Public Document Pack

Executive Board

Thursday, 11 November 2021 Time: 6.00 pm Venue: Blackburn Library

AGENDA

<u>Information may be provided by each Executive Member relating to their</u> area of responsibility

- 1. Welcome and Apologies
- 2. Minutes of the Previous Meeting

Executive Board Minutes October 2021

4 - 11

- 3. Declarations of Interest
 - **DECLARATIONS OF INTEREST FORM**

12

4. Equality Implications

The Chair will ask Members to confirm that they have considered and understood any Equality Impact Assessments associated with reports on this agenda ahead of making any decisions.

5. Public Forum

To receive written questions or statements submitted by members of the public no later than 4pm on the day prior to the meeting.

6. Questions by Non-Executive Members

To receive written questions submitted by Non-Executive Members no later than 4pm on the day prior to the meeting.

7. Youth MPs Update

To receive an update from the Youth MPs along with any issues they would like to raise.

8. Executive Member Reports

Verbal updates may be given by each Executive Member.

Leader

Adult Services & Prevention

Children, Young People & Education

Environmental Services

Public Health & Wellbeing

| 8.1 | Eat Well, Move More, Shape-Up Strategy Refresh 2022- 25 Eat Well, Move Well Appendix 2 Appendix 3 Appendix 4 | 13 - 50 |
|---------|---|--------------|
| Digital | & Customer Services | |
| 8.2 | Transition to the Cloud | |
| | Cloud | 51 - 56 |
| Growt | h & Development | |
| 8.3 | Approval of Local Flood Risk Management Strategy (LFRMS) 2021-2027 Local Flood Risk Management Strategy LFRMS 2021 - 2027 Appendix A Flood Risk Management Strategy Appendix B FRMS Consultation Appendix C Equality Analysis Toolkit Appendix D Strategic Environment Assessment Appendix E Habitats Regulation Assessment | 57 - 348 |
| Financ | ce & Governance | |
| 8.4 | Corporate Revenue Budget Monitoring Report Quarter 2 - 2021/22 CorporateRevenueBudget RevenueMonitoringAppendix1QTR2202122 Copy of Revenue Monitoring Appendix 2 QTR 2 2021-22 RevenueMonitoringAppendix3QTR2202122 | 349 - 359 |
| 8.5 | Corporate Capital Budget and Balance Sheet Monitoring Report 2021/22 Capital Monitoring CapitalMonitoringAppendix1Qtr2202122 CapitalMonitoringAppendix2Qtr2202122 | 360 - 370 |
| 8.6 | Treasury Management Mid-Year Strategy Review from 2021/22 Treasury Management Review Appendix 1 - Treasury | 371 - 377 |

8.7 Household Support Fund Household Support Fund

378 -381

- 9. Corporate Issues
- 10. Matters referred to the Executive Board

PART 2 – THE PRESS AND PUBLIC MAY BE EXCLUDED DURING CONSIDERATION OF THE FOLLOWING ITEMS

Date Published: Wednesday, 03 November 2021

Denise Park, Chief Executive

Agenda Item 2

EXECUTIVE BOARDThursday 14th October 2021

PRESENT

COUNCILLOR: PORTFOLIO:

Councillor Mohammed Khan CBE Leader of the Council
Councillor Mustafa Desai Adult Services and Prevention

Councillor Julie Gunn Children, Young People and Education

Councillor Jim Smith Environmental Services
Councillor Vicky McGurk Finance and Governance
Councillor Phil Riley Growth and Development
Councillor Damian Talbot Public Health and Wellbeing

Councillor Quesir Mahmood Digital and Customer Services

EXECUTIVE MEMBER NON PORTFOLIO

Councillor John Slater Leader of the Conservative Group

ALL IN ATTENDANCE:

Zainab Dassu Deputy Youth MP Muhammed Bapu Deputy Youth MP

| | Item | Action |
|---|---|-----------|
| 1 | Welcome and Apologies | |
| | The Leader of the Council, Councillor Mohammed Khan, welcomed all to the meeting. Apologies were received from the Youth MP Zara Hyaat. | |
| 2 | Minutes of the Previous Meeting | |
| | The Minutes of the Meeting held on 9 th September 2021 were agreed as a correct record. | Agreed |
| 3 | Declarations of Interest | |
| | There were no Declarations of Interest submitted. | |
| 4 | Equality Implications | |
| | The Chair asked Members to confirm that they had considered and understood any Equality Impact Assessments associated with reports on the agenda ahead of making any decisions. | Confirmed |
| 5 | Public Forum | |
| | In accordance with Part 4 of the Executive Board Procedure Rules for questions/statements by members of the public, the following questions/statements have been received, details of which are set out below:- | |
| | Page 4 | |

| | | Item | | A |
|--------------|----------|-----------------|-----------------------|---|
| Name of P | erson | Subject Area | Response by | |
| asking the Q | uestion | - | | |
| Linda | Forrest, | Council Policy | Damian Talbot, Public | |
| Chairperson, | East | relating to | Health & Wellbeing | |
| Lancashire | Against | fluoridation of | | |
| Fluoridation | | public water | | |
| | | supplies | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | I | | |

ction

Councillor Talbot gave a detailed response to the question, and supplementary question, highlighting that the Borough had amongst the worst standards of oral health in the country, and whilst the current Council policy was against fluoridation, the debate was ongoing and any change of policy would have to be agreed by Full Council. Cllr Talbot advised that if the current Health and Social Care Bill passed, that fluoridation would no longer be a direct local government responsibility.

Councillor Talbot advised that all sides of the debate would be explored and agreed with Mrs Forrest that it was very important to work on good oral health from the pregnant mothers onwards, as good habits at this stage would help develop positive behaviours going forwards.

6 Questions by Non-Executive Members

In accordance with Part 4 of the Executive Board Procedure Rules for questions/statements by Non-Executive Members, the following questions/statements had been received, details of which are set out below:-

| | Action | | |
|--|---|---|--|
| Name of Non- Executive Member asking the Question | Subject Area | Executive Member and Portfolio | |
| Councillor Paul Marrow | Local Plan House targets and impact on capacity in secondary school place in the Borough. | Councillor Julie Gunn, Children, Young People & Education | |
| Councillor Mark Russell | Adult Social Care Budget/Reserves | Councillor Vicky McGurk, Finance & Governance | |

Councillor Gunn responded to the question and supplementary question from Councillor Marrow, giving details of the capacity across all year groups, and of pressure on secondary school provision, which would be closely monitored, and whilst there were current pressures, there was presently no need for a new build secondary school.

Councillor Slater advised that Councillor Russell had been delayed and would be unable to ask his question in person, and Councillor McGurk agreed to send her response to both Councillor Russell and Slater.

7 Youth MPs Update

The Deputy Youth MPs verbally reported on recent events and activities including :

Noted

- Progress on the Schools Voice Alliance
- Residentials for the Young Inspectors programme
- Muhammed being awarded the Young Person of the Year award at the annual One Voice dinner
- Concerns about sexual harassment of young people and possible points of action
- Advancement of the Well-being Champions project
- The forthcoming trip to London, including a visit to the House of Commons.

Further to above, Muhammed asked Councillor Gunn the following:

Are there currently any PSHE lessons or similar lessons to help young people understand how to deal with sexual harassment and how to report it, and would we be able to assist in an adjustment to the PSHE curriculum or similar to have youth led additions made (possibly holding focus groups or discussions)?

Page 6

d) Note that the Proposition is intended to be iterative, and it is

likely that as our collaborative delivery arrangements evolve and national guidance is received, further

amendments will be required

Noted

| | | A 41 |
|-----|--|----------|
| | o\Endorse the Reppine Languabire ICR Restnership | Action |
| | e)Endorse the Pennine Lancashire ICP Partnership Agreement 2021-22 | Approved |
| | Public Health & Wellbeing Update | |
| | Councillor Talbot referenced the forthcoming retirement of the Director of Public Health, Dominic Harrison, who had done an amazing job and who had also recently received an award from One Voice in recognition of his contribution. | Noted |
| 8.2 | Investment in Health and Fitness Facilities | |
| | A report was submitted which advised that Witton Park Arena (WPA) opened in 2014 and Blackburn Sports and Leisure Centre (BSLC) opened in 2015. Both leisure centres still had their original gym equipment in place, which had become outdated and had reached the end of its practical life span. | |
| | The leisure centres were closed for extended periods of time in 2020 and 2021 due to national and local Covid-19 restrictions. The closures had a significant impact on health and fitness memberships and customer confidence. | |
| | In order to recover income to pre-Covid levels and achieve income targets, the leisure centres neededed to provide modern, fit for purpose health and fitness facilities which support membership retention and growth. To achieve this, it will be necessary to replace the gym equipment at both WPA and BSLC, and the report outlined the process to enable this. | |
| | Due to the urgency of replacing the equipment, as outlined in the report, it had been agreed that this decision was not subject to Call-in. | |
| | RESOLVED - That the Executive Board: | |
| | Approves investment in health and fitness facilities at Witton Park Arena and Blackburn Sports and Leisure Centre for new gym equipment, new flooring and new lighting. | Approved |
| | Gives approval to the Director of Place in consultation with the Executive Member for Public Health and Wellbeing and the Head of Contract and Procurement to place an order with Precor (UK) through the ESPO framework. | Approved |
| 8.3 | Blackburn with Darwen's Oral Health Improvement Strategy | |
| | Members received a report which advised that Blackburn with Darwen had the highest proportion of five year olds experiencing decay in England, with 51% of our five year olds having at least one decayed missing or filled (2014). The rate for the North | |

Action Item West was 31.7% and for England in 2018/19. Good oral health had an important role in positive general health and wellbeing for children, vulnerable adults and the elderly. Prevention was a multifaceted approach involving education, healthcare, dental services, young people's services, the community, voluntary and faith sector (CVF) and Public Health. Vulnerable adults who misused substances or were homeless or those with a severe mental illness or learning disabilities required additional targeted oral health intervention, as identified in a recent PHE report. The strategy also included elderly residents in care homes as a target group requiring improved oral health care support. The oral health strategy has been developed in consultation with partners such as NHS England (NHSE), PHE, the CVF sector, and the Food Resilience Alliance. The strategy included data showing the scale of the oral health problems in the Borough, effective evidence based interventions, best practice and recommendations for collective action to improve the oral health of our residents. The main focus of the strategy was on prevention, with a key recommendation to deliver targeted preventative interventions in early years' settings as the best return on investment. With sustained investment and focussed resourcing, the impact of these interventions would be evident in the next two to five years. measured by the surveys of five year olds in 2023 and 2025 and

evaluation of the recommended interventions.

RESOLVED- That the Executive Board:

- 2.1 Note the contents of this report:
- 2.2 Approve the Blackburn with Darwen Oral Health Improvement Partnership Strategy 2021 – 2026;
- 2.3 Approve and support the oral health recommendations and action plan for local implementation.
- 2.4 Approve the recommendation to tender for an Oral Health Improvement Service, commencing April 2022

Noted **Approved**

Approved

Approved

<u>Procurement process for Substance Misuse Services</u> 8.4

The Executive Board received a report which advised that to the provision of substance misuse services across Blackburn with Darwen needed to be retendered due to the current contract coming to an end. The substance misuse service (including alcohol) incorporated a range of service contracts, covering both young people's services through to adulthood and criminal justice. There was a need to ensure that the service was dynamic and innovative to respond to emerging challenges and trends, whilst becoming more efficient, value for money with improved quality and outcomes.

Page 9

| | Item | Action |
|----|--|----------|
| | The new commissioning model would incorporate a more effective Recovery Orientated Integrated System (ROIS). This model went beyond the clinical and medical model to incorporate employment, training, education and support within family life, and took a life course approach. | |
| | The report highlighted the costs of alcohol and drug misuse, and advised that alcohol treatment reflected a return on investment of £3 for every pound invested. Drug treatment reflected a return on investment of £4 for every pound invested. | |
| | RESOLVED - The Executive Board: | |
| | 1. Notes the commencement of a tendering and procurement activity to offer this service to the wider market, with revised contractual and commissioning arrangements to be in place from 1st April 2022. This contract will encompass both adults and young peoples' services and provide advice, prevention, support and interventions across the life course. The contract will be procured for 3 years with an option to extend for up to 2 year's subject to satisfactory delivery which will be monitored via robust contract review processes. | Noted |
| | Approves the strategy for the service as set out in this report. | Approved |
| | AT THIS STAGE OF THE PROCEEDINGS THE PRESS AND PUBLIC WERE EXCLUDED FROM THE MEETING. | |
| 11 | Investment in Health and Fitness Facilities | |
| | Further to the report submitted at Agenda Item 8.2, an additional report was submitted, containing commercially sensitive information. | |
| | Due to the urgency of replacing the equipment, as outlined in the report, it had been agreed that this decision was not subject to Call-in. | |
| | RESOLVED - The Executive Board: | |
| | Approves investment in health and fitness facilities at Witton Park Arena and Blackburn Sports and Leisure Centre for new gym equipment, new flooring and new lighting. | Approved |
| | Gives approval to the Director of Place in consultation with the Executive Member for Public Health and Wellbeing and the Head of Contract and Procurement to place an order with Precor (UK) through the ESPO framework. Page 10 | Approved |

| Item | Action |
|--|--------|
| | |
| | |
| Signed at a meeting of the Board | |
| | |
| on 11 th November 2021 | |
| | |
| (being the ensuing meeting on the Board) | |
| Chair of the meeting at which the Minutes were confirmed | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

DECLARATIONS OF INTEREST IN

ITEMS ON THIS AGENDA

Members attending a Council, Committee, Board or other meeting with a personal interest in a matter on the Agenda must disclose the existence and nature of the interest and, if it is a Disclosable Pecuniary Interest or an Other Interest under paragraph 16.1 of the Code of Conduct, should leave the meeting during discussion and voting on the item.

Members declaring an interest(s) should complete this form and hand it to the Democratic Services Officer at the commencement of the meeting and declare such an interest at the appropriate point on the agenda.

| MEETING: | EXECUTIVE BOARD |
|----------------------------|---|
| DATE: | 11 th NOVEMBER 2021 |
| AGENDA ITEM NO.: | |
| DESCRIPTION (BRIEF): | |
| NATURE OF INTEREST: | |
| | |
| | |
| | |
| DISCLOSABLE PECUNIA | RY/OTHER (delete as appropriate) |
| SIGNED : | |
| PRINT NAME: | |
| (Paragraphs 8 to 17 of the | e Code of Conduct for Members of the Council refer) |
| | |

Agenda Item 8.1

EXECUTIVE BOARD DECISION

REPORT OF: Executive Member for Public Health and Wellbeing

LEAD OFFICERS: Director of Public Health & Wellbeing

DATE: Thursday, 11 November 2021

BLACKBURN DARWEN

PORTFOLIO(S) AFFECTED: ALL

WARD/S AFFECTED: (All Wards);

KEY DECISION: Y

SUBJECT:

Eat Well Move More Shape Up Strategy refresh 2022-25

1. EXECUTIVE SUMMARY

The 'Eat Well Move More Shape Up Strategy 2017-2020' has made significant progress in embedding the three key work streams of the strategy through the development of the Active BwD Network, Blackburn with Darwen's Food Resilience Alliance and the Healthy Weight Declaration. The strategy brought together key people and organisations with a shared purpose of getting Blackburn with Darwen moving more, eating well and aiming for a healthy weight. With the refresh of the strategy, there is now an opportunity to shift from a delivery focussed approach to a strategic approach, which advocates for sustainable change across the whole system.

Effectively engaging with senior leaders and decision makers is critical to implementing this whole system change. The Eat Well Move More strategic partnership aims to facilitate access to healthier, affordable and more sustainable food, increase opportunities to increase physical activity and promote a healthy weight environment through a whole system approach and ensuring that this is everyone's business. The eleven 'Guiding Principles' within the refreshed strategy gives a framework for this and encourages an evidence based, intelligence led and community focussed way of working to improve the health and wellbeing of our residents and to tackle health inequalities.

The refreshed and rebranded 'Eat Well Move More' strategy will support the recovery from the COVID-19 pandemic and build on the opportunities presented during this time and the partnerships developed during the last 18 months and there is an ambition to embed Eat Well Move More guiding principles through the borough's recovery plans.

