been Taken Forward?

Policy RE3 – The policy has been strengthened in line with the recommendations.

Policy RE4 – The policy has been amended in line with the recommendation.

Policy RE5 – The policy has been amended in line with the recommendation.

8.15 Sport and Recreation

There are eight policies in this chapter of the UDP, of which two were combined for the purpose of the assessment and one was screened out.

8.15.1 Key Strengths

Policy SR1 through the creation of new sports, recreational and cultural facilities positively fulfils a number of the SA objectives. This presents the opportunity to make a positive contribution towards the health and wellbeing of the County's population, the local economy in both urban and rural areas, the latter potentially through diversification schemes, to help improve the image of the County and to provide an opportunity to enable derelict sites or buildings in urban areas to be brought back into a productive use. The policy states that the facilities should be accessible by a variety of means of travel and this could help to reduce the impacts associated with more people travelling to access the new facilities.

Policy SR2 would offer very similar benefits to policy SR1 and is much stronger in its provisions to protect environmental resources particularly the landscape, nature conservation or historic interests.

Policy SR4 should have a positive impact on health and well-being by ensuring that areas of open space in the County are protected. Open space can also be classified as a basic amenity and so the policy positively contributes to the achievement of the objective 'to maintain and improve access to basic goods, services and amenities for all groups.' The policy might also have indirect positive impacts for biodiversity, landscape/townscape, cultural heritage and water resources, although impacts would depend upon the location of the area of green space and its characteristics.



The provision of new golf facilities or extensions to existing sites would improve access to leisure facilities for local residents, could offer economic benefits and could help the wider marketability of the County as a place to live and work, albeit this would be appealing to a limited range of people. There are a number of strong clauses in the policy addressing environmental protection which is particularly important in light of the potentially significant impacts that can occur as a result of golf course development.

Both policies SR5 and SR7 would seek to deliver areas of outdoor playing space/open space and this would contribute positively towards the achievement of the objective 'to provide access to good quality, affordable housing that meets the needs of the community' as it would create recreational areas as part of new housing developments and within urban areas where open space might be limited. There could also be benefits for community spirit and cohesion if the areas of open space provided a focal point for local communities. Such areas could also have positive impacts for townscape and the open space allocations identified in Policy SR7 could help contribute to the achievement of urban renaissance in these areas in the medium to long term.

Policy SR6 which seeks to protect allotments will have a limited number of impacts, having a largely neutral impact on many of the SA objectives. However, the policy could offer localised biodiversity and townscape benefits.

Policy SR8 positively contributes to the achievement of objectives addressing the protection of biodiversity, landscape, heritage and water resources. The policy would also ensure continued access to an important recreational resource and includes reference to the need to enhance the attractiveness of the Estuary. Maintaining and improving the Estuary could also be important in further developing the tourism sector of the County's economy and could positively contribute to marketing the County's image as a place to live, work and do business.

8.15.2 Key Weaknesses

Policy SR1 has the potential to have localised adverse impacts on biodiversity resources, the local landscape/townscape, the historic environment and water resources. The policy makes no specific provision for mitigation of these impacts and to prevent the addition of further clauses to the policy, other relevant policies in the UDP could be cross-referenced.

Policy SR2, unlike SR1 fails to include a clause promoting the need for the facilities to be accessible by modes of transport other than the private car. An additional clause could be added to the policy to address this issue.

The most significant weaknesses of Policy SR3 are the climate change and air quality impacts of the golf course developments. There would be an increase in car journeys to access the facilities and these are difficult to mitigate because of the equipment that people have to carry to use the facilities, making car transport necessary. The herbicides and pesticides



used to maintain the golf courses could also have significant water resource and biodiversity impacts but this is not something the UDP can mitigate against as it is an issue that would arise once the site was constructed and operational.

Policy SR6 states that where the redevelopment of allotment land occurs there may be a requirement to offer an alternative site of at least equivalent quality. It is suggested that this also makes reference to the need to provide somewhere of an equivalent size to prevent a potential incremental, cumulative loss of allotment land which can be an important community amenity.

Although Policy SR8 seeks to preserve and enhance the nature conservation interests of the Estuary it is recommended that the wording is strengthened to make it clear that any development which could adversely impact on the integrity of the internationally important sites of nature conservation value would not be permitted.

8.15.3 Recommendations

Based upon the assessment some recommendations are outlined below to strengthen the policies.

- Policy SR1 Other environmental protection policies in the UDP could be cross-referenced.
- Policy SR2 The following clause should be added to the policy: 'the outdoor activities should be accessible, where possible, by a variety of means of travel other than the private car.' The use of the word 'unacceptable' in clause a of the policy could be re-considered in line with recommendations made for other policies in the UDP.
- Policy SR3 No modifications recommended.
- Policy SR4 No modifications recommended.
- Policy SR5 No modifications recommended.
- Policy SR6 Clause c of the policy could be modified as follows: 'alternative allotment land of at least equivalent quality and *size* is offered in exchange.'
- Policy SR7 No modifications recommended.
- Policy SR8 Clause b of the policy should be strengthened as follows: 'Would not result in significant adverse impacts on the integrity of the internationally important nature conservation sites and would seek to further preserve and enhance these features.' The remainder of the clause in the original policy wording addressing landscape assets and other interests could become a new clause of the policy.



8.15.4 How Have the Recommendations Been Taken Forward?

Policy SR1 – The UDP should be read as a whole and so no further cross-references are considered necessary.

Policy SR2 – A new criterion has been added to the policy in line with the recommendation.

Policy SR6 – The policy has been modified in line with the recommendation.

Policy SR8 – The recommendations have been incorporated into the revised policy wording.

8.16 Tourism

There are nine policies within this chapter of the UDP of which two were screened out of the assessment and a number were combined because they are very similar.

8.16.1 Key Strengths

All of the policies have the potential to improve the tourist economy which could have long term economic benefits and help to market the County as a place to visit by developing the tourist offer. The scoping workshop identified that the tourism potential of the County is underdeveloped because it is sometimes viewed as a stop-off-site for people travelling to Snowdonia and the coast and so the economic benefits for the County are limited. Policies T2 to T6 all address the provision of more tourist accommodation across the County which could help to encourage more people to have longer stays and potentially encourage greater tourist spending.

Policy T1 (Tourist Attractions) is very specific in its requirements and is a strong policy in terms of its environmental strengths. It states that vacant, redundant or underused land should be used for attractions where practicable, recognises the need to ensure that all development is appropriate to the scale and character of the locality and would not unacceptably harm natural or historic built resources. There is also a clear requirement to make the development accessible by a choice of modes of travel to try and reduce reliance on the private car. The policy also offers the opportunity to improve understanding of the Welsh language and cultural resources which could have indirect educational benefits. There could be significant benefits for quality of life in rural areas, as new tourism developments could be important for diversifying the rural economy.



Policies T2 to T6 cover the provision of new tourist accommodation. All of the policies are particularly strong in terms of their requirements recognising the need to locate the accommodation in suitable areas and sites, avoiding adverse impacts on features or areas of landscape, nature conservation or historic value and seeking to reduce reliance on the use of the private car where appropriate to access the new accommodation.

The impacts upon local facilities in existing villages and settlements across the County could be affected in one of two ways, the increased customer base created by more visitors could create the opportunity for new facilities to be established, conversely pressure on existing facilities could increase. Impacts would probably be very localised and ultimately depend upon how much tourist development occurs.

The tourist development has the potential to diversify the rural economy and provide benefits to rural quality of life and this is addressed in policy T8 which is cross-referenced to policy RE5 in the Rural Enterprise and Agriculture chapter of the UDP. There are a number of clauses in the majority of the policies addressing the need for new accommodation to be appropriate to local amenity and the existing character of the site and setting which should help to avoid a loss of character and distinctiveness.

The preservation of the Greenfield Valley (Policy T9) would preserve a valuable tourism, heritage and cultural resource.

8.16.2 Key Weaknesses

It is uncertain how the provision of new tourist accommodation, particularly new caravan or tent sites might affect fear of crime, for example local residents could be concerned about the sites being used by large groups of young people and causing disturbance. However, this will ultimately depend upon how the site is managed, its location and size. Consequently it is recommended that the provisions in Policy T6 are strengthened to ensure that the scale of site promoted is appropriate to the character and local amenity of the area.

Although most of the policies have fairly strong clauses in relation to protecting the existing character of an area and avoiding adverse environmental impacts, it is possible that some of the clauses could be strengthened and some potentially added to ensure that all issues are addressed. This is particularly important for policy T6 (Tent Camping Sites). Tent sites are more temporary than static caravan sites but it is felt that they still have the potential to result in adverse environmental impacts.

Policies T1, T2, T3 and T4 all promote the accessibility of sites by means other than the private car. However, new tourist development could increase tourist numbers and not everyone may choose to travel by public transport, walking and cycling and so there is the potential for adverse climate change and air quality impacts.

The tourist development that could be permitted by these policies, in isolation might not result in significant adverse impacts, although there is


the potential for there to be cumulative adverse impacts created by lots of small developments which makes it particularly important to ensure that all the policies include strong wording in relation to the need to avoid and suitably mitigate adverse impacts.

Although issues relating to the use of natural resources and energy consumption are very site and development specific, there is the opportunity for their to be greater cross-referencing of policies addressing these issues in the tourism policies.

8.16.3 Recommendations

Based upon the assessment, the following modifications are recommended:

- Policy T1 The word unacceptable could be removed from the statement 'not unacceptably harm the natural or historic built resources of the area' and be replaced with the following statement 'not harm the natural or historic built resources of the area or where significant adverse impacts would occur they are mitigated' as this would afford greater protection to the environment and remove some of the ambiguity from the policy.
- Policy T2 It is recommended that the following clause be added to the policy to ensure that biodiversity, landscape/townscape and cultural heritage value are adequately protected: 'not harm features or areas of landscape, nature conservation or historic value or where significant adverse impacts would occur they are mitigated'
- Policy T3 Clause 'd' of the policy should be re-worded in accordance with the recommendations above.
- Policy T4 Clause 'd' of the policy should be re-worded in line with the recommendations for T2. A further clause should be added to the policy of the need to ensure the new static caravan sites do not adversely affect that local amenity.
- Policy T5 Clause 'c' of the policy should be re-worded inline with the recommendations for policy T2. A clause should also be added to ensure that local amenity is not adversely affected.
- Policy T6 The following clause should be added to the policy: not harm features or areas of landscape, nature conservation or historic value or where significant adverse impacts would occur they are mitigated.' A clause should also be added relating to the need to protect local amenity and local distinctiveness.
- Policy T7 No modifications recommended.
- Policy T8 No modifications recommended.
- Policy T9 No modifications recommended.



8.16.4 How Have the Recommendations Been Taken Forward?

Policy T1 – The policy has been amended in line with the recommendations.

Policy T2 – An additional criterion has been added into the policy.

Policy T3 – The policy has been revised in line with the recommendation.

Policy T4 – The recommendations have been incorporated into the revised policy wording.

Policy T5 - The recommendations have been incorporated into the revised policy wording.

Policy T6 - The recommendations have been incorporated into the revised policy wording.

8.17 Community Facilities

There are nine policies in this chapter of the UDP, of which two addressing provision of new facilities at Croes Atti were combined for the assessment. It should be noted the issues associated with the allocation of the overall site and its key sustainability strengths and weaknesses have been assessed for policy HSG2 'Housing at Croes Atti, Flint' and this site has already received planning permission. Policies CF8 and CF9 were screened out of the assessment.

8.17.1 Key Strengths

Policies CF1 and CF2 of this chapter would both maintain and improve access to community facilities across the County which would have positive impacts for access to facilities, community cohesion, the quality of life in urban and rural areas and potentially the marketability of the County as settlements would be seen to have good facilities. Maintaining access to community facilities would seem particularly important in rural areas where access to facilities is more limited and where public transport connections are not as effective as the urban parts of the County, for example in Lixm where a new village hall is proposed. There could also be benefits for health and education by ensuring that such facilities are maintained.

Policy CF3 is very specific and the review of the proposed community hospital site identified no specific sustainability constraints.



Policy CF4 and CF5 specifically address the provision of facilities at the new mixed-use development at Croes Atti. When new residential development occurs there are always likely to be potential issues associated with the capacity of existing facilities to accommodate such development. The provision of these community facilities should ensure that no existing pressure is added to existing community facilities in Flint.

The new community centres identified in Policy CF6 would positively fulfil the objective ' to protect and enhance community spirit and cohesion' at the locations identified and would maintain access to a basic community facility.

Policy CF7 could offer significant economic and quality of life benefits in rural areas as it is indirectly promoting the development of the rural economy by permitting economic developments. This has the potential to have indirect benefits for access to facilities in rural areas if the economic development has wider multiplier effects.

Policy CF8, despite being screened out of the assessment will help to ensure the continued viability of existing facilities and businesses by ensuring that sufficient utilities are available and should ensure that only development supported by sufficient services is permitted in Flintshire.

8.17.2 Key Weaknesses

There are very few weaknesses associated with these policies.

The re-use of redundant hospitals for employment purposes in rural locations has the potential to place increased pressure on existing community facilities and could adversely impact upon community cohesion if the development is inappropriate to its setting. However, this issue should be avoided by reviewing any planning applications in accordance with other policies in the UDP. Stronger cross-referencing to other relevant policies in the UDP e.g. the design policies might overcome this problem. New employment development could also increase trips by the private car which would have adverse impacts for climate change and air quality. Whilst these impacts would be very localised there is the potential for there to be cumulative adverse impacts in conjunction with any other small developments that might occur in rural settlements.

Policy CF9 suggests that new utilities development will only be permitted in limited areas and the accompanying policy explanation states that development of this type should make every effort to minimise any potential adverse impacts. However, because this is not brought out clearly in the actual wording of the policy the assessment identified the potential for there to be significant adverse impacts on biodiversity, the landscape and cultural heritage features. Similarly the policy could make stronger reference to the need to protect rural character.



8.17.3 Recommendations

The following modifications are recommended:

- Policy CF1 No modifications recommended.
- Policy CF2 No modifications recommended.
- Policy CF3 No modifications recommended.
- Policy CF4 No modifications recommended.
- Policy CF5 No modifications recommended.
- Policy CF6 No modifications recommended.
- Policy CF7 it is recommended that specific site development briefs are produced to ensure that developers are fully aware of the need to ensure that the sites must be of a high design quality and appropriate to the existing character of these rural settlements.
- Policy CF8 No modifications recommended.
- Policy CF9 It is recommended that a clause is added into the policy which states that all developments of this type must be designed as far as possible to minimise their adverse impacts upon the local character of an area and the natural and built environment.

8.17.4 How Have the Recommendations Been Taken Forward?

Policy CF7 – Planning permission has already been granted for some suitable sites and so the production of development briefs now would offer little benefit.

Policy CF9 – The policy has been modified in line with the recommendations.

8.18 Minerals

There are ten minerals policies in this chapter of the UDP, three of which were screened out and two which were combined for the purposes of this assessment. Policy MIN1 stands as a guiding policy in relation to minerals, therefore the policies can be assessed as a whole.

8.18.1 Key Strengths

The major strengths of these policies lie within MIN1, which promotes the use of secondary or recycled resources before the creation of new or extensions to existing minerals sites. It therefore positively contributes to the objective relating to the sustainable use of natural resources. The policy also offers indirect benefits to landscapes, biodiversity and other environmental resources by seeking to use existing sites and alternative materials in preference to creating new sites.



Policy MIN2 is particularly specific in its requirements and has a number of environmental strengths, seeking to protect the local biodiversity, landscape/townscape, cultural heritage features and water resources. It is also clear that new minerals developments should not adversely affect local amenity or the economic viability of an area.

Policy MIN3 and MIN4 both support policy MIN2 by addressing the operation and the subsequent restoration of a minerals development. By minimising dust levels, noise and water pollution and controlling blasting operations the well-being of the nearby population will be protected. When completing the matrices it was identified that some of the benefits offered by policy MIN3 would be temporary as the minerals developments will not exist indefinitely and so air and water quality would only be temporarily protected by the clauses of this policy. The clauses of MIN4 are clear that any minerals developments need to be appropriately restored.

Policy MIN6 (Review of Mineral Permissions) enables the review of sites that have not been worked for 10 years to identify their potential contribution to the landbank. CCW has commented that there are currently issues in Flintshire in relation to the current overprovision of consented aggregate reserves and other mineral reserves and this policy would seek to address this issue and could potentially have indirect benefits for the County's environmental resources.

Policy MIN7 (Exploration for Minerals) could potentially result in temporary adverse impacts, although the policy is clear in its requirements for there to be no unacceptable environmental effects.

It was assumed for the assessment that any borrow pits established under policy MIN9 would have to operate in accordance with the requirements of policies MIN2 and MIN3 and so natural environmental resources should be adequately protected and the policy should enable some environmental enhancements to be achieved. For example, it may be possible to create wetlands using former borrow pits.

8.18.2 Key Weaknesses

Whilst Policy MIN2 (Minerals Development) includes a number of clauses protecting the County's natural environment, it fails to mention the need for there to be no adverse impacts on the water environment and this is regarded as a significant omission of this policy.

Although policy MIN3 clearly states that the minerals developments should not pose an unacceptable risk to the quality of surface and groundwaters it is possible that the minerals operations could have wider reaching impacts on the water environment through modifying groundwater flow and this should be brought out in the policy. Policy MIN4 could be improved by making it clear that restoration proposals should be sensitive to the existing topography and landscape characteristics of the area.