2. RECOMMENDATIONS

That the Executive Board:

- Note the key issues and challenges related to access to good food and physical activity across Blackburn with Darwen and acknowledge the opportunities to support COVID recovery and tackle health inequalities.
- Acknowledge and support the need for wider system change and cross sector leadership buy in and continue to champion the collaborative work already in place.
- Approve the refreshed, three year 'Eat Well Move More' Strategy.

3. BACKGROUND

The original 'Eat Well Move More Shape Up' strategy had the vision for everyone in Blackburn with Darwen to 'move more, eat well and maintain a healthy weight'. Over the last 3 years the strategy predominantly focussed on local population level interventions based on evidence of effectiveness and building on existing assets using available resources. Three key strands of work were embedded:

- Active BwD Network
- BwD Food Resilience Alliance (Appendix 3)
- Healthy Weight Declaration (Appendix 4)

The Active BwD Network and Food Resilience Alliance have created strong partnerships and a platform for communication and support across Blackburn with Darwen for various organisations and communities. Cross-sector collaboration and building on new and existing partnerships have been critical in implementing the successful streams of local work.

The refreshed partnership strategy continues to strive for a whole system approach and through supporting collaborative work brings the opportunity to engage stakeholders from the wider system to support in the shared vision. Using a 'place based' and whole system approach is key to making health everybody's business in every setting.

Key Drivers

There have been a number of key national strategies released over the past 18 months, which have been driven largely by the COVID-19 pandemic. These strategies are highlighted in the refreshed strategy. Along with regional and local activity, including the Marmot Health Equity Review for Lancashire and South Cumbria and the emerging priorities of our Primary Care Neighbourhoods, have further thrown the spotlight on the need to ensure our residents have access to healthier, more affordable and sustainable food and opportunities for physical activity. This strategy provides a mechanism to ensure that this national, regional and local activity is focussed in a place based, whole system way

4. KEY ISSUES & RISKS

The COVID-19 pandemic has highlighted the health inequalities within our communities in Blackburn with Darwen. Those living in the most deprived areas are more susceptible to the effects of COVID-19 and this further widens the health inequality gap. By increasing physical activity levels across our population and improving access to healthier and more affordable food, we can improve quality of life for everyone.

COVID-19 has also highlighted other key issues for the population such as physical deconditioning due to long term shielding and the impact of obesity on the risk of serious complications from COVID.

Capacity across the system to engage in the strategy continues to be a risk making the importance of senior level buy in and advocating for a culture change across our statutory and voluntary organisations crucial for a sustainable whole system approach.

5. POLICY IMPLICATIONS

The strategy advocates for the creation of a system which supports improved access to healthier, more affordable and more sustainable food and increased opportunities for our community to be more physically active. As part of this system change a review of all policies and contracts will be required to embed the 'guiding principles' wherever possible.

Activity will be aligned to support the priority outcomes and metrics outlined within the recently published Spending Review: Priority outcom

6. FINANCIAL IMPLICATIONS

There are no direct financial implications with the refreshed strategy due to the change to a strategic focus. Delivery of any activity associated with the strategy will be funded through the Public Health grant, the Sport England Local Delivery Pilot funds and partner contributions.

7. LEGAL IMPLICATIONS

This proposal will help improve one of the Council's eight corporate priorities (2019-2023) being: "Reducing health inequalities and improving health outcomes".

Any actions relating to the implementation of the strategy must be made in accordance with the constitution.

8. RESOURCE IMPLICATIONS

The strategy will continue to build on and develop improved partnerships/collaborations and communication across multi sector organisations to make the most of reduced resources by reducing duplication and applying for any funding in a coordinated manner and to be able to target those most in need of extra support.

The facilitation of the strategic steering group and work stream will be supported by the Public Health team.

9. EQUALITY AND HEALTH IMPLICATIONS

| Please select one of the options below. | | | |
|---|--|--|--|
| Option 1 | □ Equality Impact Assessment (EIA) not required – the EIA checklist has been completed. | | |
| Option 2 | ☐ In determining this matter the Executive Member needs to consider the EIA associated with this item in advance of making the decision. | | |
| Option 3 | ☐ In determining this matter the Executive Board Members need to consider the EIA associated with this item in advance of making the decision. | | |

10. CONSULTATIONS

The revised Eat Well Move More strategy is a partnership strategy rather than a public facing document and therefore public consultations were not required.

The strategic document has been presented to Senior Policy Teams, sub groups of the Health and Wellbeing Board, Eat Well Move More Strategic delivery groups and VCFS partnership groups between May and October 2021.

This includes:

- Senior Policy Team meetings Adults & Health, Environment, Children's Services & Education, Public Health & Wellbeing
- Executive Member Board Growth & Development, Digital & Customer Services, , Finance & Governance
- Blackburn with Darwen Integrated Operational Group, CVS Network Group, Age Well Partnership, Children's Partnership Board
- Leader of the Council

11. STATEMENT OF COMPLIANCE

The recommendations are made further to advice from the Monitoring Officer and the Section 151 Officer has confirmed that they do not incur unlawful expenditure. They are also compliant with equality legislation and an equality analysis and impact assessment has been considered. The recommendations reflect the core principles of good governance set out in the Council's Code of Corporate Governance.

12. DECLARATION OF INTEREST

All Declarations of Interest of any Executive Member consulted and note of any dispensation granted by the Chief Executive will be recorded in the Summary of Decisions published on the day following the meeting.

| CONTACT OFFICER: | Amy Greenhalgh amy.greenhalgh@blackburn.gov.uk |
|------------------|---|
| | Beth Wolfenden beth.wolfenden blackburn.gov.uk |
| DATE: | 12 th October 2021 |
| BACKGROUND | Appendix 1 - Eat Well Move More Shape Up Strategy 2017-2020 |
| PAPER: | Appendix 2- Eat Well Move More Strategy 2022-2025 |
| | Appendix 3 - BwD Good Food Plan |
| | Appendix 4 - Local Authority Declaration on Healthy Weight |
| | |



Foreword

Welcome to the refreshed 'Eat Well Move More' strategy! Tackling unhealthy weight and physical inactivity remains a local priority. Through this strategy and partnership, we aim to ensure that moving more, eating well and being a healthy weight is everybody's business.

We are continuing to strive for a whole system approach through collaborative working. Working in this way brings the opportunity to engage stakeholders from the wider system to support in the shared vision. Using a 'place based' and whole system approach is key to making health everybody's business in every setting.

Now more than ever there is the need to increase national and local focus and commitment to people's health, wellbeing, and quality of life and this has been highlighted by the COVID pandemic. During this time, we have seen the Health and Care sector and communities face considerable challenges. The pandemic has also highlighted the health inequalities, which exist within our communities in Blackburn with Darwen. However, we know that be improving access to good food and creating opportunities to be physically active, these health inequalities can be reduced significantly.

The strategy provides a timely opportunity to drive forward system change and support leaders to advocate local decision making, which reflects the needs and priorities of people who live, work, and go to school or college in our borough. Long-term, sustainable change can only happen when we work in partnership with our local community. Supporting and encouraging conversations around physical activity and good food across the system not only benefits health on an individual level but also impacts positively on other local agendas including, employability, productivity and reducing the demand on social care.

We are better together, and we can all do our bit as individuals, within our communities and the places that we live and work to make a difference. Together we can work to create food and physical activity environments, which encourage and enable our communities to make a healthier choice.



Cllr Damian Talbot

Cllr Damian Talbot Executive Member for Public Health and Wellbeing



Mlan

Clar Makanana ad Khana

Cllr Mohammed Khan CBE Leader of the Council



Dominic Harrison
Director of Public Health



AA2A

Dr Mohammed Umer Clinical Director Blackburn with Darwen Primary Care Networks

Executive Summary

As we begin to think about planning for COVID recovery, we are now looking to intensify and redouble our efforts to increase physical activity levels, ensure access to healthier and affordable food and promote healthy weight for our communities in Blackburn with Darwen.

The 'Eat Well Move More Shape Up Strategy 2017-2020' made significant progress in embedding the three key work streams of the strategy through the development of the Active BwD Network, Blackburn with Darwen's Food Resilience Alliance and the Healthy Weight Declaration. The strategy brought together key people and organisations with a shared purpose of getting Blackburn with Darwen moving more, eating well and aiming for a healthy weight. With the refresh of the strategy, there is now an opportunity to shift to a collective strategic approach, which advocates for sustainable change across the whole system and supports ongoing development and delivery.

Effectively engaging with senior leaders and decision makers is critical to implementing this whole system change. The **'Eat Well Move More'** strategic partnership aims to facilitate access to healthier, affordable and more sustainable food, increase opportunities to increase physical activity and promote a healthy weight environment through a whole system approach, whilst ensuring that this is everyone's business. The eleven 'Guiding Principles' within the refreshed strategy gives a framework for this and encourages an evidence based, intelligence led and community focussed way of working to improve the health and wellbeing of our residents and to tackle health inequalities.

The refreshed and rebranded 'Eat Well Move More' strategy will support the recovery from the COVID-19 pandemic and build on the learning and opportunities presented during this time and the partnerships developed during the last 18 months with the ambition to embed 'Eat Well Move More' guiding principles through the borough's COVID recovery plans.







Background

The purpose of the strategy has now shifted following on from the successful implementation of three key workstreams:

- The Food Resilience Alliance
- Active BwD Network
- The Healthy Weight Declaration

These work streams have brought together people and organisations with a shared purpose and principles that cuts across and provides motivation for our combined work. The collaborative work has enabled successful bids for national funding for the Department of Health and Social Care funded Childhood Obesity Trailblazer Programme 'Healthier Place Healthier Future' and The Sport England Local Delivery Pilot – 'Together an Active Future'.

The focus was on delivery of the vision 'For everyone in Blackburn with Darwen to move more, eat well and maintain a healthy weight'. The shift is now to a more strategic approach and how we embed sustainable, cultural and systemic change.

Positive behaviour change in individuals needs to be supported by the whole system. In order to achieve system change across sectors, infrastructure and places, we must work collaboratively to develop a shared vision.

We are exposed to an environment which promotes unhealthy weight from an early age, where high calorie, nutrient poor food is easily accessed, cheap and abundant and physical activity is not the 'go to' choice. A key driver moving forwards with the new strategy is looking at the 'place', the wider built environment and transport systems. These play a crucial role by either promoting or hindering access to physical activity and good food.

Disadvantaged areas tend to have a higher density of main roads, poorer air quality and higher collision rates this combined with more prevalence of an obesity causing environment exacerbates health inequalities and further discourages walking, cycling and being active. Active travel planning influences numerous local drivers in BwD including health inequalities, high levels of deprivation, long term conditions, social isolation and air quality. The built environment is key to maintaining independence and mobility and supporting active ageing.

Building strong collaborations across the sector is key to influencing and creating a healthier built environment where the easy choice is the healthy choice.

The journey so far 2017-2020

There have been a number of successes during the life of the original strategy which have provided a platform for future activity and developments. Some key highlights include:



Breastfeeding Friendly Borough

BwD became a Breastfeeding Friendly Borough in 2018. The continued good work and maintenance of the initiative has recently led to the revalidation of the Gold level Baby Friendly award. This highlights the work undertaken to provide a practical and effective way for health services to improve care provided for all mothers and babies, including the highest level of breastfeeding support.



The Summer Holiday Activity Fund Programme

In 2019 Spring North led the bid to bring the Holiday Activity Fund to BwD. The programme reached around 2,500 children and young people who were eligible for free school meals. The four week summer programme provided a programme of activity and food across the borough in a range of settings delivered by the local youth organisations and the Council's Childrens Centres and Young People Services.



The Healthy Weight Declaration

BwD was the first borough in the country to have Local Authority and Clinical Commissioning Group to sign a joint Healthy Weight Declaration. This emphasises the responsibility to develop and implement policies which promote healthy weight.

ge 21

www.blackburn.gov.uk

The journey so far 2017-2020



HEALTHIER PLACE, HEALTHIER FUTURE
OUR PENNINE LANCASHIRE

Child Obesity Trailblazer Programme

Department of Health and Social Care funded Healthier Place, Healthier Future programme continues to address some of the drivers of unhealthy weight across Pennine Lancashire taking a population and targeted approach. Successful work so far includes: the development of a series of resources for elected member development alongside a regular Pennine Lancashire elected Health & Wellbeing forum and two rounds of social movement, #getshangry campaigns.

Together an Active Future



Together an Active Future

In 2017 Pennine Lancashire was successfully in becoming a Sport England Local Delivery Pilot site to help to tackle physical inactivity trends across the 6 boroughs. The proposed £10 million funding will see the pilot being delivered until 2025.



BwD Stride and Ride Group

In response to the Emergency Travel Fund announced by the Government at the start of the COVID-19 pandemic an active travel partnership was set up to manage the fund and develop walking and cycling infrastructure in the borough. This group has now gone on to develop a Walking and Cycling plan for the BwD which was signed off in September 2021.

The journey so far 2017-2020





Eat Well - Blackburn with Darwen Food Resilience Alliance

BwD Food Resilience Alliance (FRA) aims to help us all, whatever our age or background, to have a better relationship with food; to learn how we can manage what and how much we eat. Most of all it will make sure that good food is available to all who need it when they need it; it will do this by encouraging more collaboration between those organisations which provide food to the vulnerable and those in crisis.

The FRA is a social and community movement, which will bring communities together to end food poverty in its many forms. It will transform the way we think about, source, provide and consume food.

The FRA will link up those who grow our food locally with those who eat it. We want to understand and change the waste caused by food surpluses in the shops. We want to help our communities cook and eat together.



Recipe 4 Health

Blackburn with Darwen Borough Council's Environmental Health team support local food business, including cafes and takeaways, schools, nurseries and care homes to achieve the 'Recipe 4 Health' healthier catering award. Settings can achieve Bronze, Silver or Gold with all award holders being showcased on the www.BeWellBwD.com webpage.





Blackburn with Darwen Social Prescribing Alliance

The journey so far 2017-2020

The BwD Social Prescribing Alliance is an important partnership which formed in September 2020 as part of a community based early intervention and prevention offer within the four neighbourhoods of Blackburn with Darwen. It plays a crucial role help improve the physical and mental well-being of local people access & receive the best offer of support as soon as possible. Consisting of over 80 community-based representatives including the Social Prescribing Link Workers, the Alliance meets on a monthly basis to build rapport, make connections, share local knowledge and ensure referral mechanisms are as efficient as possible.





BLACKBURN DARWEN BOROUGH COUNCIL

The impact of the COVID-19 pandemic

The past year has seen the health and care system and local communities face considerable challenges. The COVID-19 pandemic has highlighted the health inequalities that exist within our communities. Those living in the most deprived areas are more susceptible to the effects of COVID and this further widens the health inequality gap.

Attitudes towards the place that we live changed significantly during this period. The pandemic created increased opportunities for walking and cycling, with more value placed on our green and blue spaces. However, it has also highlighted the fragility of our food system, increased opportunity for an increase in availability of unhealthier takeaway food and increasing weight across our population during this period. The physical activity and the food environment system plays a vital role in improving public health and wellbeing and widening access to healthy choices.

We need to harness the focus and momentum created in light of COVID-19 and use this as a conversation starting point partners, stakeholders, businesses and individuals. We also need to review our policies, systems and activities to ensure that those most at risk of health inequalities are supported in an appropriate and timely way.





Health & Social Care System Changes

Since the first strategy was developed, there have been significant changes across the health and social care system and a number of key strategies released which have supported emerging work across the food, physical activity and healthy weight agendas (Table on page 20). The developing Lancashire and South Cumbria Integrated Care System and Pennine Lancashire Place based Partnership along with the four local Primary Care Neighbourhoods are providing significant opportunities to embed prevention as a 'must do' and to tackle health inequalities.

Department of Health & Social Care

Integration and Innovation: working together to improve health and social care for all

Published 11 February 2021

The Department of Health and Social Care's legislative proposals for a Health and Care Bill

In February 2021, a new DHSC White Paper was released which builds on the NHS Long Term Plan and aims to support recovery from the COVID pandemic. The paper focusses on integration and collaboration across the system bringing opportunities to influence commissioning and place based, evidence driven interventions.

This strategy aims to align with changes across the system to promote a culture change in promoting and embedding good food, increased physical activity and healthy for all.