Policy MIN7 (Exploration for Minerals) could be regarded as being a little weak in its requirements as it fails to acknowledge the need for any



temporary works to have no adverse impacts on the local amenity of an area.

8.18.3 Recommendations

Based upon the assessment the following modifications are recommended:

- Policy MIN1 No modifications recommended.
- Policy MIN2 The term 'unacceptable adverse impact' is used in the policy and this could be interpreted in different ways. It is recommended that the policy is re-worded as follows: 'the development will not have a *significant adverse impact* upon the following interests of importance.' A clause could also be introduced relating to the protection of the water environment and the water resources policy (EWP16) cross-referenced.
- Policy MIN3 Clause f of the policy could be re-worded as follows: 'it
 would not result in significant adverse impacts to ground and surface
 water resources.'
- Policy MIN4 Clause d could be clarified as follows: 'the final landform design taking into consideration the surrounding topography and landscape character.'
- Policy MIN5 No modifications recommended.
- Policy MIN6 No modifications recommended.
- Policy MIN7 The term 'unacceptable' could be removed and replaced with the term 'no significant adverse impact' as recommended for policy MIN2. The policy could also be broadened to ensure that there would be no adverse impacts on the amenity value of an area.
- Policy MIN8 No modifications recommended.
- Policy MIN9 No modifications recommended.
- Policy MIN10 No modifications recommended.

8.18.4 How Have the Recommendations Been Taken Forward?

Policy MIN2 – The policy has been re-worded in line with the recommendations.

Policy MIN3 – The policy has been re-worded in line with the recommendations.

Policy MIN4 - The policy has been re-worded in line with the recommendations.

Policy MIN7 – The wording of the policy has been clarified but the policy has not been modified to refer to amenity because the developments would only be temporary.



8.19 Energy, Waste and Pollution

There are 17 policies in this chapter of the UDP of which one was screened out of the assessment. The remaining policies were all subject to a complete assessment against the SA objectives. Policy EWP6 'Areas of Search for New Waste Management Facilities' suggests areas where proposals for new waste management facilities should be located. All of these broad areas were reviewed individually at the strategic level to identify their key sustainability strengths and weaknesses.

8.19.1 Key Strengths

Policies EWP1 to EWP5 all address energy and all positively promote energy efficiency, the development of renewable energy sources and technologies and so positively contribute to the achievement of the objective ' to increase energy efficiency and require the use of renewable energy resources.' The policies should also offer indirect climate change and air quality benefits in the long term if fossil fuel consumption decreases and hence carbon dioxide emissions decrease. The use of non-renewable natural resources would also decrease.

Policies EWP4 and 5 are both fairly comprehensive in their requirements and clauses of each policy identify the need for any new renewable energy developments not to have an unacceptable detrimental impact on environmental, landscape and heritage features of national or regional importance. EWP4 also states that turbines should be designed to avoid other impacts on the environment including noise, light, shadow flicker and wildlife. Another key strength of policy EWP4 is the need to ensure no adverse cumulative impacts on landscape.

The key sustainability strengths of each of the potential areas of search for waste management facilities are summarised in Table 8-7. The policy (EWP6) is also clear that any new proposals for waste sites have to be in accordance with policies EWP7 and EWP8.

Policy EWP8 (Control of Waste Development and Operations) includes a number of clauses which seek to ensure that there would be no unacceptable impacts upon landscape, sites of nature conservation value, sites of historic/archaeological importance, health, amenity, nor cause a noise, smell, vibration, smoke, air pollution nuisance. Policy EWP7 is also very clear in its requirements for waste to be managed as close to its source as possible and for alternatives to road to be used for transporting waste. This could have benefits for air quality and climate change if the amount of waste transported by road decreases.

All new development has the potential to increase the amount of waste produced by the County. Policies EWP9 and EWP10 provide an opportunity for the waste generated by large developments to be recycled and for waste minimisation to be fully investigated and implemented. Policy EWP11 acknowledges the potential risks associated with developing land



adjacent to landfill sites and so ensures that risks to human health would be fully considered, that all necessary pollution issues would be addressed.

Policy EWP 12 (Pollution) would have direct positive impacts for human health and by ensuring that new development would not 'create an additional risk of pollution or hazard' there would be indirect benefits for land, air, water quality and biodiversity, despite these latter receptors not being specifically mentioned in the policy. There could also be indirect benefits for the marketability of the County as a place to live and potentially quality of life by preventing significantly polluting development from occurring. Policy EWP13 (Nuisance) complements EWP12 and positively fulfils objectives addressing health, biodiversity, landscape/townscape, cultural heritage, water features and air quality. There is also the potential for positive transboundary impacts because nuisance and pollution issues do not adhere to county boundaries.

Policies EWP14 and EWP15 are complementary and would ensure that development on potentially contaminated or unstable sites is appropriate and would have no risks for future land users and adjacent land users.

Policies EWP16 and EWP17 are both strong in their need to protect the water environment and to ensure that new developments do not increase flood risk. Policy EWP17 would have positive impacts for human health, maintaining access to goods and services and potentially the economy by ensuring that flood risk as a result of inappropriate development would not increase.

8.19.2 Key Weaknesses

Policy EWP1 is a little vague in its requirements as it states that 'there will be a presumption in favour of renewable energy schemes subject to them meeting the other relevant requirements of the Plan. 'It is unclear which 'other requirements' of the plan are being referred to and the ambiguity of this policy could be reduced by cross-referencing other relevant policies in the plan.

The explanatory text supporting policy EWP2 suggests that the re-use of building materials is also an element of this policy. It is recommended that the policy is re-worded to ensure that this issue is clearly established within the policy itself.

Policy EWP3 could be criticised for being a little vague as the term 'large in scale' is left to interpretation and so could provide the opportunity for developers to avoid adhering to the requirements of this policy.

Both policies EWP4 and EWP5 fail to mention the need to protect the water environment and this is a potentially significant omission. For example the foundations of wind turbines and the access roads across the sites can frequently have significant impacts upon drainage patterns, both surface and groundwater. It is recommended that both policies are re-worded to ensure that the need to mitigate adverse impacts on the water environment is clear.



Although clause a of Policy EWP5 does acknowledge the need for new renewable energy developments to 'be compatible' with landscape, nature conservation and heritage interests, the policy wording is a little vague and could be strengthened to ensure that developers would seek to mitigate as far as possible any potential adverse impacts on these features. Similarly policy EWP4 fails to specifically mention the need to protect local sites and, therefore there could be cumulative localised impacts on local attributes.

The key sustainability weaknesses associated with Policy EWP6 are addressed in Table 8-7. Although not specific weaknesses of the policy, all new waste management facilities have the potential to increase traffic movements associated with the transportation of the waste to the sites. Where possible opportunities should be sought to transport the waste by rail.

All of the waste policies within this chapter of the UDP are fairly comprehensive and very few significant weaknesses have been identified. However, policy EWP8 only appears to be protecting sites of nature conservation value and any waste development sites have the potential to affect all habitats or species and this needs to be recognised in the policy, with appropriate mitigation provided where these impacts could be significant. The policy also fails to specifically mention the water environment and waste operations frequently pose risks to both ground and surface waters. No other weaknesses related to the waste policies have been identified. Although some suggested improvements to their wording are presented below to reduce some elements of ambiguity.

Although Policy EWP12 is fairly comprehensive it could be strengthened by acknowledging that pollution impacts can be both direct and indirect and by specifically mentioning receptors other than the general public to slightly broaden its scope.

A weakness of policy EWP14 is its failure to acknowledge that the contamination on site would need to be treated to a sufficient level depending upon the future end users of the sites. This issue could be clarified in the policy wording (see recommendations below). The remediation of contaminated sites can also generate waste associated with the disposal of the contaminated material, although amendments to the waste legislation have led to in-situ remediation techniques being more prominent. The need for off-site disposal of contaminated waste to be minimised could be referenced in the policy. No weaknesses were identified for policy EWP15.

Policy EWP16 could be strengthened by acknowledging that the water environment can be impacted both directly and indirectly by development.

8.19.3 Areas of Search for New Waste Management Facilities (EWP 6)

Policy EWP6 identified potential areas of search for new waste management facilities. Each of these sites has been subject to a high level

Sustainability Appraisal and Strategic Environmental Assessment The Flintshire Unitary Development Plan K:\projects\NH50993\F-Reps\SA Report003-NH50993-NHR-01-SA ReportF.doc



review to identify the key strengths and weaknesses of each broad area with the results presented in Table 8-7.

Area of Search	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations
Ewloe Barn Industrial Estate, Parry's Quarry and Pinfold Lane Quarry, Alltami	Limited number of residential areas immediately nearby. Well located in relation to potential waste sources e.g. Mold, Buckley, Deeside.	Presence of Alltami Brook – potential pollution issues Deeside and Buckley Newt Site SAC and the Buckley Claypits and Commons SSSI in close proximity to all areas but not as close to the Pinfold Lane Quarry.	There should be no adverse impacts on the integrity of the designated sites.
Springhill Quarry, Bagillt	Strategic location near to coastal waste sources i.e. towns. Not immediately adjacent to properties. Close to road and rail links.	Approximately 200m from an area designated as floodplain. Dee Estuary SPA, Ramsar, pRamsar, pSPA, pSAC, SSSI approximately 300m from the Quarry, potential for indirect adverse impacts e.g. as a result of leaching of contaminants.	Liaise with EA with regards to flood issues. There should be no adverse impacts on the integrity of the designated site.
Mount Pleasant Road (North), Buckley	In a largely industrial area. Nearby waste sources i.e. industrial site and residential properties in Buckley.	Adjacent to Deeside and Buckley Newt Sites SAC and the Buckley Claypits and Commons SSSI. Reasonably close to residential areas.	There should be no adverse impacts on the integrity of the designated site.

Table 8-7	Key Sustainability Strengths and Weaknesses of Areas of Search in Policy
EWP6	



Area of Search	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations
Former Power Station, Connah's Quay	Easy access to the highway network. Located in reasonable proximity to the Deeside Industrial Zone which will be a waste source.	Partially within the floodplain. Abuts the Dee Estuary SSSI, SPA, pSPA, Ramsar site, pRamsar and pSAC. Landscape/green space designation on opposite side of railway. On fringes of a residential area.	There should be no significant adverse impacts on the integrity of the designated site. Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable.
Crump's Yard, Dock Road, Connah's Quay	Located in reasonable proximity to the Deeside Industrial Zone which is a waste source Easy access to the highway network	Within 150m of the Dee Estuary Ramsar site, pRamsar, SPA, pSPA, pSAC and SSSI. Within the floodplain.	There should be no significant adverse impacts on the integrity of the designated site. Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable.
Land to the east of Shotton Paper, Deeside Industrial Park	Good transport links. In an established industrial area which is a waste source.	Situated in the floodplain. Close to the Dee Estuary Ramsar site, pRamsar, pSPA, SPA, pSAC and SSSI.	There should be no significant adverse impacts on the integrity of the designated site. Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable.



Area of Search	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations
Land adjacent to Green Waste Composting Site, Greenfield Business Park	Within or adjacent to an existing business park. Adjacent to the rail network and safeguarded highway route so communications links should be good. Close to existing commercial and industrial waste sources. Potential to locate adjacent to an existing waste facility.	Situated in the floodplain. In close proximity to the Dee Estuary designations. Potential for adverse impacts on adjacent tourism allocation.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site. Potential for adverse impacts on the tourism allocation need to be considered.
Adjacent Mostyn Docks, Mostyn	Adjacent to Mostyn Docks which is a waste source. Adjacent to railway and highway network.	Situated adjacent to and partially within Dee Estuary SPA, pSPA, SSSI, pSAC, pRamsar and Ramsar boundary. Within the floodplain.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site.
Parc Bychan Quarry, Rhosemor	Reasonably close to the A55 transport links. The waste facility could potentially serve the more rural parts of the County.	Situated within a landscape of historic importance. Could potentially impact upon the Halkyn Mountain SAC and the Halykn Common and Holywell Grasslands SSSI.	There should be no significant adverse impacts on the integrity of the designated site.



Area of Search	Key Sustainability Strengths	Key Sustainability Weaknesses	Recommendations
River Lane, Saltney	Close to road and rail links. Close to nearby populations which are a source of waste.	Within the floodplain. Abuts the River Dee SSSI and SAC. Potential for the site to be used to manage waste in Cheshire because of its proximity to the border.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site.
Prince William Avenue, Sandycroft	Adjacent to the railway. Close to an industrial area – waste source.	Within the floodplain. Within 300m of the River Dee SSSI and SAC. Adjacent to green barrier designation and so there is the potential for adverse impacts on landscape and amenity.	Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable. There should be no significant adverse impacts on the integrity of the designated site.
Deeside Development Zone	Good transport links. An established industrial area – waste source.	Situated in the floodplain. Close to the Dee Estuary Ramsar site, pRamsar, SSSI, pSPA, SPA and pSAC.	There should be no significant adverse impacts on the integrity of the designated site. Issues of developing in the floodplain must be discussed with the EA. From an adaptation to climate change perspective this location would not be sustainable.

All of the above search areas for new waste management facilities have the potential to adversely impact upon the integrity of a number of designated sites of international and national importance including the Dee Estuary, the River Dee, the Deeside and Buckley Newt Sites and Halykn Mountain. These search areas have probably been identified because they are in close proximity to most of the population in Flintshire and so there is inevitably going to be a conflict between the most suitable locations from a proximity principle perspective (i.e. the need to manage to the waste as



close to its sources as possible) and the need to protect these designated sites. There would also be the potential for incremental cumulative adverse impacts associated with the development of a number of waste management facilities across the County. All of the planning applications for the waste installations would need to be accompanied by an Environmental Impact Assessment and the assessment would have to demonstrate that there would be no adverse impacts on the designated sites.

Any new waste management facilities would generate additional traffic and a number of the potential search areas are in close proximity to road links. It is recommended that where possible as much of the waste material is transported by rail as possible

8.19.4 Recommendations

Based upon the assessment the following modifications are recommended:

- Policy EWP1 The policy could be strengthened by crossreferencing the 'other relevant requirements of the Plan' that the policy is referring to, if not specific policies then key chapters of importance.
- Policy EWP2 The policy could be re-worded as follows: 'In all new development the Council must be satisfied that sufficient steps have been taken in the siting, aspect, form and design of new buildings to minimise the wasteful consumption of energy and natural resources in the construction and use of buildings.'
- Policy EWP3 The proposals could be improved by clarifying the meaning of 'large in scale' to reduce the policy's ambiguity.
- Policy EWP4 A clause needs to be added into the policy in relation to protecting and ensuring no adverse impacts on the water environment or an existing clause should be added making reference to the water environment, for example policy d. Areas of land used for wind turbine developments can sometimes be of recreational value and to ensure that significant losses of recreational land do not occur. clause c of the policy could be re-worded as follows: 'the impact of the development upon agriculture, forestry, *recreation* and other land uses is minimised to permit existing uses to continue unhindered.' In accordance with recommendations made for other policies of the UDP the word 'unacceptable' could be removed from policy a and replaced with the following: 'the development is not sited within nor would have a significant adverse effect upon a sensitive area of national or regional environmental, landscape and/or heritage importance or where adverse impacts would occur they are appropriately mitigated.'
 - Policy EWP5 The policy in its current form could be seen as being in conflict with policy L2 of the UDP as such development may not be compatible with the AONB. It is recommended that the policy refers to the landscape resource as a whole and that policy L2 is crossreferenced.



- Policy EWP6 A number of the potential search areas are situated very close to designated sites and so could have very significant environmental consequences. Where possible any new facilities should be situated as far as possible from these sites. The explanatory text supporting the policy should clearly identify the potential need for Appropriate Assessment for individual sites if they could potentially affect the integrity of sites of international importance.
- Policy EWP7 No modifications recommended.
- Policy EWP8 Clause b of the policy could be re-worded as follows: 'the development does not either directly or indirectly have a significant adverse impact on features of the landscape, biodiversity, heritage resources or the water environment, or where adverse impacts would occur, suitable mitigation is provided.' This wording would avoid any ambiguity associated with the term 'unacceptable' and would also ensure that the water environment is specifically mentioned in the policy.
- Policy EWP9 No modifications recommended.
- Policy EWP10 The policy could be clarified to explain what is meant by the term 'major development proposals.'
- Policy EWP11 No modifications recommended.
- Policy EWP12 The policy could be re-worded as follows: "New development which could create an additional risk of pollution or hazard, either *directly or indirectly* will be permitted only where..." The following receptors could also be mentioned in the policy: biodiversity, water resources, soil and land quality and air quality, although it is recognised that the aim of the policy seems to be specifically to protect human health.
- EWP13 No modifications recommended.
- EWP14 Clause a could be clarified as follows "appropriate measures are taken to deal with any contamination which exists on the site to ensure that no residual risks would remain for future receptors on site." A clause could be added to state that off-site disposal of contaminated waste material should be minimised as far as possible.
- EWP15 No modifications recommended.
- EWP16 Clause a of the policy could be re-worded as follows: "would not have a significant *direct or indirect* impact on the capacity and flow of groundwater, surface water, or coastal systems."
- EWP17 No modifications recommended.



8.19.5 How Have the Recommendations Been Taken Forward?

Policy EWP1 – The wording of the policy has been clarified.

Policy EWP2 – *The policy has been re-worded in line with the recommendations.*

Policy EWP3 – The explanatory text supporting the policy has been modified to assist the definition of 'larger scale.'