Our Mission

Tackling obesity and physical inactivity is a priority for the whole Eat Well Move More partnership. A whole system approach can add value by providing the opportunity to engage stakeholders across the wider system to develop a shared vision and be stronger together.

We will support 'community power' and 'social movement', ask what people and places need to succeed not what targets need to be met or services the local authority can offer. Systems not a single organisation create change.

What we will do:

Provide the encouragement, opportunity and an environment that empowers people to make physical activity and healthy eating the easy choice throughout the course of their lives

Create and support opportunistic interventions. Understand the complexities around uncomfortable conversations, raising the issue of weight, inactivity and food insecurity

Work collaboratively with all partners and the community to encourage positive lifestyle changes that enable the people of Blackburn and Darwen to improve their physical and mental health and wellbeing

Use the power of physical activity and good food to build a fairer future for everyone in the recovery from the COVID-19 pandemic

Empower the most vulnerable and at risk of poor health in our community to make positive behaviour changes

Building community resilience and capacity, through strength and asset based approaches, to ensure inclusivity and accessibility

Support the workforce of Blackburn with Darwen to make every contact count





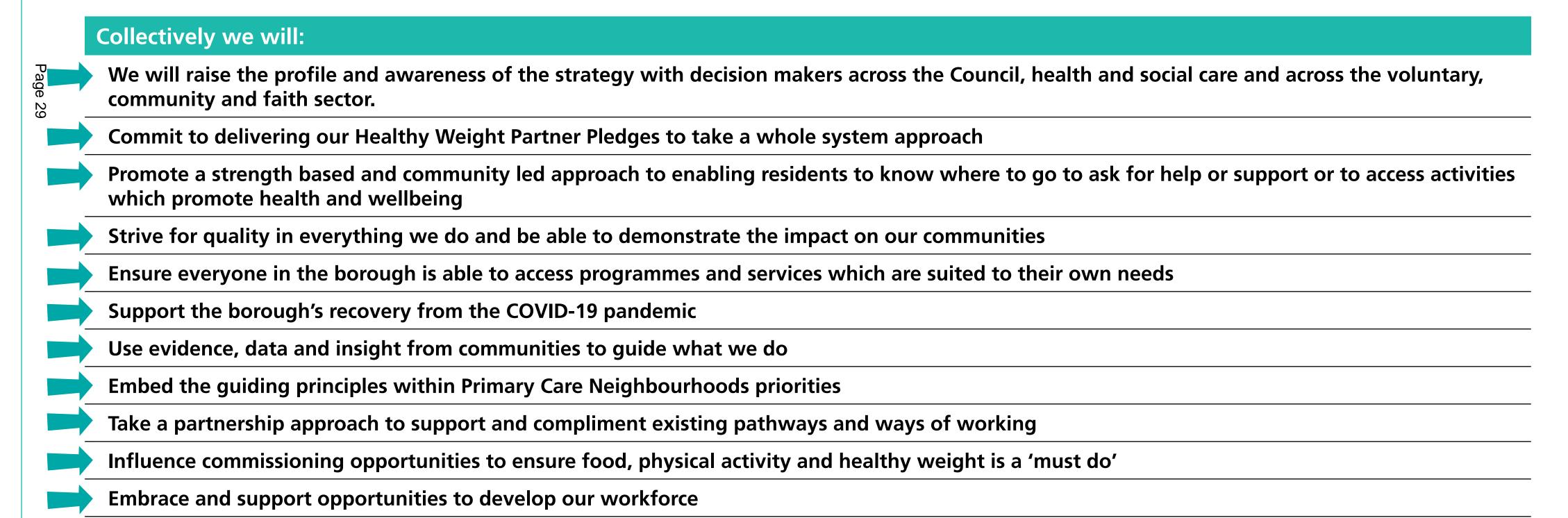


Our Guiding Principles

The strategy and guiding principles will reflect the approach of the Health and Wellbeing Strategy and the underpinning Guiding Principles by taking a:

LIFE COURSE, PLACED BASED, WHOLE SYSTEM APPROACH TO MAKE HEALTH EVERYBODY'S BUSINESS

They are also designed to support delivery of existing local action plans and frameworks relating to food, physical activity and healthy weight (page 20).



'Together we are greater than the sum of our parts'

The deep-rooted inequalities in accessing good food and being physically active highlight the lack of opportunities for some people and some communities. The complex reasons behind this are linked to where we live, work and are educated.

We must take a whole system place based approach and look at the physical and social environment around us, organisations and institutions that support us and local, regional and national strategies and policies which impact ourselves and our communities.



Promote being 'Stronger together' across all sectors. PH will support organisations to take steps to make food, physical activity and healthy weight as must do for health and wellbeing.

A whole system approach should be adopted through agreement with leaders from across the system.

The language of the strategy must be understandable to all to support and influence other portfolios and to encourage conversations and interactions between sectors.

Create a clear understanding of the Healthy Weight Partner Pledge, harness its importance and encourage sign up and delivery across sectors.





Ensure that people and communities are involved in local decision making involving their 'place'.

Be responsive and adaptable around their needs and priorities and maintain open channels of communication.

Enable easy access to the right service at the right time.

Promote the ethos of 'doing with' and not 'doing to'.

Consistent and persistent messaging to promote health and wellbeing across all organisations.

Highlight the importance of learning and development, sharing skills, knowledge and the importance of robust evaluation and accountability.

Recognise failure and support learning from this.



www.blackburn.gov.uk

'Together we are greater than the sum of our parts'



Clear communication channels and transparency between service providers and stakeholders to ensure service delivery models and referral systems are clear.

Individuals to be able to access he right service at the right time.

Harness the momentum created by the pandemic around wider impacts on health including obesity, long-term conditions, access to good food and deconditioning.





Understand barriers and enablers through working closely with communities and providing the support that they need.

Ensure quality data is available which is reliable and relevant to the diverse communities and above all any evidence based resource is useable within that community.

Public Health will support dissemination of advice and information from a national and local level, including partner insight, JSNA's and health needs assessments.

We will work closely with and support Primary Care Neighbourhoods priorities. Linking in with the Primary Care Network Delivery Group and the Clinical Commissioning Group to work collaboratively where opportunities arise e.g. the Adult Weight Management Direct Enhanced Service Specification and NHS Health Checks programme





Promote and develop existing collaborations and support the growth of new ones. Reduce the risk of duplicating work and ensure the strengths and skills of all partners involved are fully utilised.

Create efficient pathways with clear access information, which work to provide an effective service to all.

Establish strong links with mental health pathways and healthy weight.

www.blackburn.gov.uk

'Together we are greater than the sum of our parts'





Use existing resources to ensure staff have the skills, knowledge and confidence to engage in conversations around food, weight and physical activity. Provide training and learning opportunities for role models/champions and harness peer to peer influencing.

Encourage organisations and their staff to have clear and shared responsibilities to be eating well, being active and being a healthy weight.

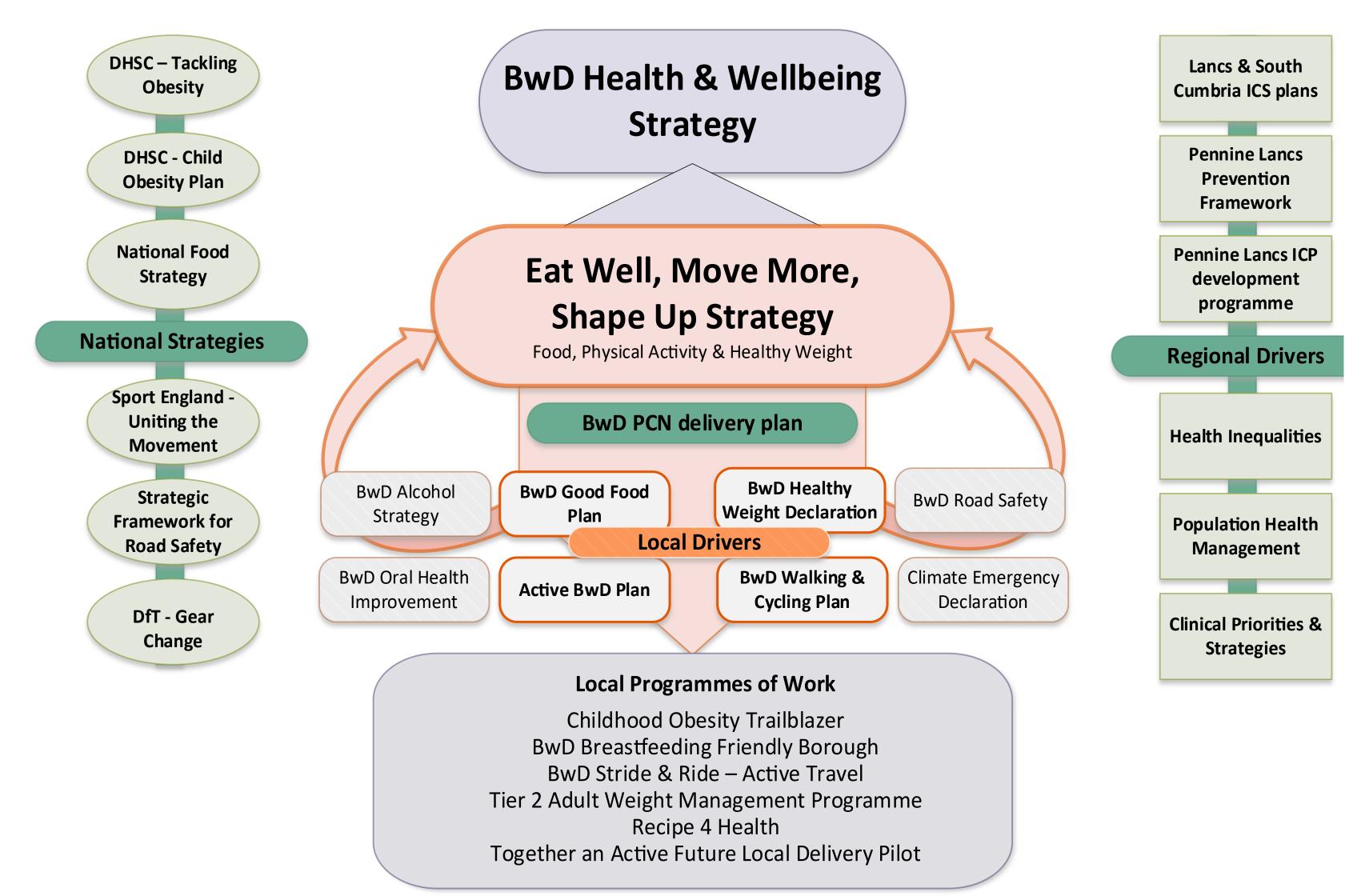
Find opportunities across the Council and Health & Social Care and support finding a shared purpose across the system and effective ways to work together. Use this platform to influence commissioners and provide the evidence to include health in all commissions.

11

As a Public Health function support and input into commissioning and provide communication links between relevant forums and groups.

National, Regional and Local Drivers and Supporting Strategies and Plans





What does success look like?

What does success look like?

We will have participation from all key public, voluntary, community and faith sector organisations

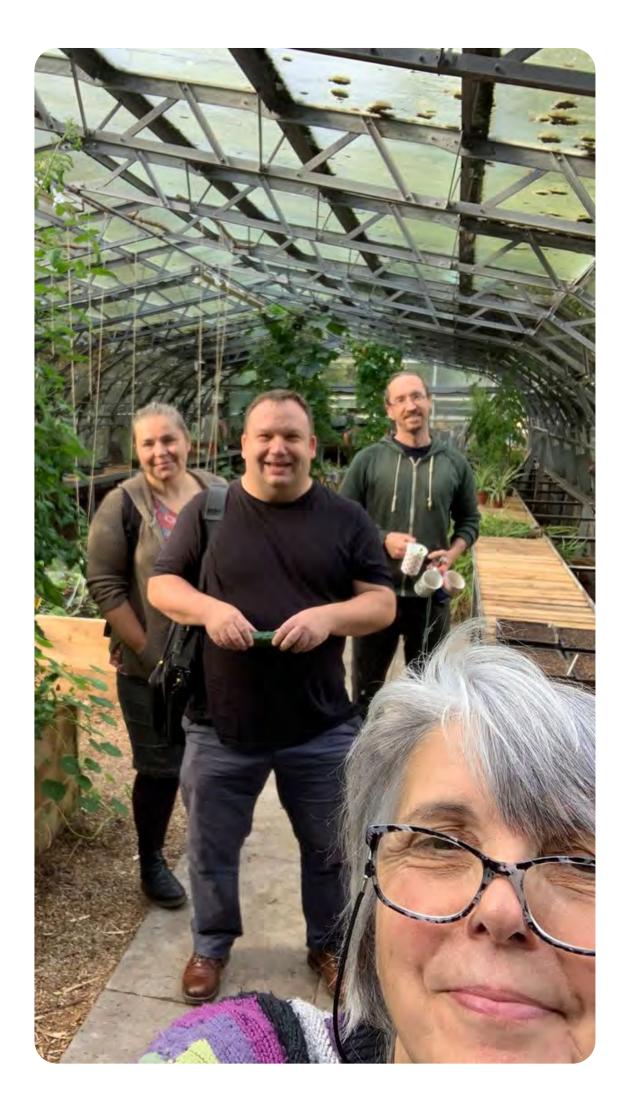
All partners will be delivering their Healthy Weight Pledges to support taking a whole system approach

We will support the development and implementation of a comprehensive workforce development offer available to all frontline workers and volunteers which upskills around physical activity, healthy weight and access to good food

All partners will be using the evidence, data and community insight to develop relevant and effective programmes and interventions

All existing and new Council commissions and policies will be reviewed to ensure health is included as a 'must do'

All Equality Impact Assessments and Health Impact Assessments will be reviewed and comments for action provided by Public Health



Recommendations



Collectively we will scan the horizon, constantly scoping where upcoming developments sit, being prepared for what is coming next.

Supporting Primary Care Neighbourhood Development

To link closely with Primary Care Neighbourhoods to support their priorities. A key area being the Healthy Weight Direct Enhanced Service.

Supporting Population Health Management

Embed and increase the coverage of local health relevant policies and improving the quality of decisions that protect and promote population health.

Tackling Health Inequalities

Take the recommendations from the Lancashire and South Cumbria Marmot Healthy Equity Review to shape our developments to tackle health inequalities.

Making Health Eeverybody's Business

All professions, partners, communities and individuals need to recognise and acknowledge the wide impact of poor nutrition and inactivity. Everybody has a part to play in creating healthy environments and influencing decisions that impact on their 'place'. Enable others to come together to understand the system and focus on what can be achieved together.

Targeting and Supporting Workforce Development

Work with health and social care colleagues to develop a robust induction process across all sectors which prioritises health and wellbeing and changes the culture around food and physical activity.



How will we monitor progress on this strategy?

The Eat Well Move More Strategy Group meets every other month to discuss progress and to receive updates from the BwD Food Resilience Alliance and Active BwD Networks. In these meetings, the partners will provide the strategic steer and scrutiny to ensure we are on track for success. The Eat Well Move More group will provide regular progress updates to the Children's Partnership Board, Live Well Boards and Age Well Partnership and an annual report to the Health and Wellbeing Board.

This strategy was developed in consultation and partnership with:

- » BwD Food Resilience Alliance
- » BwD Active Network
- » Age Well Partnership
- » Children's Partnership Board to follow
- » CVS Community Network
- » BwD Council Senior Policy Teams Adults and Health, Children and Education, Place and Resources

www.blackburn.gov.uk

To achieve the ambition for people in Blackburn with Darwen outlined within this strategy will need a true partnership approach. All organisations, services, businesses, employers and individuals within our local communities have a role to play so please do think about how you can contribute, influence and support the achievement of our aims. As the borough and its residents recover from the impact of the Covid-19 pandemic we really do have a once in a generation opportunity to help people improve their health and wellbeing and live their best lives. We hope that you have found this strategy inspiring and will join us in this ambition.