Policy EWP4 – The policy has been clarified in relation to ensuring that the developments do not adversely affect recreational land and that there would be no significant adverse effects on certain features. It is not considered necessary, however to add an additional clause in relation to the water environment as this issue is addressed elsewhere in the energy, waste and pollution policies.

Policy EWP5 - The policy has been re-worded in line with the recommendations.

Policy EWP6 – *The explanatory text supporting the policy has been amended.*

Policy EWP8 - The policy has been re-worded in line with the recommendations.

Policy EWP10 – The explanatory text supporting the policy clarifies what is meant by 'major development proposals.'

Policy EWP12 - The policy has been re-worded in line with the recommendations.

Policy EWP14 - The policy has been re-worded in line with the recommendations.

Policy EWP16 – The policy has been re-worded in line with the recommendations.

8.20 Implementation

There are four policies within this chapter of the UDP which address the implementation of the remaining UDP policies. They were, however, screened out of the assessment because they are unlikely to have any significant impacts on the SA objectives. Policy IMP1 in particular should help to ensure that where a development could potentially have some trade-offs or impacts, they are dealt with appropriately through the use of conditions and planning obligations. Policy IMP2 will further ensure that policies and requirements for developers are being adhered to. IMP3



addresses plan monitoring and this process could be very valuable for the development of the LDP as it will provide a good indication of the effectiveness of the plan's policies. There will also be opportunities for this monitoring process to be integrated with the monitoring undertaken as part of the SA. The development of Supplementary Planning Guidance can only help to improve the understanding of the plan's policies and help guide developers in what is expected of them.



9 Cumulative and Synergistic Effects

9.1 Types of Cumulative/Synergistic Effects

The SEA Directive requires that the assessment includes the identification of the cumulative/synergistic effects of the plan. With regards to policies of the UDP, cumulative effects can be realised in the following ways:

- Within a policy that involves numerous geographical implications, for example through the provision of a number of individual sites. This may result in incremental impacts on the baseline which either cumulatively or synergistically combine to result in a greater overall impact than on a site by site basis.
- **Between policies**. Individual policies may have incremental impacts upon the baseline, which when combined with other policies may have cumulative or synergistic impacts, both positive and negative.
- Between topics within a policy. In this case, individual policies may have impacts on a number of topics, which could influence other topics either cumulatively or synergistically. For example, a policy may directly impact air quality, but it may also indirectly result in increased traffic flows which in turn may also impact upon air quality.

9.2 Cumulative/Synergistic Effects of the UDP

The assessment of cumulative/synergistic effects is particularly important for a UDP which should be read as a whole. The assessment was undertaken following good practice guidance and the main cumulative/synergistic effects that have been identified are presented by receptor/topic area in Table 9-1.

Receptor Topic	Cumulative/Synergistic Effects	Related Topics which may be impacted	
Biodiversity, Flora and Fauna	There is the potential for incremental adverse cumulative impacts on biodiversity resources across the County associated with some of the policies in the plan particularly those allocating land for employment, housing, commercial and waste facility developments. The adverse cumulative impacts on biodiversity are either going to be as a direct result of land take or directly through water abstraction or soil, water or air pollution. There could also be significant synergistic adverse impacts, for example a number of the employment land allocations are sited in close proximity to or within the Dee Estuary Ramsar site, pRamsar, pSPA, SPA, pSAC and SSSI and the combination of land take, pollution and nuisance impacts and potentially water resource issues like abstraction could interact to have a much greater impact on this resource, landscape/seascape and amenity/recreation impacts.	Water resources, soil and land quality, housing, economy and health.	
	The proximity of the plan's allocations to biodiversity sites of international and national importance is not the only issue of concern, the gradual erosion of biodiversity resources e.g. habitats and species of importance at the local level could occur as a result of other much more minor developments e.g. barn conversions in rural parts of the County.		
	However, despite the above issues there are clear policies in the plan addressing the need to protect and where possible enhance the biodiversity resources of the County. One of the most important plan policies is WB2 which addresses the protection of internationally designated sites.		
Air Quality	Air quality is likely to be adversely affected because of the incremental effect of multiple economic, housing and commercial developments across the County. Increased traffic movements will affect local air quality and have implications for climate change (see section below). Whilst the UDP includes policies stating that development should be well sited in relation to transport links and walking/cycling	Soil and land quality, climate change, economy, housing, biodiversity, health and housing.	

Receptor Topic	Cumulative/Synergistic Effects	Related Topics which may be impacted	
	routes, air emissions from transportation sources also rely upon individuals taking action and this is outwith the control of the Flintshire UDP.		
	A potentially positive cumulative impact of the plan is the reference throughout a number of the policies of the need to ensure the use and re-use of brownfield sites where appropriate. This could result in the remediation of heavily contaminated sites which are also a source of air pollution.		
	There are policies addressing the issue of reducing pollution from industry and new development and so this should mitigate impacts associated with air pollution from these sources.		
Climate Change	As above, the increase in traffic movements across the County associated with new development and the increased trips that would be generated would have significant long term adverse impacts. Similarly the new developments would increase energy demand which in itself would have climate change impacts.	Air quality, transport, economy, human health and housing.	
	The UDP includes polices addressing energy efficiency and renewable energy in development and this should go some way towards mitigating this issue. However, the UDP could strengthen these requirements by producing supplementary planning guidance that actually includes specific targets and requirements for new developers in relation to sustainable design and construction principles.		
	Perhaps the most significant adverse cumulative impact associated with climate change and the policies in the UDP is the significant loss of floodplain that would occur because of the UDP allocations. The vast majority of the floodplain is located along the North Wales coast and in light of the potential impacts of climate change being realised in the future e.g. sea level rise and increased frequency and severity of flooding the UDP would be working against the need to adapt to the risks posed by climate change. There would be knock on adverse cumulative impacts for biodiversity because floodplains are often important biodiversity resources. Whilst the UDP includes a policy addressing flood risk and it is clear in its requirements for		

Receptor Topic	Cumulative/Synergistic Effects	Related Topics which may be impacted	
	development not to be at risk of flooding, nor increase flood risk elsewhere, the allocations would seem to contradict this requirement.		
Water Resources	All new development across the County will place a cumulative pressure on water resources and wastewater treatment capacity. Whilst water resource availability is not currently known to be an issue it could become one in the future as more and more development occurs. This could have impacts for nature conservation resources like the River Dee if levels of abstraction exceed the carrying capacity of the resource to accommodate that level of change. There are policies in the UDP (EWP16 Water Resources) which clearly states that development should not adversely affect the County's water resources and CF8 (Service Provision) states that development will only be permitted if the necessary utility services are available.	Biodiversity, housing, economy and human health	
	A further cumulative adverse impact of the allocations is the loss of greenfield land at a number of locations across the County. This will modify runoff and drainage patterns.		
	Pollution could be another cumulative adverse impact on water resources although this will ultimately depend upon the type and form of the development. Some of the employment allocations in the UDP might be considered more 'high risk' than others because of their close proximity to the Dee Estuary. Although there is a clause in policy EWP16 addressing the need to protect the quality of ground, surface and coastal waters and so should prevent any adverse impacts on the quality of water resources.		
Soil and Land Quality Policy EWP14 and clauses within other polices promote the re-use of brownfield and derelict sites and so there could be cumulative positive impacts for soil and land quality across the County, this would have knock on benefits for water, biodiversity and air by removing sources of contamination. However, there is the potential for the remediation of contaminated sites to result in the cumulative loss of species and habitats as many brownfield sites in the County have the potential to support a		Biodiversity, water resources, human health, housing and economy.	

Receptor Topic	Cumulative/Synergistic Effects	Related Topics which may be impacted	
	diverse range of species. However, this issue is addressed in policy EWP14 (Derelict and Contaminated Land) which states that measures should be taken to safeguard significant nature conservation features that exist on a site.		
Material Assets (including minerals and waste and natural resources)	All new development would result in an incremental increase in waste production, the use of natural resources and materials, energy consumption and other material assets including cultural heritage. The UDP could strengthen its mitigation in relation to this issue by developing Supplementary Planning Guidance addressing sustainable design and construction. There are also policies in the plan promoting sustainable waste management for new developments.	Local economy, transport, housing, cultural heritage, deprivation, soil and land quality and landscape/townscape.	
	There are however a number of cumulative and synergistic benefits offered as a result of the policies that seek to protect the natural environment. Nonetheless there are outstanding issues associated with the development allocations that could threaten material assets in the long term.		
Cultural Heritage	If not implemented in a sensitive manner, the allocations policies may have a cumulative adverse impact on cultural heritage resources. There is also the potential for synergistic adverse impacts associated with the development resulting in pollution, increased nuisance etc which could all affect the setting of heritage features and landscapes and these effects combined with direct impacts could have a much greater impact overall.	Biodiversity, landscape/townscape, transport, housing and economy.	
	There are, however very strict policies addressing the protection of the historic environment and so should provide suitable mitigation.		
	It should be noted that the sites selected for brownfield re-use should be very carefully selected because the Flintshire landscape, owing to its mining and quarrying history comprises a number of brownfield sites which are an important feature of the landscape and the County's heritage.		
Landscape/townscape	There are a number of policies addressing the protection of the County's landscape	Biodiversity, water	

Receptor Topic	Cumulative/Synergistic Effects	Related Topics which may be impacted	
	resources and clauses in other policies seek to ensure that all new development is appropriate in scale to the immediate surroundings. Nonetheless the cumulative affect of multiple developments across the County could result in the loss of or adverse impacts upon local landscape features. Indeed, a number of the employment/housing allocations either utilise areas of open space or are located adjacent to green spaces.	resources, housing, employment and transport	
Transport	New development will inevitably encourage more traffic movements and so could have adverse impacts on the transport network. However, there are policies and clauses included in the plan that positively encourage the siting of development in close proximity to public transport, walking and cycling facilities.	Biodiversity, water resources, housing, employment, transport and population.	
Economy	New development in Flintshire would offer a number of cumulative economic benefits by creating employment opportunities, improving the skills of the County's population and improving the image of the County as a place to live and do business. The positive cumulative impacts would be particularly beneficial for people living in regeneration areas as most of the development is focused close to the settlements along the eastern coast where it is recognised that regeneration is needed. However, the longevity of these long term positive impacts could be questioned in light of the potential risks of siting so much of the employment development in the floodplain. It is also considered more likely that these benefits would be realised in the urban parts of the County rather than rural areas.	Population, education, deprivation and living environment and transport.	
Housing	The housing policies should result in cumulative housing benefits across the County by providing new sites and fulfilling for a range of hosing needs including affordable which is a recognised issue across the County.		
Deprivation and Living Environment			

Receptor Topic	Cumulative/Synergistic Effects	Related Topics which may be impacted	
	natural environment should all make a positive contribution towards reducing levels of deprivation. However, it should be noted that living environment deprivation is most prominent in the settlements along the coast and the high number of allocations in this area (including for industrial uses) could potentially worsen existing problems.	landscape.	
Population	The allocations in the plan offer the potential to develop the County's economy, improve job opportunities and increase the provision of facilities and so could offer cumulative benefits to quality of life by improving social and economic conditions.	All other topic areas.	
Education and Qualifications The UDP policies are unlikely to have a significant cumulative or synergistic impact on education and qualifications. There is, however the possibility that new housing allocations across the County could place increasing cumulative pressure on educational facilities. Close liaison between the planning and education department will be essential to address this issue. The provision of new tourist facilities across the County which also serve an educational purpose could offer minor cumulative benefits for education.		Economy, housing, population, transport and deprivation.	



9.3 Interactive and Transboundary Effects

Flintshire shares physical borders with Chester City Council, Wrexham County Borough Council and Denbighshire County Council and a number of the County's most important environmental features fall within the administrative boundaries of other authorities in addition to Flintshire including Ellesmere Port and Neston Borough Council and Wirral Metropolitan Borough Council. The key transboundary features are:

- The Clwydian Range AONB
- The Alyn Valley Woods SAC
- Berwyn and South Clwyd Mountains SAC
- The River Dee and Bala Lake SAC
- Dee Estuary pSAC, pSPA, Ramsar site, pRamsar and SPA

All of the above therefore can be affected both by development in Flintshire and in neighbouring authority areas. For example a small amount of development in the AONB in Flintshire might in isolation not be considered as having a significant effect on the features, whilst this development combined with actions in Denbighshire could result in a significant cumulative effect. The policies in the Flintshire CC UDP have been strengthened through the SA process to recognise the potential risks associated with cumulative developments in Flintshire and so should help prevent the occurrence of this issue within Flintshire itself. However, this SA cannot address the policies of other authority UDPs/LDPs. The emergence of the Sub-Regional Spatial Strategy for West Cheshire and North East Wales presents an opportunity to deliver more cross-border working to help mitigate the occurrence of such impacts and to promote more sub-regional working and thinking.

Air, water and land pollution does not adhere to County boundaries and actions within Flintshire have the potential to have indirect, transboundary effect for neighbouring authorities. Policies EWP12, EWP13, EWP14 and EWP16 are very clear that no development in the County should result in adverse pollution impacts and consequently such indirect, transboundary effects should not be realised.

The employment policies of the UDP have the potential to lead to a number of employment opportunities, improving the skills of the County's population and its image. This could result in wider multiplier benefits for other parts of North Wales and this could be a positive transboundary impact of the UDP. Again, the SRSS presents an opportunity to further develop and maximise these transboundary opportunities. Associated with increased economic development there is the potential for increased vehicular movements both within Flintshire and neighbouring authorities which has associated adverse air quality impacts. This is something that it is very difficult to mitigate, although Policy AC4 is clear in its requirements for major traffic generating developments to be accompanied by travel plans which could go some way to helping to reduce such emissions.



10 Monitoring Framework

10.1 Introduction

This section provides an outline monitoring framework and advice for monitoring the significant effects of the implementation of the UDP. Monitoring can be used to:

- Determine the performance of the plan and its contribution to objectives and targets
- Identify the performance of mitigation measures
- Fill data gaps identified earlier in the SEA process
- Identify undesirable environmental effects
- Confirm whether environmental predictions are accurate.

Monitoring should be an ongoing process that is integral to the UDP implementation.

10.2 Legislative Requirements of the SEA Directive

The activities relevant to monitoring that are stipulated in the SEA Directive are outlined in Box 6.

Box 6 SEA Legislative Requirements for Monitoring

The Directive says:

"Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stages unforeseen adverse effects, and to be able to undertake appropriate remedial action" (Article 10.1).

The Environmental Report shall include "a description of the envisaged concerning monitoring (Annex I (i)).

10.3 Approach to Monitoring

Guidance on the approach to monitoring has been taken from the following sources:

- WAG (August 2004) Strategic Environmental Assessment (SEA) of Unitary Development Plans, Interim Good Practice Guide
- ODPM et al (September 2005): A Practical Guide to the Strategic Environmental Assessment Directive



 ODPM (November 2005) Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents

The guidance suggests that the monitoring process should focus upon the following:

- A limited set of indicators that reflect the changes to the environment that would be effected by the implementation of the UDP.
- Significant impacts where there is considerable uncertainty and where monitoring would enable preventative mitigation measures to be implemented as necessary.
- Indicators where a current lack of information could constrain a future decision-making process.

An approach based around objectives, indicators and targets is advocated which can take account of changes to the environmental/sustainability baseline as a result of the UDP's implementation. A holistic approach should be adopted that covers cumulative, synergistic, direct, indirect and cumulative impacts.

One of the most difficult issues when undertaking monitoring is identifying whether the plan in question, alone has influenced a particular indicator. For example the condition of a SSSI is likely to be affected by many factors and not just new development that has occurred as a result of the UDP's implementation. When undertaking the monitoring it can often be very useful to monitor the baseline conditions as this may help identify what factors are causing the changes.

It is often possible to link the monitoring strategy with other monitoring programmes. A series of performance indicators have been developed and reviewed by Flintshire CC for the UDP itself and where possible these have been utilised to maximise efficiency and remove duplication of effort. However, additional indictors have been proposed to ensure that the significant issues identified in the SA are monitored. In the future there may be opportunities for the monitoring framework to draw upon information that is collated by statutory consultees who already have monitoring frameworks in place

10.4 Proposed Monitoring Framework

Table 10-1 provides a framework for monitoring the significant effects of implementing the UDP. The framework is based around the SA objectives and includes the following elements:

- The potentially significant impact that needs to be monitored or the key areas of uncertainty
- Suitable monitoring indicators
- A target where one has been identified
- The potential data source



It is recommended that each of the indicators are monitored annually. Although it may be possible to alter the frequency of monitoring to a longer time period if limited change is being identified.

The use of indicators that could be affected by a number of factors and not just the implementation of the UDP is inevitable. Where such indicators are used the monitoring data will need to be subject to a more detailed review to try and determine if and how the UDP is having an impact.

For some of the proposed indicators there is currently a lack of baseline data against which the performance of the UDP can be addressed. Over time as more data is gathered it may be possible to refine the indicators according to the data available.

For some of the SA objectives, monitoring indicators have not been proposed, as a significant impact was not identified through the SA.