National, Regional and Local Drivers and Supporting Strategies and Plans

| | Local BwD and ICP footprint | (Pennine Lancashire) | Regional ICS and Pan Lancs | National |
|--------------------------|--------------------------------|---|------------------------------|----------------------------|
| | Strategy/Plan | Programme | Strategy | Strategy/Plan |
| Food | BwD Good Food Plan | BwD Breastfeeding Friendly Borough | | National Food Strategy Pt1 |
| | | Recipe 4 Health | | |
| Physical Activity | Active BwD Plan | Together an Active Future | Local Transport Plan 4 | Uniting the Movement |
| | Walking and Cycling Plan | BwD Stride & Ride Active Travel Programme | | (Sport England) |
| | | Connecting East Lancashire | | Gear Change (DfT) |
| | | BwD Connect | | |
| Healthy Weight | BwD Healthy Weight Declaration | Healthier Place, Healthier Future – Childhood | | Tackling Obesity (DHSC) |
| | | Obesity Trailblazer Programme | | Childhood Obesity |
| | | Tier 2 Adult Weight Management Programme | | Plan Pt 1, 2 and 3 (DHSC) |
| Cross Cutting | BwD Oral Health Improvement | National Diabetes Prevention Programme | Lancashire and South Cumbria | |
| | BwD Alcohol Strategy | NHS Health Checks Programme | Health Equity Commission | |
| | BwD Road Safety (development | Get Stuck In - Holiday Activity and Food | | |
| | commencing in September 2021) | Programme (DfE funded) | | |
| | Climate Emergency Declaration | Community Long COVID programme | | |
| | | 5 Ways to Wellbeing | | |
| | | Primary Care Networks | | |

Supporting Reading

For further information on the evidence which underpins this refreshed strategy, please go to this link for the original Eat Well More Shape Up strategy 2017 - 2020

www.blackburn.gov.uk/health/eat-well-shape-move-more

BLACKBURN DARWEN

Our Partners









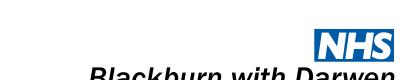
re:fresh your health and wellbeing



Blackburn with Darwen **Clinical Commissioning Group**









BLACKBURN WITH DARWEN GOOD FOOD PLAN

See our Facebook Page and Twitter Page @FoodBwD

Eat Well – the food and nutrition strategy for Blackburn with Darwen

Blackburn with Darwen aims to be a place where everyone can access good quality, healthy, affordable food; where we enjoy a healthy diet and where the food in the borough is produced and sourced locally and responsibly; this in turn supports the local economy and helps sustain the environment. Food will bring the community together - celebrating different food cultures and promoting cohesion through food.

The BwD Eat Well Strategy highlights how all the partners including East Lancashire Hospital Trust, BwD Clinical Commissioning Group, and BwD Council are working hard to support residents to become healthier. This plan supports the Eat Well Strategy, developed over the last three years which embeds plans by a range of public sector organisations. The Alliance will provide a focus for community, voluntary and faith organisations to work with the public sector to realise the overall aim of the Eat Well strategy – to improve our health and wellbeing.



Around 14,000 children and young people in the borough live in poverty

BwD has the third lowest level of disposable income in the UK

107 households in BwD were subject to the benefit cap in November 2018 with almost 80% of these single parent families and close to 400 children affected

During 2019, Blackburn Foodbank supported just over 11,000 people with crisis food provision of which 42% were children and young people

Over 50% of babies in the BwD are not receiving breastmilk at 6 weeks of age

70% of the NHS budget is spent on treating Long Term Conditions with poor diet contributing to diabetes, cancer, cardio-vascular disease and obesity. Those from more deprived communities are much more likely to experience them and also more severely.

We CANNOT treat our way of this

Blackburn with Darwen's Food Resilience Alliance

We all have a relationship with food. We either have too much or not enough, are told we eat the wrong things, or we waste too much. BwD Food Resilience Alliance aims to help us all, whatever our age or background, to have a better relationship with food; to learn how we can manage what and how much we eat. Most of all it will make sure that good food is available to all who need it when they need it; it will do this by encouraging more collaboration between those organisations which provide food to the vulnerable and those in crisis.

The Alliance is a social and community movement, which will bring communities together to end food poverty in its many forms. It will transform the way we think about, source, provide and consume food.

The Alliance will link up those who grow our food locally with those who eat it. We want to understand and change the waste caused by food surpluses in the shops. We want to help our communities cook and eat together.

Food is so important on so many levels – we want to make sure that we all have the best possible for our own sakes, those of our families and those of our communities in a way that is sustainable.

How will we achieve our aims?

We will develop our plan by involving all those working and living in our communities to get their agreement and commitment to the following principles. As more individuals, community groups and organisations such as housing associations, the Borough Council, Health authorities, local businesses etc, are aware of the movement, they will pledge to take forward aspects of the plan that they know are in their sphere of influence and/or responsibility.

We will work with communities and settings across the borough, to significantly reduce food poverty in neighbourhoods and for children and young people across the borough.

1 It is not acceptable that anyone goes hungry in Blackburn with Darwen

We will protect people from hunger ...

Who will?

All those organisations which provide food and support for those in crisis or struggling to feed themselves or their families— food banks, community kitchens, holiday hunger teams, benefit and other financial advisors. All the public sector organisations who provide crisis and ongoing support.

What will we do?

We will feed those in crisis – with food parcels, cooked meals,

We will know who is doing what, when, where and with whom. We will share what we know within our communities and more widely. We will make sure that the crisis response is documented and understood so everyone knows what the best response is in different circumstances.

We will ensure that children have holiday food provision and breakfast clubs

BwD Food Resilience Alliance

Good Food Plan for Blackburn with Darwen

We will challenge the provision of Free School Meals – we need more, we need better, we need improved school based processes to remove stigma. We will address the issues raised by young people through the Children's Future Food Enquiry report March 2019.

We will support the uptake of the Healthy Start Scheme to ensure that all eligible ante and post-natal mums and pre-school children have access to the vitamins and vouchers for fruit and vegetables

We will support those who need more care than food – financial, housing, or welfare advice, and work to improve council tax debt collection practices

We will make sure that those agencies involved in caring for those who are in ill-health as a result of an inadequate diet are supported to deliver their strategies eg malnutrition awareness, vitamin D awareness, breast feeding friendly borough work

We will source education and skills support to individuals, families and communities to increase their ability to source and produce good food and meals.

We will promote 4 key areas - healthy weight, reduction in the level of diabetes, understanding of vitamin D and the promotion and protection of breast feeding.

How will we do it?

We will develop a plan specifically to protect children and young people from hunger, as well as improving nutrition.

We will work in local communities to gather information about current activities and identify gaps.

We will work with service providers, public sector organisations and local enterprises to have a more coordinated response.

We will produce route maps ...for different communities, age ranges, groups such as homeless

We will identify good practice in other areas and use this to improve our support in BwD.

2 We will build food security

This means improving food knowledge and skills in our communities which have a positive impact on accessing, sourcing and cooking food – as well as understanding more about how what we eat impacts upon health and wellbeing.

Who will?

We have groups interested in food poverty and insecurity such as the Young People's Empowerment Forums. We will develop neighbourhood responses involving those with lived experience as well as strategic responses to improving our knowledge and skills.

What will we do?

We will work to ensure that we know how to access or buy good food, how to cook it, how to do this on limited budgets. We will encourage communities to grow vegetables, share cooking skills. We will make sure that we have the resources to cook – utensils, fuel. We will work with communities to ensure breastfeeding is promoted and protected.

BwD Food Resilience Alliance

Good Food Plan for Blackburn with Darwen

- Map existing and identify new food growing sites, including statutory and informal, arrange leases where appropriate (permanent and 'meanwhile')
- Match community groups with support and maintenance and support adoption of 'Incredible Edible' status for local community groups
- Help communities protect and take control of assets for food growing and other projects via the Sustainable Communities Act
- Strengthen links with Public Health and Planning and Property Departments to support and enable adoption of permanent community growing spaces and ensure inclusion of growing spaces and major new developments
- Strengthen links with Growth and development to attract and encourage sustainable, food resilient businesses
- Encourage hospitals, health centres and businesses to develop food growing on their sites with staff/patients taking ownership of the spaces

How can we address skills, employability and income?

We will seek to influence wherever we can. We believe good food is everyone's business.

Food security demands a joined up response to welfare reform. BwD should argue for and work towards a system which provides adequate financial support to ensure a household's basic needs are met, reducing use of sanctions, and engaging with claimants to understand their needs and build support around them.

We will identify and engage with all organisations which might be able to impact eg transport companies, DWP, etc

We will understand the skills required by good food companies and ensure colleges and training places are providing those skills.

We will make sure that good, healthy, affordable food is accessible in our communities

We will explain the importance of healthy food to everyone in ways which inspire them to respond, whatever their culinary and cultural differences. We will work together in to make sure the Eat Well strategy is driven by all the organisations committed to it. We will fight for resources to maximise our impact on the health of the residents of BwD. We will further develop access to low cost food for vulnerable groups, making sure we do not have food deserts. These are where affordable healthy food is not available.

Who will?

All those committed to the various actions in the Eat Well Strategy. Communities of interest in the Alliance - Schools, children's centres, community gardeners, crisis food providers, other third sector organisations providing or developing food related services, even if it is not their primary function

BwD Food Resilience Alliance What will we do?

We will create more local community pantries/co-operatives which enable people to buy/access good food cheaply. We will make sure that there are breakfast clubs, holiday clubs and adequate access to free school meals. We will encourage community groups to cook and eat good food together, by increasing knowledge and skills to all age groups and cultures, developing community cafes and places of welcome. We will promote 'pay what you can' and 'pay it forward' culture within community cafes.

We will work with schools and colleges to obtain their buy-in. We will promote existing and new opportunities to grow food; we will enable as much locally grown food as possible to be used in our communities and the crisis food chain.

We will promote the take up of Healthy Start Vouchers and Free School Meals, working with the council, 0-19 healthy child programme team, schools, charities and communities.

We will seek to discover hidden poor health relating to poor food, i.e. find those that are malnourished and with over or under weight, have pre diabetes, low vitamin D. This will then target action.

How?

By continuing to network organisations, find resources, mobilise energy and enthusiasm to build communities by sharing food - 'Sharing is Caring'

4 We will use surpluses locally

We will develop relationships and systems with our shops and restaurants to ensure that good food does not go to waste.

We will ensure that good food surplus (waste) goes into our local food chain e.g. foodbanks, food clubs, community kitchens.

We will work with local food growers to share learning on storing and preserving food from allotments to facilitate year round use.

We will work with food growers and suppliers to reduce all food waste – whether surplus food in shops or what we grow on our allotments.

We will work with growers and suppliers to remove poor quality food from the supply chain e.g. remove promotion of BOGOF.

We will do this by raising the profile of the Food Alliance and promoting its aspirations. We will work through those organisations who have expertise in securing surpluses to maximise their reach, e.g. .FareShare, Community & Business Partner's Waste not Want not scheme.

5 We will be led by data and local intelligence and share our learning widely

The BwD Food Resilience Alliance pledges to be driven by data and local intelligence in all our activity to ensure the most vulnerable in our communities are protected from hunger. We will use data and local

BwD Food Resilience Alliance Good Food Plan for Blackburn with Darwen intelligence to target our resources as a partnership as efficiently as possible, to reduce duplication and ensure we are reaching those most in need.

We will target our resources as a partnership as efficiently as possible, reduce duplication of both food supplies and the human effort to deliver them. The Food Resilience Alliance understands that easy supply of 'free food' in the system goes against the core aspiration of enabling resilience of individuals and communities to provide their own sustainable food

Who will?

Members of the Alliance (from large corporate public / private to small local) will share their current information and work to standardise and understand how it is collated and used.

All who deliver food will be able to give the reason for the provision.

How will we do it?

By networking with all public agencies, voluntary and private sector to use current available data. We will influence how that data is analysed to promote efficient sharing and learning for all associated with the Alliance. This will develop a system that provides up to date information to match local supply and demand of good food.

We will collect and share data on the effectiveness of the interventions and activity as part of the delivery of the Good Flood Plan, which will be received and monitored by the BwD Food Resilience Alliance.

FOOD RESILIENCE ALLIANCE





This Declaration was passed by:





On: 13th April, 2017



THIS LOCAL GOVERNMENT DECLARATION ON HEALTHY WEIGHT IS A STATEMENT, INDIVIDUALLY OWNED BY BLACKBURN WITH DARWEN BOROUGH COUNCIL AND BLACKBURN WITH DARWEN CLINICAL COMMISSIONING GROUP.

It encapsulates a vision to promote healthy weight and improve the health and well-being of the local population. We recognise that we need to exercise our responsibility in developing and implementing policies which promote healthy weight.









Clir Moramage A.7.

Cllr Mustafa Desai Executive Member for Health and Adult Social Care

Dominic Harrison
Director of Public Health

Doninic P. Harrison, CZ Cig-

Dr Chris Clayton Clinical Chief Officer Blackburn with Darwen Clinical Commissioning Group

WE ACKNOWLEDGE THAT:

- > Unhealthy weight is a serious public health problem that increases disability, disease and death and has substantial long term economic, well-being and social costs. The proportion of the population affected by unhealthy weight continues to rise:
- Unhealthy weight is affected by health inequalities and is more common in lower socio-economic groups;
- > Poor diet during early life (the period between conception and weaning) can carry adverse health consequences in later life:
- > Poor diet and an unhealthy weight are risk factors for cardiovascular disease, cancer and type 2 diabetes which contribute powerfully to poor health and premature death;
- Energy dense food and drinks high in fat and sugar and low in essential nutrients contribute to a significant amount of additional and unnecessary calories in the diet;
- There is greater availability and access to foods and drinks high in fat, sugar and salt which are increasingly eaten outside of the home, contributing to excess energy intake;
- Increased intake of foods high in fat and sugar and low in fruit and vegetables are strongly linked to those in manual occupations;
- > People living in more socially deprived areas have less access to healthy foods;
- > Advertising and marketing of foods and drinks high in fat, sugar and salt increases their consumption:
- Education, information and the increased availability of healthy alternatives help individuals to make healthy, informed food and drink choices;
- Modern physical activity environments contribute to sedentary lifestyles;
- Urban planning can have a significant impact on opportunities for physical activity, promoting safer environments for walking, cycling and recreation.

AS LOCAL LEADERS IN PUBLIC HEALTH WE WELCOME THE:

- > Opportunity for local government to lead local action to prevent obesity, securing the health and well-being of our residents whilst considering available social, environmental and financial NHS and social care resources:
- Opportunity to protect some of the most vulnerable in society by giving children the best start in life and enabling all children, young people and adults to maximise their capabilities and make informed choices;
- > National commitment to address childhood obesity;
- Support for the Local Authority Declaration on Healthy Weight from the following organisations: Association of Directors of Public Health North West, British Dental Association, Children's Food Campaign and the UK Health Forum.

WE COMMIT OUR COUNCIL FROM THIS DATE

13.04.2017

...to sign the Declaration to show commitment to reducing unhealthy weight in our communities, protect the health and well-being of staff and citizens and make an economic impact on health and social care and the local economy by striving to:

- Engage with the local food and drink sector (retailers, manufacturers, caterers, out of home settings) where appropriate to consider responsible retailing (such as not selling energy drinks to under 18s), offering and promoting healthier food and drink options, and reformulating and reducing the portion sizes of high fat, sugar and salt (HFSS) products;
- Consider how commercial partnerships with the food and drink industry may impact on the messages communicated around healthy weight to our local communities. Funding may be offered to support research, discretionary services (such as sport and recreation and tourism events) and town centre promotions;
- > Review provision in all our public buildings, facilities and 'via' providers to make healthy foods and drinks more available, convenient and affordable and limit access to high-calorie, low-nutrient foods and drinks (this should be applied to public institutions such as schools, hospitals, care homes and leisure facilities where possible);
- Increase public access to fresh drinking water on local authority controlled sites;
- Consider supplementary guidance for hot food takeaways, specifically in areas around schools, parks and where access to healthier alternatives are limited;
- Advocate plans with our partners including the NHS and all agencies represented on the Health and Wellbeing Board, Healthy Cities, academic institutions and local communities to address the causes and impacts of obesity;

- Protect our children from inappropriate marketing by the food and drink industry such as advertising and marketing in close proximity to schools; 'giveaways' and promotions within schools; at events on local authority controlled sites:
- Support action at national level to help local authorities reduce obesity prevalence and health inequalities in our communities:
- Ensure food and drinks provided at public events include healthy provisions, supporting food retailers to deliver this offer;
- Support the health and well-being of local authority staff and increase knowledge and understanding of unhealthy weight to create a culture and ethos that normalises healthy weight;
- > Invest in the health literacy of local citizens to make informed healthier choices:
- Ensure clear and comprehensive healthy eating messages are consistent with government guidelines.
- Consider how strategies, plans and infrastructures for regeneration and town planning positively impact on physical activity:
- > Monitor the progress of our plan against our commitments and publish the results.