SA Objective	Significant Effect to be Monitored	Indicator	Target	Data Source
To reduce crime, disorder and fear of crime	Although the plan policies in isolation are unlikely to have a significant effect, the plan cumulatively, in the long term, through stimulating regeneration and promoting the designing out of crime, could have positive impacts on crime levels and fear of crime	population for different	Reduce crime rates below current baseline levels Reduce fear of crime below current levels	Community Safety Strategy

 Table 10-1
 Proposed Monitoring Framework

SA Objective	Significant Effect to be Monitored	Indicator	Target	Data Source
To provide access to good quality, affordable housing that meets the needs of the community	The UDP should lead to the provision of improved housing across Flintshire. There could also be a significant impact on the provision of affordable housing.	House price/earnings affordability ratio Amount and proportion of affordable housing completions on large development sites Average density of development Number and distribution of LSOAs in the bottom 10% most deprived for housing. Information from the updated urban/rural capacity studies could be utilised.	Achieve 30% affordable housing on all large housing sites Reduce the number of wards in the bottom 10% most deprived for housing	Flintshire Community Strategy Team Flintshire CC Policy Team
To protect and enhance the Welsh language and cultural resources	New development has the potential to adversely impact upon Welsh language and cultural resources through dilution effects. However, the UDP includes a number of policies seeking to protect Welsh language and cultural resources.	Percentage of resident population with knowledge of the Welsh language	Increase above current baseline	Neighbourhood Statistics

SA Objective	Significant Effect to be Monitored	Indicator	Target	Data Source
To protect and enhance community spirit and cohesion	The community facility policies could have a significant positive impact on community spirit and cohesion.	Percentage of residents satisfied with their neighbourhood as a place to live	Increase above current baseline	Flintshire Community Strategy Partnership
To protect and improve access to basic goods, services and amenities for all groups	Through the siting of new development, the UDP could influence current levels of access to facilities and have a significant positive impact through the provision of new facilities and opportunities	Percentage of residents finding it easy to access key local services in their neighbourhood Availability/loss of village shops/post offices/pubs (there is currently a lack of baseline data available – a rural services survey could be undertaken to commence monitoring of this indicator).	Increase above current baseline Increase provision of services in rural centres appropriate to scale and size of settlement	Flintshire CC Policy Team Flintshire Community Strategy Partnership



SA Objective	Significant Effect to be Monitored	Indicator	Target	Data Source
To promote a sustainable economy and business development	The UDP includes a number of employment land allocations and employment policies which should have a long term positive impact on the County's economy.	Take up rates for employment land Number of VAT registrations by sector Jobs created Employment land developed by use classes Annual tourist expenditure Economic activity rates	An increase in the number of Business Starts from 32 firms per 1,000 people to 40 over the life of the strategy. Increase in the annual tourist expenditure in the County from £106.6 million to £130 million.	Flintshire CC policy team and Economic Development Neighbourhood Statistics
To develop and market the County's image as a place to live, work and do business	New development, increased opportunities across Flintshire and the protection of the County's environmental assets through the UDP policies should have a long term positive impact upon the County's image.	Number of tourist visitors Number of VAT registrations/deregistrations	Increase above current baseline	Economic Development Team Statistics Wales (WAG)

SA Objective	Significant Effect to be Monitored	Indicator	Target	Data Source
To improve the quality of life in rural areas	There could be significant long term positive impacts on access to facilities and economic performance as a result of policies promoting diversification and the improvement of services and facilities.	Limited indicators available at present because of a current lack of suitable baseline data. With further improvement of data availability the following indicators could be used	No specific targets identified to date	Flintshire CC policy team
		Number of diversification schemes permitted		
		Availability /loss of village shops/post offices/pubs		
		Number of agriculture/forestry buildings permitted		
To deliver urban renaissance and improve the vitality and vibrancy of urban areas	The UDP strategy focuses upon regeneration and there are a number of	Percentage of brownfield land/buildings developed	Increase percentage of Flintshire CC po brownfield land developed above current baseline	Flintshire CC policy team
	policies which could make a significant long term contribution towards urban	Area of floorspace of new retail development located n in town centres n Area of floorspace of new 85% of all new retail development located in and around town centres		
	renaissance and the vitality of urban areas.			

SA Objective	Significant Effect to be Monitored	Indicator	Target	Data Source
To ensure that biodiversity is valued, protected and enhanced	The UDP policies could protect some nature conservation assets but there could be risks to biodiversity features.	 Number, area and condition of designated sites Number of applications that lead to significant adverse impacts on SAC, SPA, pSAC, SSSI, LNR and protected species in the LBAP Performance indicators for various features of the designated sites. Percentage of applications received that are approved and result in the loss of protected trees, woodlands and hedgerows. Distribution of BAP species and habitats Areas of parks and green spaces per 1,000 head of the population (indicator could be subdivided to highlight recreation and play spaces). 	Maintain current number and area of designated sites and improve condition The Survey of Open Space and green spaces could provide useful targets. No net loss in the number of protected trees, woodlands and hedgerows.	CCW Flintshire CC policy team

SA Objective	Significant Effect to be Monitored	Indicator	Target	Data Source
To ensure that landscapes and townscapes are properly valued, conserved and enhanced	The UDP has the potential to have a cumulative adverse impact on the County's landscape associated with the allocations. However, there are policies which seek to protect the County's landscape assets.	Number of planning applications permitted contrary to AONB/green barrier/countryside policy. Area of greenspace per 1,000 population in the urban area Contextual information based upon landscape character assessment and landmap	No applications permitted contrary to AONB/green barrier/countryside policy.	
To ensure that diversity, local distinctiveness and cultural heritage are valued, protected and enhanced	The UDP includes a number of stringent policies that protect the cultural heritage resources of the County. However, new development could have a cumulative/synergistic adverse effect on heritage resources.	Number of Listed Buildings Number of Listed Buildings on the at risk register Number of Conservation Areas and appraisals	No increase in the number of Listed Buildings on the at risk register To review and prepare appraisals of all Conservation Areas	Flintshire CC Policy Team

SA Objective	Significant Effect to be Monitored	Indicator	Target	Data Source
To protect and enhance water features and resources	New development across the County has the potential to increase rates of runoff and affect water quality. There are policies in the UDP addressing the need to protect water resources.	General Quality Assessment data for main rivers (it will be very difficult to identify precisely what factors have affected water quality) Number of permitted planning applications incorporating SuDS.	No decrease in river quality Incorporation of SuDS in new development	Environment Agency Flintshire CC Development Control
To avoid, reduce and remediate contaminated soils and encourage the appropriate re-use of brownfield sites	The UDP presents the opportunity to remediate derelict, contaminated and under-used sites across the County.	Percentage of derelict, under-used and neglected land Percentage of new homes built on brownfield sites. Percentage of new employment development on brownfield sites	Reduce the amount of derelict, under-used and neglected land below current baseline. Increase the percentage of new homes/employment development built on brownfield land above current baseline.	Flintshire CC Policy and Development Control Teams
SA Objective	Significant Effect to be Monitored	Indicator	Target	Data Source
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To reduce greenhouse gas emissions and ensure that adequate adaptation measures to climate	A large number of the allocations in the UDP are sited on floodplain and so there could be significant	Number of planning applications permitted contrary to EA advice on flooding.	No new development on land at risk of flooding.	Flintshire CC Development Control Team
change are in place.	adverse impacts in terms of adaptation to the risks of climate change. Development across the County is also likely to	Number of planning applications permitted for development in flood risk areas.		
	increase carbon dioxide emissions from transportation sources.	No suitable indicator identified for monitoring carbon dioxide emission levels.		
To protect and improve air quality	New development is likely to increase air emissions from transportation sources.	Number of AQMAs Number of areas where levels of identified pollutants breach Air Quality Standards.	No AQMAs in the County	Flintshire CC Environmental Health Department
To increase energy efficiency and require the	New development is likely to increase energy	Number of renewable energy projects permitted	No targets identified to date	Flintshire CC Policy, Development Control and
use of renewable energy resources	consumption.	Development that results in energy generated from renewable sources		Building Control Departments
		Percentage of new buildings achieving high energy conservation ratings		

Page 211

SA Objective	Significant Effect to be Monitored	Indicator	Target	Data Source
To ensure the sustainable use of natural resources	The UDP through its policies has the potential to significantly impact on the aggregate land bank across the County. New development would also use natural resources.	Percentage of recycled aggregates used in construction projects Status of minerals land banks and extraction of permitted reserves	Increase percentage of recycled aggregates used in construction projects above current baseline.	North Wales Regional Aggregates Working Party and Flintshire CC Minerals and Waste team.
To minimise waste, increase re-use and recycling	The new development that occurs as a result of the UDP is likely to increase waste generation but the UDP policies could see an increase in re-use and recycling.	Total tonnage of municipal waste arisings, percentage landfilled Total tonnage of municipal waste arisings, percentage reused or recycled Total tonnage of municipal waste arisings, percentage composted.	By 2010 at least 10% reduction in waste produced (compared to 1998 arisings) – national target By 2009/2010 and beyond achieve at least 40% recycling/composting with a minimum of 15% composting and 15% recycling.	Flintshire CC Waste Strategy Team

Page 212



ata Source	Target	Indicator	Significant Effect to be Monitored	SA Objective
intshire CC transport olicy Team	Increase for al above current	Journey to work by mode Extent of cycling network (km) Length/condition of public rights of way New development on large sites within 250m of a bus stop Number of/percentage of new major developments	New development will increase travel movements but the policies present a significant opportunity to increase the use of sustainable modes of transport.	To promote the use of sustainable modes of transport.
		rights of way New development on large sites within 250m of a bus stop Number of/percentage of	increase the use of sustainable modes of	

Page 213



10.5 Management and Responsibilities

It is recommended that Flintshire CC produce a report annually documenting the results from the monitoring programme. The monitoring data needs to be collated in a structured manner so that patterns and trends can be identified.

The SEA Directive does not require that the UDP is modified if monitoring reveals adverse effects. However, the intention of this entire process is to reduce significant adverse effects from the plan-making and implementation process and so remedial measures should really be implemented as appropriate. To gain maximum benefit from the process, Flintshire CC need to determine when remedial action would be implemented i.e. what would be the trigger and the type of remedial action that might be implemented, for example the modification to a policy or the introduction of a new policy.

Flintshire CC should collate the monitoring data in tabular format and record the following:

- The SA objective and significant effect being monitored
- The indicator being used
- The data recorded
- The trend i.e. is the situation improving or deteriorating
- The need for remedial action i.e. the trigger or threshold that would lead to remedial action being required and if it is needed
- The remedial action to be taken
- The date for the implementation of remedial action.

Table 10-2 provides a framework for identifying who is responsible for collating the monitoring data.

 Table 10-2
 Monitoring Responsibilities Table

Monitoring Activity	Responsible Body	Dates and frequency	Format of Results	Status/Issues Encountered



11 Conclusions

A full SA of the Flintshire CC UDP commenced in April 2006 and although the UDP was already significantly developed by this time it has been possible for this retrospective SA to positively influence the development of the UDP. The intention of this process, has from the outset been to make it as inclusive as possible. Workshops have been held throughout all stages of the SA process and liaison with the statutory consultees has been integral to ensure that the process was as transparent as possible and to seek guidance and feedback on key elements of the process.

The SA has been executed such that all legislative requirements of the SEA Directive have been fulfilled. The SA commenced in April 2006 and a scoping report was issued to the statutory consultees in June 2006 which was designed to get as much feedback as possible regarding the baseline conditions in the County and the key constraints and opportunities. Following the receipt of the scoping responses the assessment of the UDP elements was undertaken. The following components were assessed:

- The strategic aims
- The spatial options i.e. where areas of growth and development restraint will occur in the County
- The plan policies

Throughout the SA there has been continual feedback between the SA practitioners and the plan-makers to enable the recommendations from the SA process to be integrated into the modifications to the UDP.

The spatial strategy of the UDP had already been selected when the SA commenced. However, the original strategy options were reviewed to confirm whether the option selected was the most sustainable and compatible with the SA objectives. The SA confirmed that the preferred spatial option (essentially a hybrid of all of the options) was the most sustainable as it should enable balanced development within the environmental capacities of the County. A recommendation of the SA process was, however to strengthen and make clearer the need to protect the sites of internationally designated sites in Flintshire. It was also recognised that the strategy would need to be supported by some strong policies to provide the necessary direction for development control decisions.

All of the plan policies were assessed against the SA objectives. A number of the policies allocate land for development. All of the potential sites identified in the policies were subject to a more detailed level of assessment, whereby the key site constraints and opportunities were identified through a simple desk study exercise. One of the major weaknesses of the UDP relates to the housing and employment allocations as a number of the potential sites are situated adjacent or in close proximity to European sites within the Natura 2000 network and/or lie within the floodplain. Whilst the SA recommended the review of these particularly sensitive sites, and some of the housing allocations have since been



removed from the plan, there remain a number of sites which could potentially result in adverse impacts. Consequently a screening exercise for Appropriate Assessment was undertaken under Regulation 48 of the Conservation (Natural Habitats etc) Regulations 1994 to determine whether the land use allocations would have significant effects on designated sites within the Natura 2000 network. The plan should not, however be read in isolation and policy WB2 (Sites of International Importance) ensures that such sites would be protected from development that could affect their integrity. Consequently an Appropriate Assessment was not considered necessary. Full details are provided in the following report: Hyder Consulting (2006) Screening Under Regulation 48 of the Conservation (Natural Habitats etc) Regulations 1994 (Report No. 005 – NH50993-NHR-01).

In relation to flood risk issues policy EWP 17 (Flood Risk) clearly identifies the requirements for developers should development be considered in an area at risk of flooding. Despite the concerns regarding some of the allocations the employment policies have the potential to offer social and economic benefits by stimulating increased economic activity and improving job opportunities. These impacts would be particularly beneficial in some of the towns along the Dee Estuary where there are recognised deprivation issues.

From a social perspective there are policies in the plan that seek to improve the quality of facilities in the County and the provision of new housing developments, which incorporate affordable housing will have benefits, particularly in rural areas where there are recognised problems associated with housing affordability. The policies in the UDP that seek to protect and enhance the County's environmental resources should also have indirect benefits for quality of life.

A significant proportion of the County is rural and this creates a number of issues in terms of access to facilities, protecting rural areas from inappropriate development, yet ensuring that opportunities for diversification and development occur in a sustainable manner. The UDP includes a specific chapter addressing rural enterprise and agriculture and this should help to ensure that diversification opportunities are maximised. The SA, however identified that the rural enterprise and diversification policies were a little weak in terms of their environmental protection requirements and have since been strengthened in line with the SA recommendations.

All of the development promoted through the UDP is likely to increase energy consumption, increase water use, increase waste generation and increase travel. These issues, are not, however unique to Flintshire. The UDP seeks to positively influence and improve performance in relation to these issues by including policies addressing energy efficiency, sustainable waste management and the need for large scale developments to have travel plans and these are all positive elements of the plan. The UDP could be further strengthened through the preparation of an SPG on sustainable design and construction.



The plan should ultimately be read as a whole as the policies, in reality will never be implemented in isolation. An assessment of the likely cumulative/synergistic effects of the UDP was completed to determine the likely impacts on key receptors. Whilst the potential for incremental, cumulative adverse effects was identified on receptors such as biodiversity, air quality, water resources, landscape/townscape, cultural heritage and soil and mineral resources as a result of multiple new developments across Flintshire, there are strong policies in the UDP which should ensure that these resources are protected from inappropriate development. From an economic perspective there should be long term cumulative benefits, although the longevity of these benefits could be guestioned in light of a considerable number of employment allocations situated in the floodplain. The SA also identified that there is the potential for there to be interactive and transboundary effects because Flintshire shares borders with a number of authorities and it is recognised that there are considerable movements of people across the County's borders. A number of sites within the Natura 2000 network also cross borders and hence they could be impacted by both activities in multiple authorities. Whilst the policies in Flintshire have been strengthened it is the responsibility of the other authorities to ensure that they have policies protecting these assets.

Owing to the late commencement of the SA process, it was not possible to influence from the outset the direction of the UDP. However, a number of findings from this process can be carried forward when Flintshire CC commence the production of their LDP. During the preparation of the UDP, the SRSS for West Cheshire and North East Wales commenced and this should present an opportunity for much closer cross-border working between authorities. This should help to overcome some of the issues associated with transboundary cumulative effects particularly on sites within the Natura 2000 network. Water resource availability and the impact of increasing water demand on the County's environmental resources is an issue that should be subject to further scrutiny as part of the LDP. Policy WB2 (Sites of International Importance) and policy EWP16 (Water Resources) both ensure that the County's resources will not be adversely affected. However, this issue should continue to be the focus of investigation as part of the monitoring process for the UDP to ensure that risks are identified in a timely manner and to ensure that development control decisions using these policies are based upon the most up-to-date knowledge.

Overall, this SA has been a beneficial process, and despite being retrospective has led to some strong conclusions and subsequent modifications to the UDP.





Appendix A

Scoping Consultation Responses





Appendix B

Review of Plans, Programmes and Policies





Appendix C

Baseline Data



Figure 1 Health Deprivation Domain

(Based on standardised limiting long-term illness, standardised mortality ratio for all causes of death for all ages, cancer standardised incidence ratio). **Health**







Figure 2 Employment Deprivation Domain

(Based on claimants of incapacity benefit, claimants of severe disablement allowance and participants on options for New deal for Young People and Intensive Activity Period for New Deal 25 plus)





Figure 3 Overall Index of Multiple Deprivation (all Domains)

(Domains covered are: income deprivation; employment deprivation; household deprivation; health deprivation; physical environment deprivation; education, skills and training deprivation; and geographic access to services by bus and walking deprivation).





Figure 4 Access to Services by Bus and Walking Deprivation Domain

(Based on proportion of population within 10 minutes of a food shop by walking and bus, within 15 minutes of a GP surgery by walking and bus, within 15 minutes of a primary school by walking and bus, 30 minutes of a secondary school by walking and bus, 15 minutes of a Post Office by walking and bus, 30 minutes of a NHS dentist by walking and bus, 15 minutes of a public library by walking and bus and bus and 20 minutes of a leisure centre or swimming pool by walking and bus.

Geographic Access to Services







Figure 5 Physical Environment Deprivation Domain

(Elements covered are air quality, air emissions, proportion of the population living within 1km of a waste disposal site, 1km of a significant industrial source and in an area with a significant risk of flooding).





Figure 6 Housing Deprivation Domain

(Based on households lacking central heating and household overcrowding, excluding all student households).

Housing

First 10% (1.0 to 190.0) Next 10% (190.0 to 380.0)

- Next 10% (380.0 to 570.0)
- Next 20% (570.0 to 950.0)









Sustainability Appraisal and Strategic Environmental Assessment The Flintshire Unitary Development Plan K:\projects\NH50993\F-Reps\SA Report603-NH50993-NHR-01-SA ReportF.doc Hyder Consulting (UK) Ltd 2212959 22/09/06 12:04 88



Appendix D

Development of the SA Objectives



SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	SRSS Principles	Key Flintshire Priorities/Objectives	Baseline Issues	SA Objective
Population Human Health	Achieving a strong, healthy and just society	Building Sustainable Communities – our future depends on the vitality of our communities, as attractive places to live and work.	Strengthen existing settlements and communities and help combat social exclusion	Key aim of the Community Safety strategy is to continue the programme of improving public safety and to reduce fear of crime.	Community safety is a number one priority for the residents of Flintshire. Anti-social behaviour is a concern for residents.	To reduce crime, disorder and fear of crime
Population	Achieving a sustainable economy	Building Sustainable Communities	Further develop the skills base of the labour force	The Economic Development Strategy seeks to improve the skills base of the County	Educational attainment is above performance nationally	To maintain and improve levels of educational attainment for all sectors of society
Population Human health	Achieving a strong, healthy and just society	Building Sustainable Communities	Strengthen existing settlements and communities and help combat social exclusion	Establishing a healthy and caring community is a key theme of the Community Strategy.	Although health in Flintshire is fairly good in comparison to other parts of Wales, some wards of Flintshire have greater problems associated with health deprivation.	To maintain and improve levels of health for all and reduce health inequalities.

SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	SRSS Principles	Key Flintshire Priorities/Objectives	Baseline Issues	SA Objective
Population Human health Material Assets	Achieving a strong, healthy and just society	Building Sustainable Communities	Strengthen existing settlements and communities and help combat social exclusion	The Housing Strategy also seeks to ensure that everyone has equitable access to and choice of appropriate housing and to improve the areas where people live.	The housing needs survey identifies a requirement for more affordable housing in the County. There are a number of wards with LSOAs in the bottom 10% for housing deprivation.	To provide access to good quality, affordable housing that meets the needs and requirements of the community.
Population	Achieving a sustainable economy Achieving a strong, healthy and just society	Respecting distinctiveness – a cohesive identity which sustains and celebrates what is distinctive about Wales, in an open and outward-looking way, is central to promoting Wales to the world, as well as to our future economic competitiveness and social and environmental well- being.	Create a clear identity for the sub- region	The Community Strategy identifies the Welsh language as an essential part of the culture and identity of Flintshire.	The percentage of people resident in Flintshire with a knowledge of the Welsh language is below the Wales average.	To protect and enhance the Welsh language and cultural resources.

SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	SRSS Principles	Key Flintshire Priorities/Objectives	Baseline Issues	SA Objective
Population	Promoting good governance	Building Sustainable Communities	Strengthen existing communities and help combat social exclusion	The Social Inclusion Strategy seeks to develop a more inclusive society where people can play their part if they wish. Developing a good community spirit is a key element of social inclusion.	Survey data suggests that people living in the County do seem to play a fairly active role in their society although opportunities should be sought to improve participation and involvement further.	To protect and enhance community spirit and cohesion
Population Human health	Achieving a strong, healthy and just society	Building Sustainable Communities	Strengthen existing communities and help combat social exclusion Reduce the need to travel within the sub- region through careful location of housing, employment and retail.	The Social Inclusion Strategy seeks to develop a more inclusive society where people can access basic goods and amenities. The Community Strategy also states that the people of Flintshire should be entitled to equal access to high quality lifelong learning, cultural	Parts of Flintshire have problems associated with access to facilities and amenities, particularly in the more rural parts of the County. Access to facilities tends to be difficult for people without a car.	To maintain and improve access to basic goods, services and amenities for all groups.

SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	SRSS Principles	Key Flintshire Priorities/Objectives	Baseline Issues	SA Objective
				facilities.		
Population	Achieving a sustainable economy	Promoting a sustainable economy – We need an innovative, high value economy for Wales which utilises and develops the skills and knowledge of our people: an economy which both creates wealth and allows that prosperity to be spread throughout Wales: an economy which adds to the quality of people's lives as well as their living and working environments.	Enhance the external competitiveness of the sub-region by building on existing successes and identifying future opportunities to widen the economic base.	The vision for Flintshire identified in the Economic Development Strategy is to develop a sustainable world- class economy based on a step change in innovation, enterprise whilst maximising the areas physical and human assets. There is identified need to develop entrepreneurship and business start- up strength.	Flintshire's economy is performing well with low levels of unemployment and high economic activity rates. However, there is a need for further improvement in terms of diversifying the economic base and overcoming some economic disparities.	To promote a sustainable economy and business development
Population	Achieving a sustainable economy Achieving a strong, health and just society	Promoting a sustainable economy	Reduce the need to travel within the sub- region through the careful location of housing, employment and	The Economic Development Strategy promotes investment in the County's towns and villages to make it a	Although no up-to- date statistical data has been obtained about the vitality and vibrancy of the towns in the County,	To develop and market the County's image as a place to live, work and visit.

SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	SRSS Principles	Key Flintshire Priorities/Objectives	Baseline Issues	SA Objective
			retail.	competitive location for economic development. The Corporate Plan also states that the County should be an attractive place to live, work and visit.	strategies suggest that there is currently under- investment in some of the towns and villages.	
Population	Achieving a sustainable economy Achieving a strong, healthy and just society	Promoting a sustainable economy Achieving sustainable accessibility Building sustainable communities	Reduce the need to travel within the sub- region through the careful location of housing, employment and retail. Strengthen existing communities and help combat social exclusion	The Economic Development Strategy acknowledges the needs of the rural parts of Flintshire (approximately 75% of the County is rural).	Issues of access to employment opportunities and other facilities are recognised problems in rural parts of the County.	To maintain and improve the quality of life in rural areas
Population	Achieving a strong, healthy and just society Achieving a sustainable economy	Achieving sustainable accessibility – we will develop access in ways that encourage economic activity, widen employment	Promote and develop an integrated transport system for the sub- region, and connecting into the wider area.	A key action of the Economic Development Strategy is the need to improve ICT infrastructure in new and existing businesses		To improve the effectiveness of communications links and infrastructure

SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	SRSS Principles	Key Flintshire Priorities/Objectives	Baseline Issues	SA Objective
		opportunities, ensure quality services and balances the social, environmental and economic impacts travel can have.				
Population	Achieving a strong, healthy and just society Living within environmental limits	Achieving sustainable accessibility Valuing our environment Building sustainable communities	Strengthen existing settlements and communities and help combat social exclusion	Investing in towns and villages is a strategic theme that will be achieved by making towns attractive, safe and vibrant places.	There are 12 LSOAs in the bottom 10% for physical environment deprivation and it is acknowledged that some areas have suffered because of the manufacturing decline in the County.	To deliver urban renaissance and improve vitality and vibrancy in urban areas
Biodiversity Flora, Fauna	Living within environmental limits	Valuing our Environment – the quality of our environment is a fundamental asset; for its intrinsic value, for our economy and quality of life.	Protect and enhance the environmental assets of the sub- region, including the natural, built and coastal environments.	The Flintshire BAP includes a number of objectives relating to the protection and enhancement of native species both common and scarce in the County.	There are a wealth of biodiversity resources in Flintshire	To ensure that biodiversity is valued, protected and enhanced

SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	SRSS Principles	Key Flintshire Priorities/Objectives	Baseline Issues	SA Objective
Landscape	Living within environmental limits	Valuing our environment Respecting distinctiveness	Protect and enhance the environmental assets of the sub- region, including the natural, built and coastal environments.	The Clwydian Range AONB Management Plan includes a number of objectives that seek to manage the area.	There is a high quality landscape in the County that must be protected.	To ensure that landscape and townscapes are properly valued, conserved and enhanced
Cultural Heritage (including architectural and archaeological heritage)	Living within environmental limits	Valuing our environment Respecting distinctiveness	Protect and enhance the environmental assets of the sub- region, including the natural, built and coastal environments.	The Clwydian Range AONB Management Plan recognise the importance of protecting the heritage resource.	There is a wealth of cultural heritage resources in the County that need to be protected.	To ensure that diversity, local distinctiveness and cultural heritage are valued, protected and enhanced.
Water	Living within environmental limits	Valuing our environment	Protect and enhance the environmental assets of the sub- region, including the natural, built and coastal environments.	The Corporate Plan states that the County should be a place where people want to live, work and visit. The Community Strategy Partnership emphasises the importance of the environment for	Water quality in the County has improved recently but could be further enhanced	To protect and enhance water features and resources

SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	SRSS Principles	Key Flintshire Priorities/Objectives	Baseline Issues	SA Objective
				quality of life.		
Soil	Living within environmental limits	Valuing our environment	Protect and enhance the environmental assets of the sub- region, including the natural, built and coastal environments.	The Corporate Plan states that the County should be a place where people want to live, work and visit. The Community Strategy Partnership emphasises the importance of the environment for quality of life.	Currently there are a number of data gaps in relation to soil and land resources in the County. However, there are a number of potentially contaminated sites particularly along the Dee Estuary.	To avoid, reduce and remediate contaminated soils and encourage the appropriate re-use of suitable brownfield sites ²¹
Climatic factors	Living within environmental limits	Valuing our environment	Protect and enhance the environmental assets of the sub- region, including the natural, built and coastal environments.	The Corporate Plan states that the County should be a place where people want to live, work and visit. The Community Strategy Partnership	Parts of the County are at risk of flooding and there is currently quite a high reliance on use of the private car for travel to work purposes	To reduce greenhouse gas emissions and ensure that adequate adaptation measures to climate change are in place

²¹ It is recognised that sites within and adjacent to the settlement limits may be suitable for redevelopment. However, because of its mining history Flintshire has a number of brownfield sites in the open Countryside and the Clywdian Range AONB and such sites would not be suitable for redevelopment. This issue has been acknowledged when assessing options/policies against this objective.

SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	SRSS Principles	Key Flintshire Priorities/Objectives	Baseline Issues	SA Objective	
				emphasises the importance of the environment for quality of life.			
Air	Living within environmental limits Valuing our environment		Protect and enhance the environmental assets of the sub- region, including the natural, built and coastal environments.	The Corporate Plan states that the County should be a place where people want to live, work and visit. The LTP also seeks to reduce the impact of road traffic on air quality.	There are no AQMAs in the County but there are a number of potential industrial transport related sources of air pollution.	To protect and improve air quality	
Climatic factors	Living within environmental limits	Valuing our environment	Protect and enhance the environmental assets of the sub- region, including the natural, built and coastal environments.	The Corporate Plan states that the County should be a place where people want to live, work and visit. The Community Strategy Partnership emphasises the importance of the environment for quality of life.	There is currently no data available about energy efficiency in the County.	To increase energy efficiency and require the use of renewable energy resources	
Soil	Living within	Valuing our	Protect and enhance the	The Corporate Plan states that the	There are a number of RIGS in the	To ensure the sustainable use of	

SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	Baseline Issues	SA Objective		
Material Assets	environmental limits	environment	environmental assets of the sub- region, including the natural, built and coastal environments.	County should be a place where people want to live, work and visit. The Community Strategy Partnership emphasises the importance of the environment for quality of life.	County and the County has a strong history of mining and quarrying.	natural resources
Soil Material Assets	Living within environmental limits	Valuing our environment	Protect and enhance the environmental assets of the sub- region, including the natural, built and coastal environments.	The Corporate Plan states that the County should be a place where people want to live, work and visit. The Community Strategy Partnership emphasises the importance of the environment for quality of life.	The landfilling of waste has decreased in the County and there has been increased recycling and reuse.	To minimise waste, increase re-use and recycling
Air Climatic Factors Population	Living within environmental limits Achieving a sustainable economy	Valuing our environment	Promote and develop an integrated transport system for the sub- region, and	The LTP seeks to control the growth of traffic on the County's roads and to promote the use	There is a greater dependence on the private car for travel to work in comparison to	To promote the use of sustainable modes of transport.

SEA Directive Topic	UK Sustainable Development Strategy	Wales Spatial Plan – Key Objective	SRSS Principles	Key Flintshire Priorities/Objectives	Baseline Issues	SA Objective
Human health			connecting into the wider area.	of alternative forms of transport.	Wales and England and Wales	



Appendix E

SA Objective Compatibility



SA (Dbjective
1	To reduce crime, disorder and fear of crime
2	To maintain and improve levels of educational attainment for all sectors of society
3	To maintain and improve levels of health for all and reduce health inequalities
4	To provide access to good quality, affordable housing that meets the needs and requirements of the community
5	To protect and enhance the Welsh language and cultural resource
6	To protect and enhance community spirit and cohesion
7	To maintain and improve access to basic goods, services and amenities for all groups
8	To promote a sustainable economy and business development
9	To develop and market the County's image as a place to live, work and visit.
10	To maintain and improve the quality of life in rural areas
11	To deliver urban renaissance and improve the vitality and vibrancy in urban areas
12	To improve the effectiveness of communications links and infrastructure
13	To ensure that biodiversity is valued, protected and enhanced.
14	To ensure that landscapes and townscapes are properly valued, conserved and enhanced.
15	To ensure that diversity, local distinctiveness and cultural heritage are valued protected and enhanced
16	To protect and enhance the water features and resources
17	To avoid, reduce and remediate contaminated soils and encourage the appropriate re-use of brownfield sites
18	To reduce greenhouse gas emissions and ensure that adequate adaptation measures to climate change are in place
19	To protect and improve air quality
20	To increase energy efficiency and require the use of renewable energy sources
21	To ensure the sustainable use of natural resources
22	To minimise waste, increase re-use and recycling
23	To promote the use of sustainable modes of transport



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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23




Appendix F

UDP Strategic Aim and SA Objective Compatibility



SA O	bjective
1	To reduce crime, disorder and fear of crime
2	To maintain and improve levels of educational attainment for all sectors of society
3	To maintain and improve levels of health for all and reduce health inequalities
4	To provide access to good quality, affordable housing that meets the needs of the community
5	To protect and enhance the Welsh language and cultural resources.
6	To protect and enhance community spirit and cohesion
7	To maintain and improve access to basic goods, services and amenities for all groups
8	To promote a sustainable economy and business development
9	To develop and market the County's image as a place to work, live and visit
10	To maintain and improve the quality of life in rural areas
11	To deliver urban renaissance and improve the vitality and vibrancy in urban areas
12	To improve the effectiveness of communications links and infrastructure
13	To ensure that biodiversity is valued, protected and enhanced
14	To ensure that landscape and townscapes are properly valued, conserved and enhanced.
15	To ensure that diversity, local distinctiveness and cultural heritage is valued, protected and enhanced.
16	To protect and enhance water features and resources
17	To avoid, reduce and remediate contaminated soils and encourage the appropriate re- use of brownfield sites
18	To reduce greenhouse gas emissions and ensure that adequate adaptation measures to climate change are in place.
19	To protect and improve air quality
20	To increase energy efficiency and require the use of renewable energy resources
21	To ensure the sustainable use of natural resources
22	To minimise waste, increase re-use and recycling
23	To promote the use of sustainable modes of transport.



UDP Str	rategic Aims
1	ECONOMY – To create a thriving, diverse and sustainable economy providing a wide range of quality employment opportunities to local people
2	SOCIAL AND WELFARE – To enable all local residents the opportunity to have access to quality housing, services, shops and leisure, recreational and sports facilities.
3	HEALTH – To facilitate the development of a safe and healthy environment
4	COMMUNITY IDENTITY – To preserve community life by limiting development to a level which can be reasonably sustained and assimilated within existing communities.
5	NATURAL ENVIRONMENT – To conserve and enhance the natural environment and its diversity – landscape, nature conservation and biodiversity
6	BUILT ENVIRONMENT – To conserve and regenerate and enhance the built and historic environment
7	ENERGY - To stabilise and ultimately reduce non renewable energy consumption and encourage appropriate renewable energy
8	RESOURCES - To make the most prudent and efficient use of resources, including land and buildings and encourage the use of recycled and secondary rather than primary resources
9	POLLUTION - To stabilise and ultimately reduce the potential for pollution
10	WASTE – To stabilise and ultimately reduce waste generation and disposal utilising waste management measures
11	CULTURE AND LANGUAGE – To promote and support a diverse local culture including the protection and development of the Welsh language
12	TRANSPORT AND ACCESS – To integrate new land uses with the existing transport network, and to improve accessibility to varying alternative transport modes other than the car and to promote the integration of transport modes.
13	PROXIMITY PRINCIPLE – To apply the proximity principle whereby problems are solved locally rather than passing them onto future generations.
14	RESPECT FOR ENVIRONMENTAL LIMITS – To ensure that resources are not irrecoverably depleted or the environment irreversibly damaged.