IN ADDITION OUR LOCAL AUTHORITY WILL WORK TOWARDS:.....

- Support the introduction of 'Mile a Day' and 'Couch to 5k' in primary and secondary schools respectively
- Support Early Years settings to enable a structured physical activity offer and healthy food policy
- Develop a Food Poverty Network to reduce food poverty and tackle malnutrition in all settings
- Support the introduction of school food policies including lunchbox policies
- > To be a designated Sugar Smart Town

- Develop a Food Charter for the Borough to promote healthy and sustainable food in a local economy
- Promote Active Travel and use of Rights of Way across the Borough to increase physical activity, for social and employment opportunities and minimise air pollution
- Support 'Street Play' initiatives through exploring the implementation of periodic temporary street closure orders and other innovative sites for play
- > To be a designated Breastfeeding Friendly Town
- > To achieve Sustainable Food Town status

Signatories:

Cllr Mohammed Khan M.B.E. Leader of the Council Cllr Mustafa Desai Executive Member for Health and Adult Social Care Dominic Harrison
Director of Public Health

Dominic P. Hanrison.

Dr Chris Clayton Clinical Chief Officer Blackburn with Darwen Clinical Commissioning Group

てた ひゅー

To be reviewed by 13th April, 2018







The Local Authority Declaration on Healthy Weight has been designed and developed on behalf of Food Active, by the Health Equalities Group and is based on the the Local Authority Declaration on Tobacco Control.

Agenda Item 8.2

EXECUTIVE BOARD DECISION

REPORT OF: Executive Member for Digital and Customer Services

LEAD OFFICERS: Strategic Director of Resources (SIRO)

DATE: Thursday, 11 November 2021

WARD/S AFFECTED: (All Wards);

KEY DECISION: Y



Transition to the Cloud

1. EXECUTIVE SUMMARY

PORTFOLIO(S) AFFECTED:

The purpose of this report is to support an application for the funding required to deploy a Microsoft Azure Cloud Platform and Cloud backup solution which is needed to underpin the Council's new approach to Information Technology and Digital Strategy delivery. This investment will enable the Council to begin the process of replacing its ageing, inflexible, legacy systems and facilities with a next generation digital platform that will support the transformation of its public services, alleviating the current risks that the council faces.

Digital and Customer Services

2. RECOMMENDATIONS

That the Executive Board:

- Approves for inclusion in the Council's Capital Programme for 2021/22, a capital budget of £248k to fund the transition costs of moving to the cloud to be funded through prudential borrowing.
- Approves the use of the digital transformation programme contingent revenue reserves of £447k to fund one off non-recurrent revenue expenditure to cover dual running costs and post transition assistance.

3. BACKGROUND

Most of the Council's systems and services currently rely on IT infrastructure located from Council owned on-site data centres. Over the last 13 years the Council has invested heavily in IT infrastructure going through periodic capital investment to refresh equipment as required. The Council is in a position where it needs to invest more capital for on-site equipment over coming years but before this occurred alternative options were looked at. Over recent years the industry has seen a movement away from private cloud to public cloud such as Microsoft Azure. The main difference of interest between a public cloud and a private cloud is that in a private cloud the purchaser buys the capacity that it believes it needs, in advance via a fixed fee. In contrast, within a public cloud the infrastructure can be scaled immediately on demand. Scaling on demand means that the purchaser only uses and pays for what it needs when it needs it, and its capacity profile can flex up and down ensuring the purchaser only pays for capacity it actually uses, rather than what it estimates it might need as well as other benefits.

The large scale refresh programmes for Core Infrastructure which take years of preparation and implementation have a sizable capital commitment, which will be significantly reduced. Often by the time we have implemented such systems they are already a good way through their life span. Investing in on-premise infrastructure is now no longer a feasible option and skills to maintain such an infrastructure are now classed as outdated, making the market for recruitment much smaller with more competition thus higher salaries or specialist contractor support.

In order to access the viability of this, the Council worked with specialist consultancy from the ANS Group who are experienced in working with Local Government and the NHS, to deliver the planning and design phase for cloud migration in terms of our current IT estate including costings for the project. The proposal is to move circa 80% of our services to the cloud, this demonstrated that there is a clear financial business case to proceed with this project given it delivers sizable capital investment savings when complete. This even before the significant strategic advantages that flow from the ability to leverage other Microsoft technologies especially in the area of data analysis, business intelligence, knowledge management and artificial intelligence.

This investment should unlock cost savings across the Council through transformation projects that will leverage these modern technology approaches, leading to the sustainable running of our services into the future. This investment will also increase mitigation and reduce the impact of future cyber-attacks, which could result in a multi-million pound recovery programme, as recently evidenced in Hackney and in Redcar.

This Cloud transition looks towards bringing the Council back in line with other organisations and businesses following best security and technology practices and looks forwards in how we can benefit from these advancements in the future. Our ambition is to provide the systems and infrastructure to enable significant transformation for our biggest services. This means harnessing data technologies (Machine Learning and Artificial Intelligence), embracing the Internet of Things in services to people and the management of assets and leveraging the Internet and Web technologies to deliver the best in front facing online services. Our current on premise solution cannot cost effectively provide the infrastructure to support this ambition.

The user experience will be significantly improved as part of the investment, both as bi-products of the above outcomes (for example simplified operations will reduce overall outages and performance issues) and through direct strategic investment. New methods of working will allow the Council to employ technologies for remote working across any device, this will allow the council to deploy remote services for accessing a "Desktop" that is hosted in our cloud environment enabling us to invest in cheaper devices dependent upon role.

Moving to a Cloud first model will allow our staff and citizens to connect directly with services over the internet without reliance on BwD maintained datacentres or BwD broadband connections. Reliability and connection speed will thus be improved as we would be utilising the vast speed of Microsoft's network. This also goes a long way into helping troubleshoot end user issues whilst we adopt hybrid home/office working model.

The completion of transition will deliver the following high level outcomes:

- A solid foundation for the council's new approach to a modern Digital Strategy.
- Appropriate Back Up and Disaster Recovery capability will be delivered.
- The platform will enable the Council to build new business models whilst enabling better ways to engage with its citizens.
- The ability to leverage the Platform in the future to provide better insight and use of data through the use of a new common data platform.
- Greater flexibility to allow us to react and create services quickly.
- Improved reliability with services provided across two major UK regions.
- Improved Security.

Easier integration with the NHS, police and schools.

4. KEY ISSUES & RISKS

The Councils current infrastructure is at the stage where further capital investment is required to keep it maintained, secure and reliable.

The majority of Council services are provided from data centres within the borough, Moving to the Cloud will allow us to be better prepared for disaster scenarios with services being run from London and Cardiff.

The current solution is not flexible, Cloud computing allows IT to react and create services faster than ever before. If we lose a service it should be able to be built from its previous iteration of code within minutes.

Although the Council has robust security measures on the existing estate, moving to the Cloud will strengthen and centralise our security into one single platform.

The department is financially reliant on other Councils and the NHS renting space to fund overhead costs of running the main BwD datacentre, the transition to Cloud will allow us to review the longer term future of the facility should 3rd parties decide to move out.

The data centre is one of the Councils highest CO2 polluting buildings. Cloud facilities are far more energy efficient in terms of energy required to run services, this will help mitigate the risk we are currently facing in terms of the increase in our local electricity costs.

By moving to the Cloud there is the risk of vendor lock in with Microsoft, this will be mitigated by also exploring options such as Amazon Web services to ensure we are able to exit if required. This is however unlikely as costs are negotiated by government.

5. POLICY IMPLICATIONS

The UK government has increasingly focused on cloud services since it launched its Cloud First policy in 2013. The policy was reassessed in 2019 and remains a flagship technology policy. The new contract will build on the Government's One Government Cloud Strategy and the principles of the Digital Data and Technology (DDaT) strategy, which focuses on modernising technology, strengthening cyber defence, improving digital skills and embedding a culture of innovation. It also supports more recent issues such as supporting the UK's recovery from the COVID-19 pandemic and sustainability.

6. FINANCIAL IMPLICATIONS

The proposed transition to the Cloud will result in a movement from historical periodic capital investment in equipment to an annual revenue payment. In order to fully demonstrate the value of moving to the Cloud the below shows the costs of remaining as we are against moving to the Cloud over a 10 year period.

Do nothing costs

| Revenue Costs | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | Years 7-10 Per annum |
|---------------------------|---------|---------|---------|---------|---------|---------|----------------------------|
| Data centre running costs | 68,000 | 68,000 | 68,000 | 68,000 | 68,000 | 68,000 | 68,000 |

| Software | 107,200 | 132,200 | 132,200 | 132,200 | 132,200 | 132,200 | 132,200 |
|-------------|---------|---------|---------|---------|---------|---------|---------|
| licencing | | | | | | | |
| Hardware | 20,000 | 40,000 | 40,000 | 20,000 | 25,000 | 25,000 | 38,750 |
| maintenance | | | | | | | |
| Total | 195,200 | 240,200 | 240,200 | 220,200 | 225,200 | 225,200 | 238,950 |

| Capital Costs | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | Years 7-10 total |
|-----------------------|---------|---------|---------|---------|---------|---------|------------------|
| Software Licencing | 119,000 | 134,000 | 119,000 | 119,000 | 119,000 | 119,000 | 476,000 |
| IT Hardware | 173,000 | 78,000 | | 518,000 | | | 769,000 |
| Total | 292,000 | 212,000 | 119,000 | 637,000 | 119,000 | 119,000 | 1,245,000 |

Transition to the Cloud

| Revenue Costs | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | Years 7-10 Per |
|---------------------------|---------|---------|---------|---------|---------|---------|-------------------|
| | | | | | | | annum |
| Data centre running costs | 68,000 | 68,000 | 58,000 | 48,000 | 40,000 | 38,000 | 31,000 |
| Software | 94,000 | 94,000 | 58,750 | 148,500 | 119,250 | 98,000 | 98,000 |
| licencing | | | | | | | |
| Hardware | 20,000 | 40,000 | 30,000 | 20,000 | 10,000 | 10,000 | 4,000 |
| Maintenance | | | | | | | |
| Transition support | | 25,000 | 25,000 | 25,000 | 25,000 | | |
| Cloud hosting | 3,000 | 91,815 | 111,075 | 130,336 | 145,744 | 159,226 | 159,226 |
| costs | | | | | | | |
| Total | 185,000 | 318,815 | 282,825 | 371,836 | 339,994 | 305,226 | 292,226 |

| Capital Costs | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | Years 7-10 total |
|------------------------|---------|---------|---------|---------|---------|---------|------------------|
| Software Licencing | 119,000 | 119,000 | 119,000 | | | | |
| IT Hardware | | 39,000 | | | | | |
| Cloud transition costs | 10,000 | 112,165 | 41,875 | 41,875 | 41,875 | | |
| Total | 129,000 | 270,165 | 160,875 | 41,875 | 41,875 | 0 | 0 |

Our current estimated costs (Do Nothing option and assuming current clients continue to use the data centre) for the required IT investment and to run the datacentre over a 10 year period stand at:

Total Revenue - £2,302,000 Total Capital - £2,743,000 Total Costs - £5,045,000

The total estimated costs to migrate to the cloud over a 10 year period stand at:

Total Revenue - £2,972,600 Total Capital - £643,790 Total Costs - £3,616,490

There is therefore a clear financial case for the transition to occur with a saving to the Council of £1,428,510 over the 10 year period.

Revenue Funding

The department currently has a revenue budget of £220k to fund the existing IT infrastructure. Over the first few years of the migration there will be shortfall to fund the project due to transition support, dual running costs of the Cloud system / existing estate and a movement away from perpetual software licences being able to be treated as capital expenditure. There will therefore be a requirement for £447k of revenue costs to be funded through the digital transformation programme contingent revenue reserves.

From April 2026 the increased revenue costs of £72k per annum will be funded through staff efficiencies due to less resources being required internally to manage the IT estate due to the transition.

As indicated in the report, this investment should unlock cost savings across the Council through transformation projects that will leverage these modern technology approaches, potentially leading to the sustainable running of our services into the future. At this stage, it is not possible to quantify the extent of these costs savings and where they will be achieved suffice to say that the investment is necessary to provide the foundation on which these transformation projects will be developed and delivered.

Capital Funding

There will be a requirement for additional capital funding of £248k for the project, the costs for software licencing and IT hardware in the capital cost table are already included within the Councils capital programme.

Not included within the costs above are other risks that the department will be susceptible to by not proceeding with the Cloud option. The department currently relies on rental income from other Councils and the NHS to help pay for the running costs of the data centre. It is possible that they will, at some stage, also migrate to the Cloud. At that point, without any further action, it would cost the department an additional £100k per annum. Equally, should it possible to close the Data Centre as a consequence, it would also remove the risk of the department having to replace other key infrastructure located within the data centre such as cooling, generator and fire suppression systems.

Costs for Microsoft Azure are negotiated by UK government, a new three year agreement was signed in May this year for a three year period to enable public sector organisations to continue to unlock the benefits of cloud computing and business applications. The requirement for Microsoft Azure will be added to the Council's current contract with Phoenix software which will be provided at cost price.

7. LEGAL IMPLICATIONS

The resulting procurement process shall be in accordance with the Public Contracts Regulations 2015 and the Council's Contract Procurement Procedure Rules.

All contracts will be in a form approved by legal officers in the Commissioning and Procurement team.

8. RESOURCE IMPLICATIONS

There will be an impact on ITM&G staff time throughout the project, however as the proposal is to phase a migration over a four year period this can be factored into existing work plans. There will a resource reduction for the ITM&G department of two FTE's from April 2026.

9. EQUALITY AND HEALTH IMPLICATIONS

Please select one of the options below. Page 55

| Option 1 | Equality Impact Assessment (EIA) not required – the EIA checklist has been completed. |
|----------|--|
| Option 2 | ☐ In determining this matter the Executive Member needs to consider the EIA associated with this item in advance of making the decision. |
| Option 3 | ☐ In determining this matter the Executive Board Members need to consider the EIA associated with this item in advance of making the decision. |

10. CONSULTATIONS

Consultation has already taken place with the Executive member for Digital and Customer Services.

11. STATEMENT OF COMPLIANCE

The recommendations are made further to advice from the Monitoring Officer and the Section 151 Officer has confirmed that they do not incur unlawful expenditure. They are also compliant with equality legislation and an equality analysis and impact assessment has been considered. The recommendations reflect the core principles of good governance set out in the Council's Code of Corporate Governance.

12. DECLARATION OF INTEREST

All Declarations of Interest of any Executive Member consulted and note of any dispensation granted by the Chief Executive will be recorded in the Summary of Decisions published on the day following the meeting.

| CONTACT OFFICER: | Peter Hughes, peter.hughes@blackburn.gov.uk |
|------------------|---|
| DATE: | 19/10/2021 |
| BACKGROUND | Digital Strategy – Exec Board April 2021 |
| PAPER: | |

Agenda Item 8.3

EXECUTIVE BOARD DECISION

REPORT OF: Executive Member for Growth and Development

LEAD OFFICERS: Strategic Director of Place

DATE: Thursday, 11 November 2021

BLACKBUR N DARWEN

PORTFOLIO(S) AFFECTED: Growth and Development

WARD/S AFFECTED: (All Wards);

KEY DECISION: Y

SUBJECT:

Approval of Local Flood Risk Management Strategy (LFRMS) 2021 - 2027

1. EXECUTIVE SUMMARY

The Flood and Water Management Act 2010 (FWMA) designates Blackburn with Darwen Borough Council as a Lead Local Flood Authority (LLFA) responsible for managing flood risk from 'local' sources; surface water, groundwater and ordinary watercourses. Section 9 of the FWMA requires LLFAs to 'develop, maintain, apply and monitor a strategy for local flood risk management in its area.'