SA		EGY AIMS												
OBJECTIVES	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	✓	✓	 ✓ 			✓						?		
2	✓	 ✓ 									✓			
3	✓	 ✓ 	✓		✓	✓								
4		 ✓ 	 ✓ 		?	?	?	?	?	?		?		
5	?			✓		?					✓			
6		 ✓ 	 ✓ 	 ✓ 							?			
7		 ✓ 	 ✓ 			?						 ✓ 		
8	 Image: A start of the start of				?	?	?	?	?	?		 ✓ 	✓	✓
9	✓	 ✓ 	 ✓ 		✓	 ✓ 			✓			✓	✓	✓
10	✓	 ✓ 	 ✓ 	✓	✓	 ✓ 			✓			✓		
11	 Image: A start of the start of	 ✓ 	 ✓ 		 ✓ 	 ✓ 						 ✓ 		
12	✓	 ✓ 				?						✓		
13	?	 ✓ 	 ✓ 		 ✓ 	 ✓ 		✓	 ✓ 	 ✓ 		 ✓ 	✓	✓
14	?		 ✓ 		 ✓ 	✓	?	?	✓			✓	✓	✓



		EGY AIM	S		STRATEGY AIMS														
OBJECTIVES	1	2	3	4	5	6	7	8	9	10	11	12	13	14					
15	?					 ✓ 			 ✓ 			 ✓ 	✓	 ✓ 					
16	?		✓		✓				 ✓ 	 ✓ 		 ✓ 	✓	✓					
17			✓		?			 ✓ 	✓	?			✓	✓					
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19	?		 ✓ 		✓	✓			✓			 ✓ 	✓	 ✓ 					
20	?				?	?	✓					 ✓ 	✓	✓					
21	?				✓			 ✓ 	✓				✓	 ✓ 					
22	?				✓				 ✓ 	✓			 ✓ 	✓					
23	?		✓		✓	✓	✓		✓			✓	✓	 ✓ 					





Appendix G

Strategic Options Assessment Matrix

SA Objective		levelopment along public he Wrexham-Bidston and ay lines	Option 2 – Spreading der settlements based on a r settlement growth bands	igid interpretation of the	Option 3 – Identification public transport corridor		Option 4 – Locating deve assessment of capacity t development		Option 5 – Locating deve would bring about regen		Option 6 – Locating deve market demand	lopment only in areas of
	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary
Key Assumptions for the Assessment	It was assumed that the concentrated in clost stations along both o		It was assumed that a the County would hav development.		It was unknown where would be located or e development would be settlement.	xactly what sort of	It was assumed that d would be allocated in constraints and the ne the different types of c each settlement. It wa development would or regeneration.	full knowledge of the eed and demand for development within	It was assumed that the be largely located in u the County that are in although it is recognis in other parts of the C more rural areas migh would result.	rban/industrial parts of need of regeneration, ed that developments ounty e.g. in some		e located as it would larket forces. However, e purposes of this ctive, potentially
To reduce crime, disorder and fear of crime	Potentially positive along the corridors Neutral impact in other parts of the County e.g. rural areas.	Crime is influenced by many factors. Some of the most deprived wards in the County are located along the transport corridors and the regenerative benefits offered by promoting development in these areas could have a positive impact on crime rates in the long term. Crime levels in other parts of the County are unlikely to benefit.		Crime is influenced by a number of factors. Overall as no one part of the County is targeted then there might be some benefits, although these would only be realised in the long term. Greatest benefits would probably be realised in the wards where crime levels are currently highest.	Positive in settlement Negative across the rest of the County	Unlikely to offer regeneration benefits in most of County. Opportunity to design out crime in the new settlement which could reduce crime and fear of crime	Positive in urban and rural parts of the County.	It is possible that by promoting regeneration there could be indirect crime reduction benefits. Opportunities should be sought to design out crime in any new developments. Benefits are likely to be greater in the long term as regeneration occurs.	Positive in the areas where development occurs. Neutral effects in the long term in other parts of the County.	New development can stimulate regeneration and this could have positive impacts on crime particularly if people are provided with improved job opportunities. The benefits are likely to increase in the long term as there may be long lead in times for new developments and impacts upon crime would be gradual. As only some parts of the County would benefit from development the option would not contribute to the achievement of this objective in other areas.	Largely negative impacts with the potential for isolated positive impacts.	In the areas where new development occurs there could be positive impacts if regeneration occurs. However, it is considered unlikely that large scale development would occur in the areas most at need of regeneration if development is driven by market demand.
To maintain and improve levels of educational attainment for all sectors of society	Neutral impact, potentially increasing to positive in the long term	Educational attainment is influenced by a number of factors Concentrating development along the transport corridors could have long term benefits if people have better access to educational facilities. Impacts assumed to be primarily in urban parts of the County where the transport corridors are situated. Although	Neutral impact	Educational attainment is influenced by a number of factors and a spatial development option is unlikely to significantly influence attainment. It is unknown whether there would be sufficient capacity in the educational establishments to accommodate that amount of growth.	Neutral impact potentially increasing to positive in the settlement in the long term Neutral impact outside of the settlement	term in the	Neutral Impact potentially increasing to positive in the long term.		Neutral impact potentially increasing to a positive impact in the long term in the areas where development would occur. A neutral impact across the rest of the County.	Educational	Neutral impacts	Development is unlikely to significantly affect levels of educational attainment. There is a risk that by allowing development to be driven by market demand that the capacity of educational facilities could be exceeded in certain locations if some parts of the County are a lot more attractive for investment than



SA Objective	Option 1 – Locating all de transport corridors i.e. th North Wales Coast railwa	e Wrexham-Bidston and		velopment evenly across igid interpretation of the	Option 3 – Identification public transport corridor		Option 4 – Locating deve assessment of capacity to development		Option 5 – Locating deve would bring about regen		Option 6 – Locating deve market demand	elopment only in areas of
	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary
		one issue is the capacity of the existing educational establishments in these areas to accommodate this level of development.										others
To maintain and improve levels of health and reduce health inequalities for all	Neutral impact potentially increasing to positive in the long term in the settlements along the transport corridors. Neutral impact in other parts of the County.	Regeneration along the transport corridors could have well-being benefits in the long term. Some of the most deprived wards for health are situated along the North Wales Coast railway line and could benefit.	Neutral impact.	New development can have positive impacts for well- being. However, health is influenced by many factors and so uncertainty is high. The UDP also has less co- ordination with the Local Health Authority and so can have less of an impact upon this issue. It is unknown whether there would be sufficient health capacity in each of the settlements.	Neutral impact potentially increasing to positive in the long term in the settlement. Negative across the County.	The option would fail to stimulate regeneration across the County and so it is unlikely that levels of health would be maintained or improved. A well- designed settlement could offer localised well-being benefits providing sufficient health facilities are developed.	Neutral impacts in the short term potentially increasing to positive in the long term in the County.		Positive impacts in the areas where development occurs in the long term. Neutral/negative in all other areas.	Health is influenced by many factors but new development in areas in need would have positive impacts for general well-being. In other areas the objective would not be fulfilled.	Negative impacts in areas of the County where regeneration requirements are highest and potentially positive in isolated parts of the County where development occurs.	New development can improve the quality of the built environment which can have benefits for well being. These benefits are likely to be confined to those areas where development occurs and it is considered unlikely that significant regeneration of the areas most in need would occur.
To provide access to good quality, affordable housing that meets the needs of the community	Positive in the urban parts of the County. Negative in rural areas.	Housing needs would be addressed in urban areas i.e. those along the railway lines. However, there would be no benefit to the more rural parts of the County where there are no public transport corridors.	Positive across the County	Housing needs across the County should be provided at the appropriate levels in each settlement	Positive in the settlement Negative across the rest of the County.	Housing needs would be fulfilled in the new settlement but not necessarily in the rest of the County.	Positive impact across the County.	Housing development would occur based upon an understanding of need and capacity constraints and so benefits should occur for all living in the County.	Positive in areas where development occurs. Negative in other areas.	In the areas where development occurs housing need would be fulfilled but other parts of the Flintshire community would not benefit and, therefore overall the objective would not be fulfilled. For example there is a recognised housing affordability issue in rural areas and this might not be addressed under this option.	Negative impact for most of the County.	Development driven by market demand is unlikely to ensure that good quality, affordable housing is provided for all in the County.
To protect and enhance the Welsh language and cultural resources	Positive in rural parts of the County. Negative in urban areas	The rural parts of the County are likely to benefit as limited development would prevent any dilution of Welsh culture in those areas. However, depending upon the type of development that would be promoted along the transport corridor there could	Neutral impact	Development would be appropriate to the size of the settlements and so impacts on Welsh language and culture would be neutral.	settlement Neutral impact in the	By focusing development in one part of the County, the Welsh language and cultural resources across the rest of the County could be protected. There would be a neutral impact in the settlement but it could also be used	Positive impact across the County	As there would be a full understanding of capacity and constraints it is assumed that development would not be permitted that might harm the Welsh language.	Positive in areas not affected by the development. Uncertain in areas where development would occur.	The Welsh culture would be preserved in areas that would not be developed as there would be no dilution of existing culture. Impacts in the areas where development would occur are more uncertain as the impacts would	Negative impacts	There is a risk that the distinctive culture of rural villages would be adversely affected by new development as these areas are likely to be more popular for developers.



SA Objective	Option 1 – Locating all d transport corridors i.e. th North Wales Coast railwa	e Wrexham-Bidston and	Option 2 – Spreading de settlements based on a settlement growth bands	velopment evenly across rigid interpretation of the	Option 3 – Identification public transport corridor		Option 4 – Locating dev assessment of capacity development		Option 5 – Locating deve would bring about regen		Option 6 – Locating deve market demand	elopment only in areas of
	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary
		be an adverse impact in the long term, particularly if there is increasing movement of people across borders associated with the access provided by the transport corridors.				as a location to promote more cultural resources				depend upon the scale of the development and its type. Conversely new development could provide new cultural resources.		
To protect and enhance community spirit and cohesion	Positive impacts in rural parts of the County and those areas outside of the transport corridors. Negative in the settlements along the transport corridors.	Increasing development along a transport corridor may lead to more commuting and this could have adverse impacts for community spirit. Furthermore, as settlements expand and become bigger existing levels of community cohesion could be threatened. Ultimately the impacts will depend upon the existing size of the settlement, existing community networks and the level of development that occurs. Limited development in other areas would	Uncertain impacts but potentially positive in smaller rural settlements.	Impacts upon community spirit would ultimately depend upon how much development occurs in each settlement and the existing level of community cohesion. It is possible that rural parts of the County would benefit most because they are likely to have a greater level of community cohesion than some towns e.g. Mold because they are smaller.	Positive impact in the new settlement Positive and negative across the rest of Flintshire.	In the new settlement the provision of good facilities might help to enhance community spirit. Across the rest of Flintshire, the lack of development in those areas and continued lack of access to services for some people could have a negative impact upon cohesion. Conversely discouraging development from those areas may have positive impacts.	Positive Impact	It is assumed that new development would not be permitted where it might adversely affect community cohesion.	Positive in areas where development occurs. Positive/negative in other parts of the County.	The provision of new development and facilities in areas in need of regeneration would help to improve cohesion. However, in other parts of the County there could be adverse impacts if people living these areas do not benefit from new development. Conversely reduced development in more rural parts of the County might help to preserve the existing character and cohesion of these areas.	across most of the County but potential	New development in rural villages could adversely affect community spirit particularly if the development is attractive to commuters. However, if development occurs in some areas where regeneration is required then there might be localised benefits for cohesion
To improve access to basic goods, services and amenities for all groups	Positive in the settlements targeted for development and negative in all other areas of the County.	offer protection. Communities living along the transport corridors would benefit from increased development and associated service provision, whilst those in the rural parts of the County would not. Access to services in rural parts of the County is currently limited and this option would not improve this situation.	Positive impact across the County	Most groups across the County should benefit. Although if there is too much housing development in any settlement then this could inhibit access to facilities e.g. would educational facilities be able to cope with the additional housing provision in each settlement.	Positive impact in settlement Negative across rest of County	The provision of new facilities in the settlement would improve access. In other areas of the County, particularly rural problems of access would remain.	Positive impact across the County.	Based upon a knowledge of need and capacity access to services should improve across the County. Although the situation might arise whereby there is a need for additional facilities in rural parts of the County but these cannot be provided because of other constraints e.g. local distinctiveness.	Positive in areas where development occurs, negative in other parts of the County.	Again, the benefits would only occur for those people living in proximity to the development.	Largely negative impact	Development solely driven by market demand is not going to improve access to facilities for all.



SA Objective		levelopment along public he Wrexham-Bidston and ay lines		evelopment evenly across rigid interpretation of the s	Option 3 – Identification public transport corridor		Option 4 – Locating deve assessment of capacity development		Option 5 – Locating deve would bring about regen		Option 6 – Locating deve market demand	elopment only in areas of
	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary
sustainable economy and business development	impacts, although greatest benefits for areas along the transport corridors.	corridors there would be economic growth, investment and new job opportunities. However, these benefits would be one-sided and would not benefit the rural economy. Also the long-term viability/sustai nability of this option might be questioned as there might no be enough land along the corridors which could inhibit investment.	County	development across the County should have benefits. Although it might be argued to what extent this sort of development pattern would be attractive and how much growth would actually be achieved. For example, would large, high quality sites really be able to be brought forward under this option?	areas of the County with the potential for negative impacts particularly in more rural areas.	it includes land allocated for economic uses would bring benefits but it is questionable whether the rural parts of the County would benefit to the same extent, for example in terms of job opportunities.		have positive impacts (assumed to include economic development) and if based on an understanding of need, then the most appropriate areas should benefit. However, there could be a risk that large flagship sites might not necessarily be brought forward under this policy because of issues associated with capacity.	entire County in the long term but with isolated negative impact sin other parts of the County.	although it may only occur in certain areas should on the whole benefit the economy and help to regenerate key parts of the County. However, the benefits and the opportunities offered by the development might not be realised for all e.g. the new job opportunities.	County as a whole	development in the County should have positive impacts. Although not all elements of the objectives would be fulfilled as job opportunities might not be available for all and it is considered unlikely that key parts of the rural economy would be diversified.
To develop and market the County's image as a place to live, work and visit		This option probably would market the County as a place to live and do business as it would promote development in existing industrial/urban areas and would protect the rural character of the rest of the County which could maintain its attractiveness to visitors as a place to visit. However, access to job opportunities for people living outside the boundaries of the transport corridors might deter some people from choosing to live and work there because of issues of access. There is also a risk that too much growth and expansion could be negative for the County's image.	Positive and negative impacts across the County	Promoting development in all settlements should have positive impacts for the County's image providing a balance of development is promoted and it is appropriate to the existing size of the settlement. However, the potential lack of high quality, flagship sites being brought forward under this option could have negative impacts for the County's image.	Positive for all of County Medium uncertainty	A new settlement with good facilities could improve the marketability of the County which might have knock-on benefits for the rest of the County. These benefits are more likely to be realised in the long- term as the settlement becomes established.	Positive across the County.	Development based upon a sound understanding of need and constraints should ensure that development provides maximum benefits for the County and its population helping to market it as a place to live, work and visit. However, the risk of flagship sites not being developed could potentially deter some investors.	Positive across the County	Locating development to deliver regeneration should help to market the County.	Uncertain impact	Although development should help to market the County, the balance of development and the areas affected by the development would ultimately determine the impact on the County's overall marketability.
To maintain and improve the quality of life in rural areas	Negative impact	All development would be focused outside of the rural area and although this might preserve the rural character of the County, there	Positive impact.	The provision of development in rural settlements could have positive impacts if this increases access to facilities and	Uncertain impact	It is uncertain to what extent the creation of a new settlement would offer benefits to the rural community. In one sense the existing		By locating development in the areas that require development and having a full understanding of need and demand,	Negative impact.	The key areas of the County requiring regeneration (as identified through baseline data analysis) are largely urban and, therefore	Negative impact	There could be increased pressure on the rural environment and the character of rural areas if they become popular sites for



SA Objective	Option 1 – Locating all d transport corridors i.e. th North Wales Coast railwa			evelopment evenly across rigid interpretation of the Is	Option 3 – Identification public transport corridor		Option 4 – Locating dev assessment of capacity development		Option 5 – Locating deve would bring about regen		Option 6 – Locating de market demand	velopment only in areas of
	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary
		would be no development of the rural economy and people living in these areas might become further cut off from job opportunities.		potentially employment opportunities. It should also be appropriate to the size of the settlement.		community networks and the distinctive characteristics of rural areas would be retained but they might not benefit to the same extent from economic opportunities and access to some facilities could remain difficult.		rural areas of the County should benefit.		it is assumed that benefits in the rural area would be very limited.		housing development. Similarly it is considered less likely that the rural economy would be diversified
To deliver urban renaissance and improve the vitality and vibrancy in urban areas	Positive impact in the target settlements along the transport corridors but negative in areas not located along transport corridors.	This would help to deliver urban renaissance along the transport corridors but there could be issues associated with capacity and there is a risk that a lot of new development could be added to the periphery of towns.	Positive impact	Even development should ensure that vitality and vibrancy in urban areas improves particularly in those settlements where there are problems associated with deprivation.	Uncertain impact Negligible transboundary impact	It is unknown whether the creation of a new settlement would offer knock-on benefits to the rest of County and help to improve the existing urban areas. There are a number of areas of the County in need of regeneration e.g. Holywell, Connah's Quay yet is unknown whether they would benefit from this spatial option.	Positive impact in urban areas.	There should be positive urban renaissance impacts by ensuring that development is appropriate to the capacity of the existing settlement.	Positive impact	Many of the areas of the County requiring regeneration are urban and so benefits should occur.	Negative impact	It is considered unlikely that urban renaissance would be delivered although there might be localised benefits for isolated areas where development occurs.
To improve the effectiveness of communications links and infrastructure	Positive along the transport corridor, negative across the rest of the County	The option does not specifically address the expansion of communications infrastructure, although locating development along transport corridors would ensure maximum utilisation of these routes and potentially relieve pressure on other routes in the County. However, sustainable access to rural areas would not be improved. Questions could be raised about the capacity and quality of the services along the transport corridors and their capacity to accommodate this	Negative impact	The option would not be doing anything to enhance communications links and so would not improve the current situation.	Positive impact in close proximity to the settlement and the transport corridor. Negative impacts across the rest of the County. Uncertain transboundary impacts	The location along a public transport corridor should encourage more people to use this transport link. If the settlement is located along the Wrexham- Bidston line then there might be transboundary benefits. It is uncertain how other communication routes across the County would be affected as this would depend upon linkages to other transport connections.	Positive impact	Siting development with an understanding of settlement capacity should ensure that development is sited as close as possible to public transport links and, therefore maximises their effectiveness. Any large scale developments would need to be developed, with a thorough knowledge of their likely transport impacts having been obtained.	Positive in the areas benefiting from regeneration and negative in other parts of the County.	In parts of the County where development occurs it is assumed that the development would be sited close to communications links improving their effectiveness. However, benefits would be very one- sided and communications links in rural areas are not expected to benefit to the same extent.	Uncertain impact	It is unknown how the effectiveness of communications routes would be affected as this would depend upon exactly where the development would be located. There is a risk that the settlement pattern could become more dispersed which would have adverse impacts.



SA Objective	Option 1 – Locating all de transport corridors i.e. th North Wales Coast railwa	e Wrexham-Bidston and	Option 2 – Spreading de settlements based on a r settlement growth bands		Option 3 – Identification public transport corridor		Option 4 – Locating dev assessment of capacity development		Option 5 – Locating dev would bring about rege		Option 6 – Locating dev market demand	elopment only in areas of
	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary
		level of development.										
To ensure that biodiversity is valued, protected and enhanced	Uncertain impacts in urban areas, along the transport corridors but positive impacts in rural locations. There is the potential for negative cumulative impacts associated with the development of lots of sites.	Impacts on biodiversity would depend upon where the sites are located and the type of development that occurs. The focus along transport corridors would help preserve sites of biodiversity value in rural areas. There is the potential for negative impacts on the Dee Estuary which is a site of international importance.	Uncertain impact Uncertain transboundary impact	Biodiversity impact would need to be determined on a site- by-site basis. There is the potential for there to be cumulative adverse impacts associated with the incremental impact of lots of minor developments.	Uncertain impact Uncertain transboundary impact	Biodiversity impacts would need to be determined on a site- by-site basis. Transboundary impacts are uncertain because dependent upon which transport corridor is used.	Positive impact	Developments would be sited in the most appropriate locations and so adverse impacts on biodiversity sites should be avoided. However, it is possible that minor biodiversity impacts would occur with any development, although these could be mitigated through the use of appropriate measures.	Uncertain impacts	Biodiversity impacts would need to be assessed on a site- by-site basis.	Uncertain impacts	Biodiversity impacts would need to be assessed on a site- by-site basis.
To ensure that landscapes and townscapes are properly valued, conserved and enhanced	Positive in rural parts of the County and the areas outside of the transport corridors. In the settlements targeted for development negative impacts because the new development might not be in keeping with the existing townscape.	Areas outside of the transport corridors would not be used for development and so the landscape/ townscape should be protected. In the settlements along the transport corridors there is a risk that the development could lead to too much growth which may lead to the loss of green space and might not be appropriate to the existing townscape.	Negative in rural areas. Positive/negative in urban locations.	Development in rural areas could adversely affect the landscape character and quality. In urban areas, new development could improve the townscape, conversely the development may not be appropriate to the existing townscape character.	Positive and negative impacts	The option would avoid significant amounts of development in other parts of the County but there could be adverse impacts at the site where the new development is located.	Positive impact across the County.	Assumes that areas of high landscape/ townscape value would be avoided or only suitable development would be permitted.	Positive for the County overall.	Townscape areas requiring regeneration should benefit and areas of high landscape character and quality are likely to be avoided.	Negative impact	It is expected that attractive greenfield sites would be preferred and that limited regeneration of the more run-dowr areas would occur resulting in fewer benefits for the County's townscape.
To ensure that diversity, local distinctiveness and cultural heritage are valued, protected and enhanced	Uncertain impact along the transport corridors and positive impact in the other parts of the County.	Impacts on cultural heritage would depend upon the location of development. Heritage in rural parts of the County would be indirectly protected.	Uncertain impact Neutral transboundary impact	Impacts would depend upon the location of new development.	Uncertain impact at the site of the proposed settlement and positive impact in other parts of the County.	Impacts would depend upon the location of the new settlement. Cultural heritage resources in other parts of the County would be indirectly protected.	Positive impact across the County.	The assessment of capacity would consider the location of sensitive heritage features.	Uncertain impact.	Impacts would have to be assessed on a site-by-site basis.	Uncertain impact.	Impacts would have to be assessed on a site-by-site basis.
To protect and enhance the quality of water features and resources	Negative along the transport corridor and positive in rural areas.	The North Wales Coast railway is located within a flood risk area and this calls into question the entire viability of	Uncertain impact	Impacts on water resources would depend upon the location and type of development. Although there is the	Uncertain impact	Impacts on water resources e.g. flood risk would depend upon where the settlement is located. Water features in	Positive impact across the County.	Impacts on the water environment and areas of floodplain would be considered when determining capacity.	Uncertain impact	Impacts on water resources would depend upon the location and type of development.	Uncertain impact	Impacts on water resources would depend upon the location and type of development. Although the



SA Objective	Option 1 – Locating all de transport corridors i.e. th North Wales Coast railwa	e Wrexham-Bidston and		evelopment evenly across rigid interpretation of the s	Option 3 – Identification public transport corridor	of a new settlement on a	Option 4 – Locating dev assessment of capacity development		Option 5 – Locating deve would bring about regen		Option 6 – Locating deve market demand	lopment only in areas of
	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary
		this option. There could be significant risks to life associated with developing here. In rural areas limited development should reduce the risk of adverse impacts.		potential for cumulative adverse impacts associated with the incremental impacts of lots of developments.		other parts of the County could be indirectly protected.						increased use of greenfield sites could increase runoff rates and impact upon aquifer recharge.
To avoid, reduce and remediate contaminated soils and encourage the appropriate re-use of suitable brownfield sites	Positive impact in areas along the transport corridors although the availability of brownfield sites could be very different along the two corridors. Neutral impact in other parts of the County.	Focusing development along the transport corridors would promote the re-use of brownfield sites particularly as there could be a number of contaminated sites in close proximity to the rail corridors.	Positive impact across the County	Although it is unknown exactly where development would occur it is likely that focusing development in settlements based on their growth bands would lead to more use of brownfield sites.	Uncertain impact	Impacts would depend upon the type of land used to create the new settlement. The option could deter other brownfield sites in the County from being redeveloped.	Positive impact across the County.	By allocating development based upon a knowledge of capacity the most appropriate use of land should occur.	Positive impact	It is anticipated that as many of the areas requiring regeneration are urban and hence this should encourage brownfield sites to be used.	Negative impact	Brownfield sites would be less attractive because of the cost of remediating the sites in advance of development.
To reduce greenhouse gas emissions and ensure that adequate adaptation measures to climate change are in place	Negative in rural parts of the County and positive along the transport corridors. Potential for positive transboundary impacts if development located along the Wrexham- Bidston line.	In rural areas there would be continued reliance on the private car to access services and employment opportunities with associated climate change implications. In the urban areas along the transport corridors more people could use public transport and it may contribute to a modal shift in the medium and long term. However, development along the Dee Estuary coastline could result in the loss of floodplain. There could be positive transboundary impacts as one of the main transport corridors provides services to outside of the County and new job opportunities along the corridors		By promoting development across all settlements there could be more dispersed settlement patterns which could increase travel and hence greenhouse gas emissions from vehicular sources. Conversely if there is increased provision of development closer to existing settlements then there could be reduced travel.	Uncertain impact in the settlement and negative impacts across the rest of the County.	Unknown how the option would influence travel patterns. The location along a public transport corridor should reduce reliance on the private car resulting in positive impacts for air quality although the connectivity of public transport links within the settlement is unknown. There are likely to be negative impacts across the rest of the County as reliance on the private car is likely to continue.		It is unknown how the option would affect travel patterns, although it might be expected that the capacity assessment should consider the capacity and location of public transport facilities.	Uncertain impact in the regeneration areas and negative across the rest of the County.	It is unknown how the option would affect travel patterns. However, in other parts of the County reliance on the private car is likely to continue.	Potential negative impact, although high uncertainty.	It is unknown how the option would influence travel patterns. Although the use of greenfield sites could increase the risk of commuting, particularly as public transport links are more restricted in the more rural parts of the County.



SA Objective	Option 1 – Locating all de transport corridors i.e. th North Wales Coast railwa	e Wrexham-Bidston and		velopment evenly across rigid interpretation of the s	Option 3 – Identification public transport corridor		Option 4 – Locating dev assessment of capacity development		Option 5 – Locating deve would bring about regen		Option 6 – Locating dev market demand	elopment only in areas of
	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary
		could lead to people outside of the County using the public transport network.										
To protect and improve air quality	Positive in urban areas along the transport corridors and negative in rural parts of the County. Potential for positive transboundary impacts.	In urban areas, a focus on development along the transport corridor could reduce use of the private car and have positive air quality impacts by reducing emissions from vehicular sources. In the rural area a lack of development could lead to a continued reliance on the private car to access services.	Positive/negative impacts	As above	Uncertain impact in the settlement and negative impacts across the rest of the County.	As above	Uncertain impact	As above	Uncertain impact in the regeneration areas and negative across the rest of the County.	As above	Negative impact	It is unknown how the option would influence travel patterns. Although the use of greenfield sites could increase the risk of commuting, particularly as public transport links are more restricted worse in the rural parts of the County.
To increase energy efficiency and require the use of renewable energy resources	Positive in urban areas along the transport corridors and negative in rural areas.	In rural areas continued reliance on the private car to access facilities would increase fossil fuel consumption. In urban areas there could be a modal shift which could reduce consumption.	Positive/negative impacts	Depending upon how the spatial option influences travel patterns there could be positive or negative impacts on the use of energy from a transport perspective.	Uncertain impact in the settlement and negative impact across the rest of the County.	Unknown how the option would influence travel patterns and whether renewable energy would be used at the new settlement. In other parts of the County continued reliance on the private car to access facilities would increase fossil fuel consumption.	Uncertain impact	It is unknown how the option would affect travel patterns and also if renewable energy sources would be used.	Uncertain impact	It is unknown how the option would affect travel patterns and also if renewable energy sources would be used.	Potential negative impact	If travel increases then there would be increased use of fossil fuels but it is unknown if renewable energy would be used for the new developments.
To ensure the sustainable use of natural resources	Uncertain impact	It is unknown how the option would on resource use as this is a site specific issue.	Uncertain impact	It is unknown how the option would on resource use as this is a site specific issue.	Uncertain impact	It is unknown how the option would on resource use as this is a site specific issue.	Uncertain impact	It is unknown how the option would impact on resource use as this is a site specific issue.	Uncertain impact	It is unknown how the option would on resource use as this is a site specific issue.	Negative impact	All of the developments would result in a cumulative loss of greenfield land withy associated adverse impacts for soil functions in terms of water percolation etc.
To minimise waste, increase re-use and recycling	Positive impact	Locating most development in one part of the County could make waste disposal much easier and provide greater opportunities for re- use and recycling.	Negative impact	A more dispersed settlement pattern could make re-use and recycling much more difficult to co- ordinate and so impacts have been assessed as negative.	Positive impact in the settlement.	Focussing development only n one part of the County could make it easier for recycling activities to be co- ordinated but there are unlikely to be benefits n other parts	Uncertain impact	Impacts of this option on this objective are uncertain.	Uncertain impact	Impacts of this option on this objective are uncertain.	Uncertain impact	It is unknown how the option would on resource use as this is a site specific issue.



SA Objective	Option 1 – Locating all development along public transport corridors i.e. the Wrexham-Bidston and North Wales Coast railway lines				public transport corridor		Option 4 – Locating development based on an assessment of capacity to accommodate new development		Option 5 – Locating development only where it would bring about regeneration		Option 6 – Locating development only in areas of market demand	
	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary	Performance (spatially)	Commentary
						of the County.						
To promote the use of more sustainable modes of transport	Positive impact in the target areas and negative in other parts of the County.	Promoting development along the transport corridors would promote the use of public transport in those areas i.e. the more urban parts of the County. There could also be positive impacts in transboundary areas also served by the transport corridors. In the rural area there would be a continued reliance on the private car to access facilities.	Positive/negative impacts	The option could increase dependency on the private car by encouraging a more dispersed settlement pattern. However, by promoting development in all settlements of the County, there could be increased services provision and potentially greater walking/cycling.	the new settlement.	The option does promote the use of public transport through the location of the settlement along a public transport corridor. However, connectivity with the wider more rural parts of the County is unknown.	Uncertain impact	It is unknown how the option would affect travel patterns, Although the assessment of capacity should consider the location and availability of public transport services.	Uncertain impact	It is possible that the option could indirectly promote the use of public transport if more of the development is concentrated in the urban areas. However, details of how the option would affect travel patterns are unknown at this stage.	Uncertain impact	It is unknown if the option would promote the use of public transport but this is considered unlikely because of the high potential for attractive, greenfield locations being preferable for development.
Overarching Summary	as the rural parts of not be targeted for o could be beneficial the environmental ro	tives, particularly in the County along the However many of would not be 'for all' the County would development. This in terms of protecting esources and existing y spirit, although any is would not be	the County, benefiti rural areas. The ext option would actual forward the County whether it could act opportunities is a ri	evelopment across ng both urban and tent to which this lly help to drive 's economy and ually constrain	The option offers po immediately within but is unlikely to be County. The option contribute to the reg deprived parts of th	the new settlement nefit the wider is unlikely to generation of more	development would thorough understar demand and the key the County. This sh inappropriate devel occurring, although that large flagship o	nding of need and y constraints across nould prevent opment from n there might be a risk development sites rable because of there	areas of the Count regeneration but it that other parts of benefit. The option to protect the more County from inapp	y requiring is considered unlikely the County would could indirectly help e rural parts of the ropriate development considered less likely	of the SA objective considered unlikel driven by market d benefit the County areas in most need housing provision would be very isola	y that development emand would really and focus upon the d. For example and job opportunities





Assessment of the Preferred Hybrid Option

SA Objective	Hybrid Option			
	Performance (spatially)	Commentary		
To reduce crime, disorder and fear of crime	Positive across the County	The strategy would seek to regenerate the older and more run down settlements and this could help to reduce crime and fear of crime in those areas. The strategy through encouraging new development and employment growth should help to increase employment levels and potentially reduce crime. Impacts are likely to be realised gradually as regeneration occurs.		
		Opportunities should be sought to design out crime in new developments.		
To maintain and improve levels of educational attainment for all sectors of society	Indirect positive impacts across the County	In the long term there could be positive impacts for educational attainment as a result of regeneration. Impacts are uncertain because educational attainment is influenced by a number of factors.		
To maintain and improve levels of health for all and reduce health inequalities	Indirect positive impacts across the County	In the long term there could be positive impacts for levels of health as a result of regeneration. Health is influenced by many factors.		
To protect and enhance the Welsh language and cultural resources	Neutral/positive impacts across the County.	The strategy recognises the need to protect the open countryside from sporadic development which should help to protect cultural resources in these areas. By ensuring that development is appropriate to the size of the settlement should help to prevent the dilution of Welsh language and culture in these areas. The strategy makes no specific reference to the need to protect cultural resources.		

SA Objective	Hybrid Option	
	Performance (spatially)	Commentary
To protect and enhance community spirit and cohesion	Positive impacts across the County	The strategy clearly states that new development would be appropriate to the infrastructure, services, environmental and other constraints in the settlements and so should ensure that community spirit and cohesion is adequately protected.
To maintain and improve access to basic goods, services and amenities for all groups	Positive impacts across the County	By allocating development in the knowledge of existing facilities and infrastructure constraints should avoid unnecessary pressure being placed upon services. The strategy also seeks to promote the revitalisation of local an town centres which should improve the quality of facilities across Flintshire.
To promote a sustainable economy and business development	Positive impacts across the County	Improvements to major transport corridors should help to improve accessibility which should make Flintshire more attractive for investors. The strategy also seeks to diversify the rural economy and so positive impacts should be realised in both urban and rural areas.
To develop and market the County's images a place to live, work and visit	Positive impacts across the County	Promoting balanced development across the County that recognises existing constraints, encouraging regeneration of run down settlements and protecting environmental features should positively market Flintshire as a place to live, work and visit. Improvements to the transport corridors should also offer benefits.
To maintain and improve the quality of life in rural areas	Positive impacts	The strategy seeks to diversify the rural economy and promotes the protection of the environment.