The previous Local Flood Risk Management Strategy (LFRMS), a Blackburn with Darwen Borough Council only document, was produced in May 2014. Now that the Environment Agency have published the new National Flood and Coastal Erosion Risk Management Strategy for England, it is required that LLFAs update their Local Strategies to ensure they remain compliant with the requirements under Section 9 of the FWMA and wherever possible undertake this on a subregional footprint, given cross-boundary connections, hence the production of pan-Lancashire Strategy.

To this end, Blackburn with Darwen Borough Council, Lancashire County Council and Blackpool Council have compiled a joint Lancashire Local Flood Risk Management Strategy (LFRMS) 2021 – 2027, which has been subject to consultation with flood risk management authorities, wider partners and with members of the public (a full consultation report is presented in Appendix B).

Approval is now sought for the final draft of the joint Lancashire Local Flood Risk Management Strategy 2021 – 2027 (Appendix A).

2. RECOMMENDATIONS

That the Executive Board:

Approves the joint Lancashire Local Flood Risk Management Strategy 2021 – 2027 to fulfil the three Council's combined duty under Section 9 of the Flood and Water Management Act 2010.

3. BACKGROUND

Under the Flood and Water Management Act 2010 (FWMA), Blackburn with Darwen Council are designated as a Lead Local Flood Authority (LLFA). The FWMA places several duties and gives powers to LLFAs who are the responsible flood risk management authority (RMA) for managing Page 57

flood risk from 'local sources' which are surface water, groundwater and from ordinary watercourses. Section 9 of the FWMA places a duty on LLFAs to develop, maintain, apply and monitor a strategy for local flood risk management in its area (a 'local flood risk management strategy'). The current Local Flood Risk Management Strategy 2014 – 2017 was approved by the Executive Member in May 2014 and the replacement document has been delayed to ensure we combine the aspirations and priorities of the collaborating Councils.

Local flood risk management strategies are required to be consistent with the National Flood and Coastal Erosion Risk Management (FCERM) Strategy which is produced by the Environment Agency under Section 7 of the FWMA. The Environment Agency published the new National FCERM Strategy for England on 25 September 2020 and therefore LLFAs are required to review their local flood risk management strategies to ensure they remain consistent with the new national strategy and therefore compliant with Section 9.

The joint Lancashire Local Flood Risk Strategy 2021- 2027 has been developed in partnership by the three LLFAs within the County of Lancashire; Blackburn with Darwen Borough Council, Lancashire County Council and Blackpool Council. The Strategy has been produced in this way to reflect established FCERM sub-regional governance arrangements of the Lancashire FCERM Partnership. This Partnership includes representatives from all flood risk management authorities and wider partners (e.g. Rivers Trusts) across Lancashire and aims to facilitate effective partnership working on flood risk matters of local importance. A joint Local Flood Risk Management Strategy for Lancashire enables the Partnership to provide an environment in which delivery of the Strategy can be regularly monitored and recorded. It will create an opportunity to consider alignment of approach with other LLFAs within the county of Lancashire doing things once rather than three times, bringing potential for resource efficiency. Where issues/barriers occur working in partnership with other organisations may help to unlock these. As well as effective partnership working, this approach should encourage a catchment-based approach to managing local flood risks consistency across our County as advised by the principles laid out in the National FCERM Strategy. The timescale on the Strategy (2021 to 2027) reflects the six-year flood risk cycle as well as the timescale of the new national FCERM Investment Programme.

All parties have worked in collaboration and there has been a consultation undertaken on the proposed document.

The Lancashire Local Flood Risk Strategy 2021 - 2027 presents our vision under which sits 6 themes and 53 objectives.

Vision: By 2027, Lancashire will be a more flood resilient place that is better prepared for and more adaptive to risks, challenges and opportunities supporting a sustainable future for the people of Lancashire.

Theme 1: Delivering effective flood risk management locally

Theme 2: Understanding our local risks and challenges

Theme 3: Supporting sustainable flood resilient development

Theme 4: Improving engagement with our flood family

Theme 5: Maximising investment opportunities to better protect our businesses and communities

Theme 6: Contributing towards a climate resilient Lancashire

To monitor successful delivery of the strategy LLFAs and other 'action owners', set out in the Business Plan, will report progress to the Lancashire FCERM Partnership where delivery will be closely monitored on a quarterly basis in a way that is transparent and cooperative with our partners. This will be achieved through a progress report provided to the Strategic Partnership Group of the Lancashire FCERM Partnership on a quarterly basis; this is significant as it is chaired by Councillors from the LLFAs. The report will monitor progress of objectives against timescales and expected outputs and outcomes.

It is also proposed that the LLFAs will publish a joint annual monitoring report of the Business Plan, reflecting progress in delivering actions from our Strategy.

4. KEY ISSUES & RISKS

As a unitary authority, the Council is not only the Highway Authority, but also the Lead Local Flood Authority (LLFA). The Local Flood Risk Management Strategy (LFRMS) outlines the general approach to managing flood risk across the borough consistent with the Flood and Water Management Act 2010 ("the Act"). The Council's primary purpose for this strategy is to ensure that, as far as is reasonably practicable, the risk of flooding to human health and life, the environment, economic activity, infrastructure and cultural heritage arising from surface water, groundwater and ordinary watercourses is minimised.

This strategy will ensure a risk based approach is undertaken for maintenance of all flood risk assets and set objectives and a business plan for long-term growth and development.

The Council have several other policy documents to ensure that we undertake our duties effectively and efficiently, including the gully emptying policy.

5. POLICY IMPLICATIONS

The strategy complements Council's Local Plan and Highway Asset Management policy.

6. FINANCIAL IMPLICATIONS

No additional funding is required in the delivery of this policy as the statutory functions are funded by existing revenue streams and annual Capital Local Transport Plan allocations. Funding for drainage improvements to ensure homes and businesses are better protected from flooding is bid for on a 6 yearly cycle through Defra Grant in Aid funding and we are presently in year 1 of this cycle with a £3.6M allocation to deliver flood mitigation schemes.

7. LEGAL IMPLICATIONS

The Flood and Water Management Act 2010 (FWMA) designates Blackburn with Darwen Borough Council as a Lead Local Flood Authority (LLFA) responsible for managing flood risk from 'local' sources; surface water, groundwater and ordinary watercourses. Section 9 of the FWMA requires LLFAs to 'develop, maintain, apply and monitor a strategy for local flood risk management in its area.'

The Strategy is supported by a Strategic Environment Assessment and Habitats Regulations Assessment; both of these documents screen out any likely significant effects and recommend that any such effects are managed on a project/scheme level.

8. RESOURCE IMPLICATIONS

| None | | | |
|------|--|--|--|
| | | | |

| 9. EQUALITY AND HEALTH IMPLICATIONS |
|--|
| Please select one of the options below. |
| Option 1 ⊠ Equality Impact Assessment (EIA) not required – the EIA checklist has been completed. |
| Option 2 In determining this matter the Executive Member needs to consider the EIA associated with this item in ad page நேர்தர்கள் the decision. |

| Option 3 | ☐ In determining this matter the Executive Board Members need to consider the EIA associated with this item in advance of making the decision. | |
|----------|--|--|
| | | |

10. CONSULTATIONS

Formal external consolation has taken place for five weeks from 12 February to 19 March 2021. The consultation provided an opportunity for other flood risk management authorities, wider partner organisations (such as Rivers Trusts) and the public the opportunity to make comments on every section of the draft Strategy. The consultation was hosted on Council's website and signposted consultees to a survey held on Survey Monkey.

175 responses were received, and a full detailed report of the feedback can be found in Appendix B. The consultation draft Strategy has been amended to take account of this feedback in this final draft Strategy.

11. STATEMENT OF COMPLIANCE

The recommendations are made further to advice from the Monitoring Officer and the Section 151 Officer has confirmed that they do not incur unlawful expenditure. They are also compliant with equality legislation and an equality analysis and impact assessment has been considered. The recommendations reflect the core principles of good governance set out in the Council's Code of Corporate Governance.

12. DECLARATION OF INTEREST

All Declarations of Interest of any Executive Member consulted and note of any dispensation granted by the Chief Executive will be recorded in the Summary of Decisions published on the day following the meeting.

| CONTACT OFFICER: | Dwayne Lowe, Head of Highways, Transport and Network, |
|------------------|---|
| | dwayne.lowe@blackburn.gov.uk |
| DATE: | 14 th October 2021 |
| BACKGROUND | |
| PAPER: | |

Local Flood Risk Management Strategy for Lancashire

2021 - 2027







Executive Summary

In 2010 the Government introduced the Flood and Water Management Act to give new powers and responsibilities to local authorities to better manage the risk of local flooding in their areas. Under this, County and Unitary Councils became 'Lead Local Flood Authorities' (LLFAs). One of the new duties of a LLFA is to produce a Local Flood Risk Management Strategy (LFRMS).

This Strategy sets out how we intend to work with partners and our businesses and communities to manage the risk of flooding in the Lancashire up to 2027. It is of interest to all who live and work in Lancashire, as managing the risk of flooding requires action by everyone, as well as to organisations that have specific responsibilities for managing flood risk in the area such as the Environment Agency, Local Authorities and the Water and Sewerage Company.

Since the devastating flooding witnessed across Lancashire in December 2015 and other events since, it has been a priority to improve resilience to flooding as part of business planning. Considerable progress has already been made working with partners to secure funding for several large flood alleviation and coastal defence schemes, reducing risk to thousands of properties.

This Strategy sets the course for continuing this momentum, identifying where resources and efforts are to be concentrated so we can confidently say as we are continuing to improve our understanding of risk whilst delivering schemes and supporting our businesses and communities to better protect and improve flood resilience for the people of Lancashire.

The diagram below shows our vision and six priority themes for delivering effective local flood risk management, whilst our Business Plan identifies 41 key objectives for delivery to allow us to achieve our vision by 2027.



Contents

| Executive Summary | 1 |
|---|----------|
| 1.Introduction | 5 |
| 1.1. What is a Local Flood Risk Management Strategy? | 5 |
| 1.2. A Joint Strategy for Lancashire | 5 |
| 1.3 National Flood and Coastal Erosion Risk Management (FCERM) Strategy | 7 |
| 2.Context | 10 |
| 2.1. Legislative Framework | 10 |
| 2.2 National Assessments and Plans | 12 |
| 2.3 North West Regional Assessments and Plans | 16 |
| 2.4 District Level Assessments and Plans | 18 |
| 2.5. Types of Flooding and Flood Risk | 19 |
| 2.6 Responsibilities of Flood Risk Management Authorities | 25 |
| 2.7 Responsibilities of Individuals and Communities | 26 |
| 2.8 FCERM Governance in Lancashire | 27 |
| 2.9 Working with our Wider Partners | 24 |
| 2.10 Funding for FCERM | 30 |
| 3.Local Flood Risks & Challenges | 35 |
| 3.1 Local Flood Risks | |
| 3.2 Local Challenges | |
| 3.3 District Fact Files. | |
| 4.Opportunities | 75 |
| New FCERM Investment Programme 2021 -2027 | |
| 5.Our Vision for Lancashire | 87 |
| By 2027, Lancashire will be a flood resilient place responsive to risks, challenges and opportun supporting a sustainable future for the people of Lancashire | |
| Theme 1. Delivering Effective Flood Risk Management Locally | 87 |
| Theme 2. Understanding our Local Risks and Challenges | 8 |
| Theme 3. Supporting Sustainable Flood Resilient Development | 88 |
| Theme 4. Improving Engagement with our Flood Family | 88 |
| Theme 5: Maximising Investment Opportunities to better protect our Businesses and Commun | nities89 |
| Theme 6: Contributing towards a Climate Resilient Lancashire | 89 |
| 6 Our Rusiness Plan | 97 |

1. Introduction

1.1. What is a Local Flood Risk Management Strategy?

The Flood and Water Management Act (FWMA) 2010 established Unitary and County Councils as Lead Local Flood Authorities (LLFAs) responsible for leading the management of local flood risks in their area. In Lancashire, the Lead Local Flood Authorities are Blackburnwith-Darwen Council, Blackpool Council and Lancashire County Council

As Lead Local Flood Authorities we have a duty under Section 9 of the Flood and Water Management Act to produce a Local Flood Risk Management Strategy (hereafter referred to as 'the strategy').

The strategy is a document sets out actions to manage local flood risks, who will deliver them and how they will be funded and coordinated. It also explains the role of our partners (such as district and borough councils, water companies, parish and town councils) and how we will work together to manage local flood risks.

What is 'local flood risk'?

Local flood risk refers to the risk of flooding from surface water, groundwater, and ordinary watercourses. More detail on local flood risk can be found in Section 2.5: Types of Flooding and Flood Risk

The strategy aims to engage communities and partnerships. Helping people to prepare for flooding is a key part of delivering the strategy as this helps communities to understand and manage flood risk.

The strategy makes us more informed and more able to help protect the communities in Lancashire from the threat of local flooding.

1.2. A Joint Strategy for Lancashire

Blackpool Council, Blackburn with Darwen Council and Lancashire County Council, as Lancashire's Lead Local Flood Authorities, have worked together to produce this joint strategy for managing local flood risk because we recognise that water doesn't respect administrative boundaries and there are benefits of working in partnership to deliver a shared vision.

As we are working together closely on this joint strategy, 'Lancashire' will be used to describe the area covered by Lancashire County Council, Blackburn with Darwen and Blackpool Council.

The reasons that we have developed the Local Strategy together include:

- Blackburn with Darwen and Blackpool border Lancashire and we share many of the same catchments. Therefore, decisions that are made in Blackburn with Darwen and Blackpool can affect flood risk in Lancashire and vice versa. This is in agreement with the guiding principles of the National FCERM Strategy to have a catchment-based approach (CaBA).
- Planning decisions are often made in conjunction with each other, particularly on major developments that sit on the border of two or more councils. This helps ensure that partnership working is a fundamental aspect of our strategic decision making
- We sit on many of the same flood risk management and coastal partnerships that exist in the North West. We can therefore present a consistent strategy and voice to others in the region, and the strategy will provide a framework to further strengthen our Lancashire Flood and Coastal Erosion Risk Management (FCERM) Partnership governance and regional profile.



Figure 1: Area covered by the Lancashire Flood Risk Management Strategy

1.3 National Flood and Coastal Erosion Risk Management (FCERM) Strategy

The Flood and Water Management Act gives the Environment Agency a national strategic overview role for flood risk management and places on them a requirement to develop the National Strategy for Flood and Coastal Erosion Risk Management in England. This strategy provides a framework for the work of all Lead Local Flood Authorities.

The National Strategy sets out the Government's national approach to flood risk and coastal erosion through its long-term vision and ambitions for managing this risk, and the measures to deliver it. It sets the context for and informs on the production of local flood risk management strategies by Lead Local Flood Authorities. Local strategies provide the framework for the delivery of local improvements needed to help communities to manage local flood risk. They also aim to encourage more effective flood risk management by enabling people, communities, business and the public sector to work together.

The vision and ambitions of the National Strategy are set out below. This strategy recognises the need to integrate flood and water management within a wide range of direct and indirect agendas to enable our businesses, communities and infrastructure to become better adapted to flood risk whilst at the same time helping to tackle climate change and biodiversity challenges.

National Flood and Coastal Erosion Risk Management Strategy

Vision: A nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100.

Ambitions:

- **Climate resilient places:** working with partners to bolster resilience to flooding and coastal change across the nation, both now and in the face of climate change
- Today's growth and infrastructure resilient in tomorrow's climate: Making the right investment and planning decisions to secure sustainable growth and environmental improvements, as well as resilient infrastructure.
- A nation ready to respond and adapt to flooding and coastal change: Ensuring local people understand their risk to flooding and coastal change, and know their responsibilities and how to take action

Our Local Flood Risk Management Strategy supports the local delivery of the high level ambitions set out in the Environment Agency's *National Flood and Coastal Erosion Risk Management (FCERM) Strategy* by ensuring our vision and themes are locally appropriate whilst remaining in alignment with those of the national strategy.

Figure 2 maps the national ambitions against our local themes and objectives to show this alignment. Section 2 gives an overview of other national, regional and local assessment and plans relevant to flood and water management in Lancashire.