SA Objective	Hybrid Option	
	Performance (spatially)	Commentary
To deliver urban renaissance and improve the vitality and vibrancy in urban areas	Positive impact	The regeneration of older and more run down settlements, siting development in locations accessible by a variety of modes of transport and promoting the revitalisation of centres and their facilities would positively contribute towards improving vitality and delivering urban renaissance.
To improve the effectiveness of communicates links and infrastructure	Positive impact	The siting of major generators of travel demand close to alternative modes of transport to the private car and the improvement of transport corridors would improve the infrastructure and its effectiveness.
To ensure that biodiversity is valued, protected and enhanced	Positive impact	The siting of new development in settlements would be reviewed in light of environmental constraints and the aim is to protect nature conservation and biodiversity.
To ensure that landscapes and townscapes are properly valued, conserved and enhanced	Positive impact	The strategy recognises the need to consider environmental constraints when allocating new development and seeks to protect and enhance the built and natural environment.
To ensure that diversity, local distinctiveness and cultural heritage are valued, protected and enhanced	Positive impact	The strategy recognise the need to protect and enhance features of architectural and historic importance.

SA Objective	Hybrid Option	
	Performance (spatially)	Commentary
To protect and enhance the quality of water features and resources	Positive impact	Although not specifically addressed in the wording of the option, it is clearly identified that development should occur subject to environmental constraints which should ensure the protection of water features and resources. However, issues associated with the location of development in relation to the floodplain and water resource demand would need to be considered on a case by case basis
To avoid, reduce and remediate contaminated soils and encourage the appropriate re-use of suitable brownfield sites	Positive impact	The strategy promotes regeneration and the use of derelict and redundant buildings and land and so positively contributes to the achievement of this objective.
To reduce greenhouse gas emissions and ensure that adequate adaptation measures to climate change are in place	Uncertain impact	It is uncertain how the option would impact upon travel patterns and hence greenhouse gas emissions from transportation sources. However, the option does promote the location of major generators of travel demand in exiting centres which are highly accessible by means other than the private car. It is also unknown where new development would be situated in relation to the floodplain.
To protect and improve air quality	Uncertain impact	It is unknown how the option would affect travel patterns and hence how air quality would be affected.
To increase energy efficiency and require the use of renewable energy resources	Uncertain impact	It is unknown how the option would affect travel patterns and the use of renewable energy sources.



SA Objective	Hybrid Option	
	Performance (spatially)	Commentary
To ensure the sustainable use of natural resources	Uncertain impact	Impacts have been assessed as uncertain as it is unknown how the use of natural resources would be affected as this is primarily a local issue.
To minimise waste, increase re-use and recycling	Uncertain impact	It is unknown how this option would affect waste management.
To promote the use of more sustainable modes of transport	Positive impact	The strategy promotes the siting of development such that it is accessible by alternatives to the private car. Employment development would also be well related to the existing public transport facilities.





Appendix H

Policy Screening/Grouping Matrix



Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
Part 1 Policies				All of these policies were subject to an individual
STR1 – New Development	×			assessment, although it is recognised that they all support each other and in undertaking the assessment,
STR2 – Transport and Communications	✓			shortcomings in some of the policies may be addressed by other Part 1 policies.
STR3 – Employment	✓			
STR4 - Housing	1			
STR5 – Shopping Centres and Commercial Development	4			
STR6 – Tourism	×			
STR7 – Natural Environment	✓			
STR8 – Built Environment	✓			
STR9 - Welsh Language and Culture	✓			
STR10 - Resources	✓			
STR11 – Sport, Leisure and Recreation	✓			
General Development Considerations				
GEN1 General Requirements for Development	✓			
GEN2 Development inside Settlement Boundaries	✓			



Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
GEN3 Development Outside Settlement Boundaries	*			
GEN4 Green Barriers	✓			
GEN5 Environmental Assessment	✓			
GEN6 Welsh Language and Culture	✓			
Design				
D1 Design Quality			✓	The policies addressing design have been grouped as it
D2 Location and Layout			✓	is assumed that in reality many of these policies would need to be considered in combination when making
D3 Building Design			✓	development control decisions.
D4 Landscaping			✓	
D5 Outdoor Lighting			✓	
D6 Crime Prevention			✓	
D7 Public Art			✓	
D8 Outdoor Advertisements		*		This policy is very specific and would have a very limited impact on many of the objectives. The policy states conditions to ensure that they would be appropriately sited. However, it is recommended that the policy be strengthened to state that outdoor advertisements will only be permitted where they would not have a detrimental affect on the existing landscape/townscape character.

Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
Trees, Woodland and Hedgerows				
TWH1 Trees and Woodland Protection			✓	These policies were grouped as they all have very similar
TWH2 Development Affecting Trees and Woodlands				objectives and seek to protect woodland and hedgerow features.
TWH3 Protection of Hedgerows				
TWH4 Woodland Planting and Management	×			
Landscapes				
L1 Landscape Character	1			All landscape policies have been assessed individually
L2 Area of Outstanding Natural Beauty	1			as they all have the potential to have significant impacts and are sufficiently different to warrant a separate
L3 Green Spaces	1			assessment.
L4 Common Land	✓			
L5 Environmental Improvement Schemes	1			
L6 The Coast	٠			
Wildlife and Biodiversity				
WB1 Species Protection	√			
WB2 Sites of International Importance			✓	These policies were grouped together as they all seek to

Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
WB3 Statutory Sites of National Importance			×	protection of sites of nature conservation importance.
WB4 Local Sites of Wildlife and Geological Importance			×	
WB5 Undesignated Wildlife Habitats	✓			
WB6 Enhancement of Nature Conservation Interests	×			
Historic Environment				
HE1 Development Affecting Conservation Areas			4	This policy has been combined with policy HE3 as they both address development issues in Conservation Areas.
HE2 Development Affecting Listed Buildings and their settings			×	This policy has been combined with policy HE4 as both relate to buildings of historic interest.
HE3 Demolition of Buildings in Conservation Areas			~	See comments for policy HE1.
HE4 Buildings of Local Interest			✓	See comments for policy HE2.
HE5 Protection of Registered Landscapes, Parks and Gardens of Special Historic Interest in Wales	√			
HE6 Scheduled Ancient Monuments and other Nationally Important Archaeological Sites			*	This policy has been combined with policy HE7 for the purposes of the assessment as both address archaeological sites either of national or lesser archaeological significance.

Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
HE7 Other Sites of Lesser Archaeological Significance			~	See comments for policy HE6
HE8 Recording of Historic Features	✓ ·			
Access and Communications				
AC1 Facilities for the Disabled		*		This policy has been screened out for the assessment, as it is very specific and would therefore have a very limited impact upon many of the objectives. The policy would however generate social benefits with the provision of special needs facilities at new developments.
AC2 Pedestrian Provision and Public Rights of Way			~	Policies AC2 and AC3 have been combined for the purposes of the assessment, as the potential impacts
AC3 Cycling Provision			✓	upon the objectives are likely to be very similar.
AC4 Major Traffic Generating Developments	×			
AC5 New/Improvements to Public Transport Facilities	1			
AC6 Railway Stations	1			
AC7 Protection of Disused Railway Lines	1			
AC8 Buses	4			
AC9 Provision of New Railfreight Facilities	×			

Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
AC10 Mostyn Docks			✓	These two policies have been combined for the
AC11 Other Docks/Jetties			4	assessment as both seek to address docks/jetties and are therefore likely to generate similar impacts.
AC12 Airport Safeguarding Zone	✓			
AC13 Access and Traffic Impact	✓			
AC14 Traffic Calming			✓	These two policies have been combined for the
AC15 Traffic Management			×	assessment as both seek to address traffic reducing measures and are therefore likely to generate similar impacts.
AC16 Road Improvements/New Roads Design			*	These policies have been combined as policy AC17 addresses safeguarded routes for future road
AC17 Safeguarded Routes			✓	improvements and, therefore relates to policy AC16.
AC18 Parking Provision and New Development	✓			
AC19 Lay-by and Picnic Areas		*		There would be no significant sustainability impacts therefore this policy was screened out for the assessment. Beneficial impacts could include improved access to amenity areas, an improved local environment and health and social benefits.
AC20 Lorry Parks	✓			
AC21 Taxis and Private hire Vehicles		4		This policy was screened out of the assessment because it was considered unlikely to impact upon the sustainability objectives.
AC22 Location of Installations	✓			

Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
AC23 New Development and Interference with Telecommunications		~		This policy was screened out for this assessment as there are not likely to be any significant impacts upon the objectives.
AC24 Cable Installation		✓		Although this policy has the potential to adversely impact upon archaeology there would be a limited impact upon the majority of other objectives. This policy was therefore screened out.
Housing				
HSG1 New Housing Development Proposals	×			This policy allocates sites for new housing development and each of these have been subject to a high level strategic review to determine their key sustainability strengths and weaknesses.
HSG2 Housing at Croes Atti, Flint	✓			
HSG3 Housing on Unallocated Sites within Settlement Boundaries	✓			
HSG4 New Dwellings in the Open Countryside	✓			
HSG5 Limited Infill Development in the Open Countryside	✓			
HSG6 Replacement Dwellings in the Open Countryside	✓			
HSG7 Change of Use to Residential in the Open Countryside	✓			



Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
HSG8 Density of Development	✓			
HSG9 Housing Mix and Type	✓			
HSG10 Affordable Housing within Settlement Boundaries	4			
HSG11 Affordable Housing in Rural Areas	4			
HSG12 House Extensions and Alterations		✓		The policy was screened out of the assessment because it is very specific and its impacts are highly localised depending upon where extensions or alterations occur. The policy is clear in its requirements for extensions to be appropriate to the surrounding area and for them not to adversely impact upon neighbours.
HSG13 Annex Accommodation		~		As above this policy is very specific in its requirements and would have a limited impact on the SA objectives because of its scope and focus.
HSG14 Gypsy Sites	✓			
HSG15 Re-use/conversion of Large Houses/Former Residential Institutional Buildings in the Open Countryside	×			
Shopping Centres and Commercial Development				
S1 Commercial Allocations	✓			
S2 Shop Front Design		✓		The impacts associated with this policy would be very

Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
				limited and so was not subject to a full assessment. The policy could be improved by strengthening the requirement for appropriate design of shop fronts within Conservation Areas or in close proximity to Listed Buildings. There is also the potential for a cumulative adverse impact to result associated with new shop frontages and advertisements.
S3 Integrating New Commercial Development	1			
S4 Small Scale Shopping within Settlements	4			
S5 Small Scale Shopping Outside Settlements	4			
S6 Large Shopping Developments	✓			
S7 Retail Frontages within Town Centre Core Retail Areas		✓		The policy was screened out of the assessment because its scope is very limited and it is considered unlikely to have significant sustainability impacts. The clauses included within the policy should ensure that the conversion from retail to non retail uses would be limited and hence the vitality and vibrancy of town centres should be maintained and potentially enhanced. This could have associated benefits for maintaining the character and quality of town centres.
S8 Hot Food Takeaways, Restaurants and Cafés		*		This policy has been screened out of the assessment because it is very specific and it is clear that new developments of this type would only be permitted where the amenity of local residents is not adversely affected,

Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
				waste disposal would be sufficient and there would be no traffic hazards created.
S9 Non-Retail Commercial Development	*			
S10 Conversion of Upper Floors		1		There would be no significant sustainability impacts and so this policy was screened out of the assessment.
S11 Retention of Local Facilities	×			
S12 Markets Car Boot Sales		✓		The policy was screened out of the assessment because it is very specific to one particular issue and the policy includes a number of clauses which should ensure that there would be not significant sustainability impacts.
Employment				
EM1 General Employment Land Allocations	*			In addition to being assessed using the matrix the sustainability strengths and weaknesses of each of the sites allocated by these policies were reviewed.
EM2 High Quality Site Allocations	*			
EM3 Development Zones and Principal Employment Areas	✓			
EM4 Location of Other Employment Development	✓			
EM5 Expansion of Existing Concerns	4			
EM6 Protection of Employment Land				



Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
EM7 Bad Neighbour Industry				
Rural Enterprise and Agriculture				
RE1 Protection of Agricultural Land	✓			
RE2 New Agricultural and Forestry Buildings	1			
RE3 Intensive Livestock Units	✓			
RE4 Small-scale Rural Enterprises			1	Policy RE4 was combined with policy RE5 as both seek
RE5 Small Scale Farm Diversification			4	to expand upon existing rural businesses and are likely to have broadly similar impacts. Neither is specific about the types of new development that might occur in rural areas.
Sport and Recreation				
SR1 Sports, Recreation or Cultural Facilities	1			
SR2 Outdoor Activities	✓			
SR3 Golf Facilities	✓			
SR4 Protecting Recreational Open Space	1			
SR5 Public Open Space and New Housing Development			*	This policy was combined with Policy SR7 as both seek to provide new areas of open space.

Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
SR6 Allotments		4		This policy was screened out of the assessment because it was considered to have a very limited influence on the SA objectives.
SR7 Allocated Sites for Outdoor Playing Space			4	
SR8 The Dee Estuary Corridor	✓			
Tourism				
T1 Tourist Attractions	✓			
T2 Serviced Tourist Accommodation			✓	PoliciesT2 and T3 were combined for the purposes of the
T3 Self-Catering Tourist Accommodation			×	assessment as they are fairly similar and both policies included a number of similar clauses.
T4 New Static Caravans and Chalets			✓	All of these policies were combined for the assessment
T5 Touring Caravan Sites			1	because they all include very similar issues and address the provision of broadly similar facilities.
T6 Tent Camping Sites			✓	
T7 Tourist Occupancy Conditions		×		This policy was screened out of the assessment because it scope is very specific and fairly limited and merely provides further support to other policies within this chapter of the UDP.
T8 Small Scale Tourism Based Farm Diversification		×		This policy has been screened out of the assessment because it is essentially the same as policy RE5 which has already been subject to a full assessment. The main positive impact of the policy would be the opportunity to achieve farm diversification which could have economic



Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
				benefits.
T9 Greenfield Valley	✓			
Community Facilities				
CF1 Retention of Existing Facilities	✓			
CF2 Development of New Facilities	✓			
CF3 New Community Hospital , Holywell	4			
CF4 New Primary School, Flint			✓	These two policies were combined for the assessment as
CF5 New Health Clinic, Flint			×	both address the provision of community facilities at the mixed use development in Croes Atti, Flint.
CF6 New Community Centres	✓			
CF7 Re-use of Redundant Hospitals in the Countryside	4			
CF8 Service Provision				This policy was screened out of the assessment because its scope is very limited and there are unlikely to be significant impacts on the SA objectives. Nonetheless by ensuring that new development does not place unnecessary strain on existing service capacity should have indirect benefits for businesses and facilities across the County.
CF9 Development of Utilities	✓			

Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
Minerals				
MIN1 Guiding Minerals Development	✓			
MIN2 Minerals Development	✓			
MIN3 Controlling Minerals Operations			✓	These policies were combined for the purposes of the
MIN4 Restoration and Aftercare			4	assessment as both relate to the overall lifecycle of a minerals development and so ideally should be considered together.
MIN5 Dormant, Inactive and Interim Development Order Sites		*		This policy was screened out of the assessment as it merely requires that existing sites are brought up to modern planning requirements and so impacts are likely to be similar to those for policies MIN3 and MIN4.
MIN6 Review of Mineral Permissions	✓			
MIN7 Exploration for Minerals		~		This policy has been screened out of the assessment as temporary exploration works should have very limited affects and the policy clearly states that there should be no unacceptable environmental effects. However, the policy could be strengthened to include amenity issues.
MIN8 Protection of Mineral Interests		4		The policy was screened out because any issues relating to the pre-extraction of minerals prior to development occurring would be likely to result in similar impacts identified for other policies.
MIN9 Borrow Pits	✓			
MIN10 Mineral buffer Zones	1			



Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
Energy, Waste and Pollution				
EWP1 Sustainable Energy Generation	✓			
EWP2 Energy Efficiency in New Development	4			
EWP3 Renewable Energy in New Development	4			
EWP4 Wind Turbine Development	✓			
EWP5 Other Forms of Renewable Energy Generation	1			
EWP6 Areas of Search for New Waste Management Facilities	*			This policy was assessed against the SA objectives, and each of the potential 'search sites' was reviewed at a high level to identify the potential sustainability strengths and weaknesses.
EWP7 Managing Waste Sustainably	✓			
EWP8 Control of Waste Development and Operations	4			
EWP9 New Development and Waste Management Facilities	4			
EWP10 Reusing Development Waste	✓			
EWP11 Development on or Adjacent to a Landfill Site	1			
EWP12 Pollution	✓			
EWP13 Nuisance	✓			



Policy	Complete Full Assessment?	Screen Out?	Complete Full Assessment but Group with another Policy?	Commentary
EWP14 Derelict and Contaminated Land	×			
EWP15 Development of Unstable Land		✓		This option was screened out of the assessment because although it as an important policy in terms of developing sites and would obviously have significant implications in terms of reducing risks to humans it would have a limited impact upon many of the other objectives.
EWP16 Water Resources	✓			
EWP17 Flood Risk	✓			
Implementation				
Implementation Statement 1 Planning Conditions and Planning Obligations		1		These policies are very important elements of the plan as they address the implementation of the remaining plan
Implementation Statement 2 Compliance and Enforcement		1		policies. They are, however unlikely to significantly impact upon the SA objectives because of their scope
Implementation Statement 3 Monitoring the Plan		1		and so have not been subject to a full assessment.
Implementation Statement 4 Supplementary Planning Guidance		1		





Appendix I

Policy Assessment Matrices