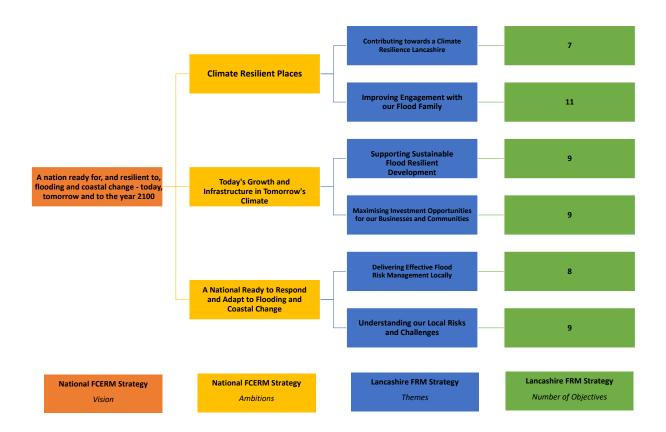


Figure 2: Alignment of National FCERM Strategy ambitions with Local Flood Risk Management Strategy Delivery



2.1. Legislative Framework

The legislative framework sets out the roles and responsibilities flood risk management authorities have in flood and water management.

Flood Risk Regulations (FRR) 2009

These regulations transpose the EU Floods Directive into UK law and made County and Unitary Councils Lead Local Flood Authorities (LLFAs) with primary responsibility for managing local flood risk. Additionally, they imposed duties on the risk management authorities to co-operate to:

- Prepare preliminary assessment reports about past floods and identify areas of significant risk.
- Prepare flood risk maps and flood hazard maps for any areas identified as having a significant risk of flooding.
- Prepare flood risk management plans, to include objectives for managing the flood risk and proposals for how this will be achieved.

Flood and Water Management Act (FWMA) 2010

The Flood and Water Management Act aims to improve both flood risk management and the way water resources are managed. It creates clearer roles and responsibilities through defining flood 'risk management authorities' and instils a risk-based approach to flood and water management. There is a lead role for local authorities in managing local flood risks and a strategic overview role of all flood risk for the Environment Agency.

Section 13 of the FWMA places a duty to cooperate on the flood risk management authorities in the exercise of their functions. The way in which we deliver this is through working in partnership. The Lancashire FCERM Partnership is the forum through which this is facilitated.

Town & Country Planning (Development Management Procedure) (England) Order 2015

In April 2015 planning legislation was amended to make LLFA's statutory consultees for all major development proposals with surface water implications during the planning process. This applies to development within any flood zone.

The Environment Agency is a statutory consultee for major development proposals within Flood Zone 2 and Flood Zone 3, and for developments in Flood Zone 1 within an area defined by the Agency as having critical drainage problems.

Land Drainage Act (LDA) 1991 (as amended by the FWMA 2010)

On 6th April 2012, Schedule 2 (Sections 31, 32 and 33) of the FWMA amended the Land Drainage Act 1991 and transferred powers for the regulation of ordinary watercourses to the Council as LLFA. The powers of the LLFA to regulate ordinary watercourses broadly consist of two elements; the issuing of consents for any changes to ordinary watercourses that might obstruct or alter the flow of an ordinary watercourse and enforcement powers to rectify unlawful and potentially damaging work to a watercourse.

Coast Protection Act 1949 (as amended by FWMA 2010)

This Act gives permissive powers to maritime local authorities (Coast Protection Authorities) to manage the risks associated with coastal erosion and flooding from the sea. The Act also defines the boundaries of "the sea" which impacts on funding arrangements for capital works.

Highways Act 1980

Section 41 of the Act requires the Highway Authority to maintain the highway at public expense. A highway authority is under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice. It was determined in a test case that this also includes flood water.

Climate Change Act 2008

This requires a UK-wide climate change risk assessment every five years accompanied by a national adaptation programme that is also reviewed every five years.

This legislation gives the Government power to require public bodies and statutory organisations, such as water and sewerage companies, to report on how they are adapting to climate change.

Water Framework Directive (2000/60/EC) (WFD)

This is a European Directive which aims to protect and improve the water environment. It is implemented through River Basin Management Plans (RBMPs), and establishes a legal framework for the protection, improvement and sustainable use of water bodies across Europe.

WFD applies to all water bodies, including rivers, streams, brooks, lakes, estuaries and canals, coastal waters out to one mile from low water, and groundwater bodies.

Water Industry Act 1991

This legislation relates to the water supply and the provision of wastewater services in England. It sets out the main powers and duties of the water and sewerage companies and defines the powers of the Water Services Regulation Authority (Ofwat).

Reservoir Act 1975

Reservoir that are capable of holding more than 25,000 m3 of water are regulated under this act. Undertakers (owners and/or operators) of this reservoirs are required to register them with EA and fulfil the responsibilities under this act.

2.2 National Assessments and Plans

In addition to the *National Flood and Coastal Erosion Risk Management (FCERM) Strategy,* there are a number of national documents which are relevant to flood and water management.



Storm ciara and storm Dennis Dunes Damage Feb 2020

A Green Future: 25 Year Environment Plan

The 25 Year Environment Plan (YEP), published in 2018, sets out what government will do to improve the environment, within a generation, focusing on improving the UK's air and water quality and protecting threatened plants, trees and wildlife species. It details how those in government will work with communities and businesses to do this over the next 25 years. **You can read the full plan here.**

There are 10 goals of the Environment Plan (Figure 3), and the one most applicable to flood and water management is 'reducing the risks of harm from environmental hazards' which will be achieved through:

- making sure everyone is able to access the information they need to assess any risks to their lives and livelihoods, health and prosperity posed by flooding and coastal erosion.
- bringing the public, private and third sectors together to work with communities and individuals to reduce the risk of harm
- making sure that decisions on land use, including development, reflect the level of current and future flood risk.
- boosting the long-term resilience of our homes, businesses and infrastructure.



- Clean air
- · Clean and plentiful water
- Thriving plants and wildlife
- Reducing the risks of harm from environmental hazards
- Using resources fromnature more sustainably and efficiently
- Enhancing beauty, heritage and engagement with the natural environment
- Mitigating and adapting to climate change
- Minimising waste
- Managing exposure to chemicals
- · Enhancing biosecurity

The Ten Point Plan for a Green Industrial Revolution

The Ten Point Plan aims to lay the foundations for a Green Industrial Revolution to support a green recovery mobilising £12 billion of investment in creating green jobs and a green economy. *You can read the plan here*.

In relation to flood and water management, the plan aims to support communities in better adapting to and offering protection from the effects of climate change by investing in flood defences and using nature-based solutions to increase flood resilience; this is covered by point nine 'protecting our natural environment'.

The government is committing £5.2 billion investment in flood defences in a 6 year programme for flood and coastal defences from April 2021, which will support 2,000 flood schemes across every region of England and better protect over 336,000 properties from risk of flooding. It will also fund new innovative approaches to work with the power of nature to not only reduce flood risk, but deliver benefits for the environment, nature and communities.

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied by Local Planning Authorities (LPA) and decision-makers, both in drawing up plans and making decisions about planning applications.

Section 14 of the NPPF sets out how the challenges of climate change, flooding and coastal change will be approached through planning and development.

You can view the National Planning Policy Framework here.

The interpretation of the NPPF is supported by the Planning Practice Guidance (PPG). This is a web-based resource which sets out how the government's planning policies are expected to be applied in England. The flood risk and coastal change section of the PPG advises how to take account of and address the risks associated with flooding and coastal change in the planning process.

In broad terms, this national framework requires plans and developments to:

- Take into account climate change over the longer term to avoid increased vulnerability to the range of impacts arising from climate change.
- Develop policies to manage flood risk from all sources, taking account of advice from the flood risk management authorities (RMAs).
- Ensure new development does not increase flood risk elsewhere.
- Avoid inappropriate development in areas at risk of flooding by directing development away from areas at highest risk.
- Where development is necessary, make it safe without increasing flood risk elsewhere and direct the most vulnerable development to areas of lowest flood risk.
- Be supported by an appropriate site-specific Flood Risk Assessment, where one is required.
- Ensure development is appropriately flood resilient and resistant.
- Major development should incorporate sustainable drainage systems (SuDS) which should meet the Technical Standards for SuDS.

2.3 North West Regional Assessments and Plans

North West Flood Risk Management Plan (FRMP)

The Flood Risk Management Plan (FRMP) explains the risk of flooding from rivers, the sea, surface water, groundwater and reservoirs. FRMPs set out how flood risk management authorities will work with communities to manage flood and coastal risk.

The North West FRMP covers the river basin catchments of Lancashire and sets out information on flood risk for the North West river basin district from 2015 to 2021 and a summary of the aims and actions needed to manage the risk. You can access the current **North West FRMP** <u>here</u>. The Environment Agency is leading work to produce a new, updated North West FRMP that will be available by 2022.

The FRMP is split into 6 documents. These are:

- the summary which gives a high level overview of the FRMP
- Part A includes the legislative background and information for the whole river basin district (RBD)
- Part B includes detail about each catchment, the flood risk areas and other strategic areas
- Part C includes the measures identified to manage flood risk across the river basin district
- the Strategic Environmental Assessment (SEA) statement of particulars includes the potential impacts on people and the environment when implementing the measures in the FRMP
- the Habitat Regulations Assessment (HRA) details the potential impacts on designated European sites when implementing the measures in the FRMP

Catchment Flood Management Plans (CFMP)

Catchment Flood Management Plans (CFMPs) are written by the Environment Agency and aim to establish flood risk management policies which will deliver sustainable flood risk management for the long term across a catchment.

CFMPs consider all types of inland flooding, from rivers, groundwater, surface water and tidal flooding.

The Shoreline Management Plan (SMP) consider flooding from the sea. CFMPs also include:

- the likely impacts of climate change
- the effects of how we use and manage the land
- how areas could be developed to meet our present day needs without compromising the ability of future generations to meet their own needs

The CFMPs are grouped by river basin district and Lancashire falls within the **North West River Basin District**. CFMPs which are relevant to Lancashire are:

- **Alt Crossens** Covers West Lancashire
- Douglas Covers Chorley, South Ribble, West Lancashire
- Irwell Covers Rossendale
- Lune Covers Lancaster and parts of Cumbria
- Ribble Covers Blackburn, Burnley, Fylde, Hyndburn, Pendle, Preston, Ribble Valley, Rossendale
- Wyre Covers Blackpool, Wyre and Preston

Whilst not fully superseded by the Flood Risk Management Plan (FRMP), any actions from CFMP which are still valid will be carried forward to the new FRMP in 2022. CFMPs are, however, still useful in setting 'policies' for each sub-area or 'policy unit'. There is also much more detail at a catchment level in CFMPs, for example about how long different rivers take to rise in response to heavy rainfall.

North West RFCC Business Plan

The North West Regional Flood and Coastal Committee (RFCC) is one of twelve RFCCs in England, established under the Flood and Water Management Act 2010. The Committee brings together, with an independent Chair, the flood risk management authorities as a regional partnership to take an overview of flood and coastal erosion risk management. They also seek to promote investment and encourage innovation which is good value for money and benefits communities.

The Committee's Business Plan sets out what it wants to achieve and how. The Business Plan is not a statutory document but supports the Committee in transparently communicating and engaging with those who will benefit from the delivery of this work. Business Plan delivery is supplemented by an annual action plan setting out the actions that will be delivered in each financial year in more detail, and is closely monitored on a quarterly basis.

You can find the Business Plan here.

Drainage and Wastewater Management Plan (DWMP)

United Utilities will publish their draft Drainage and Wastewater Management Plan in summer 2022, to support their business plan for the 2024 Price Review. Yorkshire Water is working to a similar programme.

Drainage and Wastewater Management Plans (DWMP) identify ways that organisations to work together to improve drainage and environmental water quality. It provides the basis for more collaborative and integrated long-term planning by water companies, working with other organisations that have responsibilities relating to drainage, flooding and protection of the environment. It makes use of the tools and approaches below to enable investment to be targeted more effectively and provide customers and stakeholders with better information about the UK's drainage and wastewater services.

2.4 District Level Assessments and Plans

Preliminary Flood Risk Assessment (PFRA)

A Preliminary Flood Risk Assessment (PFRA), and the identification of 'flood risk areas', is required to be produced by Lead Local Flood Authorities (LLFAs) under Section 10 of the Flood Risk Regulations (FRRs) 2009. The first PFRAs were produced in 2011 and Section 17 of the FRRs required LLFAs to review their PFRA and 'flood risk areas' in 2018. Subsequent reviews must be carried out at intervals of no more than 6 years.

A PFRA is an assessment of floods that have taken place in the past and floods that could take place in the future. It considers flooding from surface water runoff, groundwater and ordinary watercourses. PFRAs are used to identify areas that are at risk of significant flooding. These areas are called 'flood risk areas.' Existing 'flood risk areas' have been identified using guidance produced Defra and represent 'clusters' of areas where flood risk is an issue and where 30,000 people or more live.

PFRAs include:

- a summary of information on significant historic floods;
- a summary of information on future flood risks based primarily on the Environment Agency's national datasets;
- a spreadsheet containing information for reporting to the European Commission.

PFRA's for Lancashire can be found on Blackburn with Darwen, Blackpool and Lancashire County Council websites.

Strategic Flood Risk Assessment (SFRA)

A Strategic Flood Risk Assessment (SFRA) is a study carried out by one or more Local Planning Authorities to assess the risk to an area from flooding from all sources, now and in the future, taking account of the likely impacts of climate change, and to assess the impact that land use changes and development in the area will have on flood risk.

The SFRA is used by the Local Planning Authority to:

- determine the variations in risk from all sources of flooding across their areas, and also the risks to and from surrounding areas in the same flood catchment;
- inform the sustainability appraisal of the Local Plan, so that flood risk is fully taken into
 account when considering allocation options and in the preparation of plan policies,
 including policies for flood risk management to ensure that flood risk is not increased;
- apply tests (the Sequential and Exception Tests) when determining land use allocations;
- identify the requirements for site-specific flood risk assessments in particular locations, including those at risk from sources other than river and sea flooding;

- determine the acceptability of flood risk in relation to emergency planning capability;
- Consider opportunities to reduce flood risk to existing communities and developments through better management of surface water, provision for conveyance and of storage for flood water.

SFRAs in Lancashire can be viewed on the Unitary and District Council Local Planning Authority websites.

2.5. Types of Flooding and Flood Risk

What causes flooding?

Flooding occurs when water inundates land which is land not normally covered by water, typically where there is too much water or because the water is in the wrong place. Some floods develop over days as a result of water taking its time to reach watercourses and overwhelming them, whilst flash floods generate quickly following intense rainfall or rapid snow melt.

Whilst flooding is a natural phenomenon, it can result in wide ranging environmental, social and economic impacts when it interacts negatively with the human environment. There is hence a need to manage water and flood risk to ensure its negative impacts are minimised.

What is flood risk?

The definition of 'risk' is the combination of the probability (likelihood or chance) of an event happening and the consequences (impact) of it occurring. Floods can happen often or rarely and have minor or major consequences. Where the probability and the consequences of flooding are high, then an area is considered to be at a high risk of flooding.

Flood Risk = Probability x Consequences

Types of Flood Risk

There are many different types of flood risk and flooding can be caused by the interaction between one or more types of flood risk. This means that flooding can be complex to understand and difficult to address, so it is important that all flood risk management authorities work closely together in understanding and managing flood risks.

Figure 4 demonstrates the different types of flood risk, whilst Table 1 describes these risks and explains which flood risk management authority is responsible for managing each risk.

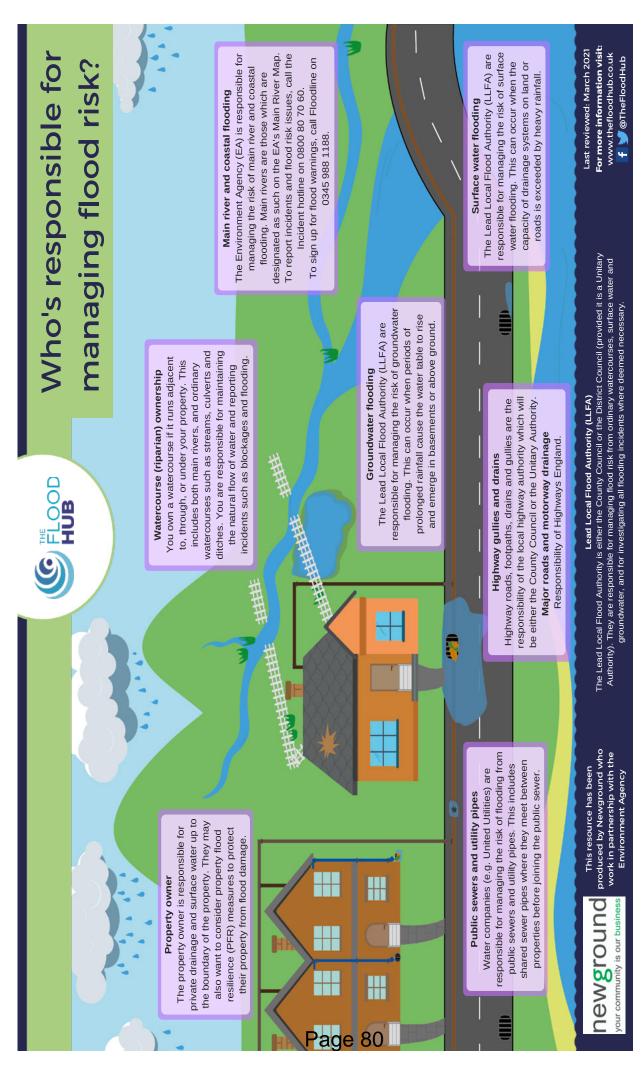


Figure 4: Types of flood risk The Flood Hub.

Table 1: Types of flood risk and responsible flood risk management authority

Surface water flooding is caused by the build-up of water on surfaces because it cannot soak into the ground due to it being hard paved, frozen, baked solid etc., due to the lay of the land, or where rainfall exceeds the infiltration capacity of the soil. It often occurs during intense or prolonged rainfall events.

Responsible Authority

Lead Local Flood Authority (Blackpool, Blackburn-with-Darwen and Lancashire County Council)



Surface water flooding in Thornton – 11 August 2020

Groundwater flooding occurs when the water table (the water level below ground) rises above the ground surface. During periods of heavy and prolonged rainfall, the water level in the ground may rise to such an extent that it seeps into property basements, or the emergence of groundwater at the surface (can often be a natural spring) may cause damage to properties and infrastructure. Some areas are known to be more prone to groundwater flooding than others due to the naturally high level of the water table level in that area.

Responsible Authority

Lead Local Flood Authority (Blackpool, Blackburn-with-Darwen and Lancashire County Council)

Ordinary watercourses flooding occurs when heavy and/or prolonged rainfall causes the watercourse to break its banks or when blockages occur (for example by debris or when infrastructure fails). Ordinary watercourses typically smaller brooks, drainage channels, ditches, cuts, dikes, sluices, soughs or culverts that may only convey water for a short length of time in a year.



Lead Local Flood Authority

(Blackpool, Blackburn-with-Darwen and Lancashire County Council)

Ewood Mill Race

Highway flooding (non-trunk roads) is the accumulation of water on the adopted Highway network surface. Highway flooding may be caused by blockages or capacity issues in Highway drainage systems, or simply by sheer volume of rainwater falling on the carriageway, which the existing drainage network cannot cope with has the responsibility to manage flood risk on

local authorities-maintained road network.



Highway flooding on the A584 in Freckleton 11 August 2020

Highway flooding (trunk roads and motorways) is the accumulation of surface water on the strategic road network maintained by National Government Body.

Coastal flooding typically occurs when strong winds, wave action, high tides and/ or storm surges, or a combination of these factors during storm conditions, cause coastal overtopping.

Responsible Authority

Highway Authority

(Blackpool, Blackburn-with-Darwen and Lancashire County Council)



Meins Road, Blackburn

Highways England

Environment Agency

Main Rivers are larger rivers that can span several counties but also include some smaller watercourses (those which are deemed to require specialist management). The Department for Environment, Flood and Rural Affairs (Defra) have set the criteria for defining these rivers as Main Rivers in England and Wales.

A666, Darwen

Sewer flooding can occur when large volumes of rainwater enter the public sewer system or when the public sewer system becomes blocked. Flooding from private sewers is the responsibility of the landowner.

Reservoir flooding occurs when a reservoir fails or breaches resulting in this water escaping and flooding on to the adjacent land. Reservoirs are artificially created ponds or lakes that are usually formed by building a dam (wall), across a river or watercourse. This type of flooding is considered to be very low risk as it is highly unlikely to occur.

Canal flooding can be as a result of excessive surface water running off or discharging to an artificially created waterway. The water levels within canals can vary (although not as much as rivers) due to many factors including proximity to controlled/uncontrolled inflows, lock usage etc.

Canal and River Trust

Responsible Authority

Environment Agency



Flooded power station at Lancaster in December 2015

Water and Sewerage Companies

Water and Sewerage Companies

2.6 Responsibilities of Flood Risk Management Authorities

Lead Local Flood Authorities bring together all relevant Flood Risk Management Authorities to manage flood risk. No single body has the means to reduce all sources of flooding and therefore everyone has a part to play in effective flood risk management for Lancashire.

Figure 5 illustrates the key Flood Risk Management Authorities that work together in managing flood risk across Lancashire.

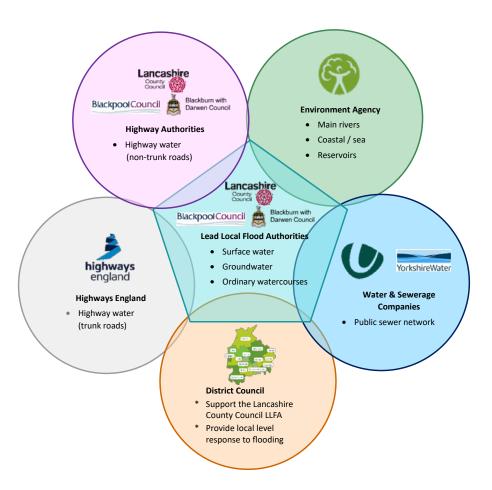


Figure 5: Flood Risk Management Authorities in Lancashire

Under Section 13 of the Flood and Water Management Act 2010, flood risk management authorities each have a role to play in managing flood risk at a local level and must cooperate and ensure a partnership approach is taken to address concerns and maximise opportunities to holistically manage flood and coastal erosion risks.

Table 2 explains the key responsibilities, duties and powers placed upon flood risk management authorities in Lancashire by the Flood & Water Management Act 2010.

We have clearly set out how we intend to do this through the delivery of actions set out within our Business Plan and governed through the Lancashire Flood and Coastal Erosion Risk Management (FCERM) Partnership and the regional governance of the North West Regional Flood and Coastal Committee (RFCC). You can find out more about FCERM governance in 2.8 below and on The Flood Hub.

Table 2: Key Responsibilities, Duties and Powers of Flood Risk Management Authorities

| Flood & Water Management Act | | Lead Local Flood Authority | Highway Authority | District Councils | Environment Agency | Water and Sewerage Companies |
|------------------------------|---|----------------------------------|----------------------|-----------------------------|-----------------------|------------------------------------|
| Section 7 | Develop the National Flood and Coastal Erosion Risk Management Strategy | | | | ✓ | |
| Section 9 | Develop a Local Flood Risk Management Strategy | √ | | | | |
| Section 13 | Cooperate with relevant authorities in exercising flood and coastal erosion risk management functions | √ | √ | √ | √ | √ |
| Section 14 | Power to request information | ✓ | | | ✓ | |
| Section 17 | Raise a Local Levy for Flood and Coastal Erosion Risk Management | | | | ✓ | |
| Section 19 | Investigate Flooding to a locally derived threshold. | ✓ | | | | |
| Section 21 | Maintain a register of structure and features affecting flood risk | ✓ | | | | |
| Sections 22 - 26 | Establish a Regional Flood and Coastal Committee and raise a Local Levy for FCERM | | | | ✓ | |
| Section 27 | Contribute towards sustainable development | ✓ | ✓ | ✓ | ✓ | ✓ |
| Section 39 | Local Authorities are to manage flooding, water levels and coastal erosion in the interests of nature conservation, the preservation of cultural heritage or people's enjoyment of the environment. | ✓ | | ✓ | | |
| Schedule 1 | Power to designate structure and features | ✓ | | ✓ | ✓ | |
| Schedule 2 | Ordinary Watercourse Consenting and Enforcement (by amendment to the Land Drainage Act 1991) | ✓ | | | | |
| Town & Cour | ntry Planning (Development Management Proced | lure) (Engla | nd) Order 2 | 015 | | |
| Part 4 | Identifies statutory consultees in the development management planning process | √ | √ | | ✓ | |

2.7 Responsibilities of Individuals and Communities

Business, land and property owners

Whilst there are a number of organisations and flood risk management authorities who have a responsibility for the management of the different sources of flooding, an individual property owner or business still has the responsibility to take measures to protect their property from flooding.

Flooding can still occur despite all stakeholders meeting their responsibilities and therefore, it is important that business, land and property owner take appropriate steps to ensure that their property and contents are protected where they are known to be at risk.

The Flood Hub is a North West regionally funded website to support our communities in understanding how they can become more resilient and resistant to flooding.

Riparian Owners

A riparian landowner is defined as someone who owns land or property next to or over a river, stream, ditch or culvert/pipe that forms part of a watercourse. The riparian landowner is responsible for the section of watercourse which flows through their land. If a land boundary is defined next to a watercourse, it is assumed that the landowner owns the land up to the centre of the watercourse, unless it is owned by someone else.

Under the Land Drainage Act (1991), riparian landowners have a legal responsibility to maintain the free passage of water through the section of watercourse that flows through their land.

The Flood Hub is a North West regionally funded website and provide advices and guidance on riparian ownership.

Developers

Developers are responsible for managing flood risk on-site during development. This should be considered as part of the site-specific flood risk assessment, where required, and in the sustainable drainage strategy for the site helping to ensure any phasing of construction considers how water will be managed. The Local Planning Authority, in consultation with flood risk management authorities, is responsible for ensuring development is carried out in accordance with approved plans and, where this is breached, taking appropriate enforcement action.

2.8 FCERM Governance in Lancashire

The structure of flood and coastal erosion risk management (FCERM) governance in Lancashire can be split into three levels as shown in Figure 6 below:

| | Flood & Water Management | | | |
|-----------------|---|--|--|--|
| North West | Regional Flood and Coastal Committee (RFCC) | | | |
| | RFCC Finance Sub Group | | | |
| | Task Groups (as required) | | | |
| Lancashire-Wide | Lancashire FCERM Partnership | | | |
| | Strategic Partnership | | | |
| | Tactical Officers Group | | | |
| District | 14x Operational 'Making Space for | | | |
| | Water' Groups | | | |
| | | | | |

Figure 6: Regional and Sub-Regional Governance of Flood and Water Management

North West Regional Flood and Coastal Committee (RFCC)

The North West Regional Flood and Coastal Committee (RFCC) is one of twelve RFCCs established in England by the Environment Agency under Section 22 of the Flood and Water Management Act. The RFCC brings together Elected Members (Councillors) appointed by Lead Local Flood Authorities (LLFAs) and independent members with relevant experience for three key purposes:

- 1. to ensure there are coherent plans for identifying, communicating and managing flood and coastal erosion risks across catchments and shorelines;
- 2. to provide a link between the Environment Agency, LLFAs, other risk management authorities, and other relevant bodies to build a mutual understanding of flood and coastal erosion risks in its area, and;
- 3. to use this understanding to encourage efficient, targeted and risk-based investment in flood and coastal erosion risk management that represents value for money and benefits local communities.

The chair of the RFCC, is independent and was appointed by the Secretary of State for the Department for Environment, Food and Rural Affairs. The North West RFCC has a Business Plan which provides more information about the Committee and its work.

The Committee is supported by a Finance Sub-Group which provokes more detailed discussion and consideration of financial aspects of Committee business. The Finance Sub-Group meets four times a year, typically two/three weeks before the main Committee meeting and is chaired by a Member of the North West RFCC.

North West and North Wales Coastal Group

The Coastal Group brings together the organisations who manage the coastline from Great Ormes Head in Llandudno to the Solway Firth on the Cumbria – Scotland border. The Group examines the social, economic and environmental issues that arise along the changing coastline and seek to find the best policies, usually using the Shoreline Management Plan and associated Coastal Strategies to address these matters.

The Group is supported by two sub-groups: one for Liverpool Bay and a Northern Sub Group covering north of this. The Northern Sub Group is the sub group relevant to Lancashire and representatives from our Coast Protection Authorities – Blackpool, Fylde, Lancaster, West Lancashire and Wyre Councils - attend sub-group meetings held twice a year along with other partners including the Environment Agency and United Utilities.

Overseeing delivery of the Shoreline Management Plan (SMP) is the Coastal group's is key priority. It makes recommendations as to whether maintenance of coastal defences should continue as they are at present ('hold the line'), whether maintenance (if any) should cease ('no active intervention') or whether defences, perhaps in years to come, might be set back further ('managed realignment'). Walls and embankments are often designed to protect against both flooding (flood defence/sea defence) and erosion (coast protection).

You can find out more about the North West and North Wales Coastal Group here.

Lancashire FCERM Partnership

The Lancashire FCERM Partnership is one of five sub-regional FCERM Partnerships in the North West, alongside the Cumbria, Greater Manchester, Merseyside and Cheshire Mid-Mersey FCERM Partnerships. These partnerships were created by the North West RFCC to support local governance of flood and water management and of coastal processes, enabling local issues and priorities to be governed and reflected appropriately at the North West RFCC.

The Lancashire FCERM Partnership is a collective grouping of flood risk management authorities who come together quarterly to take an overview of flood and coastal erosion risk management across Lancashire, to identify priorities and steer the use of our resources, to vote on changes to the Local Levy, and to support investment which is good value for money and benefits our communities.

There are two levels to the partnership:

Strategic Partnership Group



Elected Members and senior

representatives from Risk Management Authorities meet four times a year.

This group is chaired by a Councillor and sets the strategic direction for joint working and management of flood and coastal erosion risk of the Partnership against its resources, local risks and challenges.

Group agrees the timetable delivery of actions identified in the Strategy's Business Plan according to many factors such as delivery timescales and what will have the greatest benefit to our at-risk communities.

Tactical Officers Group

This is chaired by a Local Authority officer and is where technical lead officers deliver actions set by the Strategic Partnership Group. The group meets four times a year to coordinate delivery, share skills and implement decisions.

Lead officers also report on issues, successes and identify ways to continually improve the management of flooding and coastal erosion risks into the future.

Local Authority Operational 'Making Space for Water' Groups

Operational 'Making Space for Water' Groups are district-level technical partnership groups set up to discuss locally specific flood and coastal, where applicable, issues within their Local Authority area and provide a forum to drive forward solutions, where possible, through working in partnership.

These technical meetings are arranged and chaired by Local Authorities who, where applicable, feed outcomes of this meeting up to Tactical Officers Group and to the Northern Coastal Sub-Group as well as feeding information down to the Operational 'Making Space for Water' Group.

2.9 Working with our Wider Partners

Catchment Partnerships

Catchment Partnerships are local formed groups which advocate for a Catchment Based Approach (CaBA) to undertake integrated management of land and water, addressing each river catchment as a whole and delivering crosscutting practical interventions on the ground. These result in multiple benefits including improvements to water quality, enhanced biodiversity, reduced flood risk, resilience to climate change, more resource efficient and sustainable businesses and, health and wellbeing benefits for local communities as they engage with and take ownership of their local river environment.

Numerous organisations and sectoral interests are involved with Catchment Partnerships in Lancashire, including the Environment Agency, Water and Sewerage Companies, Local Authorities, Landowners, Wildlife Trusts, National Farmers Union, Academia and Local Businesses.

In Lancashire there are five Catchment Partnerships covering the Alt Crossens, Douglas, Irwell, Lune, Ribble and Wyre Catchments which are chaired by Rivers Trusts and Groundwork.

You can find out more about them here.

Whilst not a flood risk management authority, Catchment Partnerships are highly recognised and valued groups which support us in, where possible:

- delivering a catchment-based approach (CaBA) to flood and water management
- helping to drive improvements in water and bathing water quality locally
- championing the use and delivery of natural flood management techniques across Lancashire.

Flood Action Groups (FIAGs)

A Flood Action Group (FIAG) is a voluntary group of local residents who meet on a regular basis to work on behalf of the wider community to help to try and reduce the impact of future flood events. Across Lancashire, there are around 50 FIAGs and, whilst the focus of the group can vary, is typically based around emergency planning and can also tackle local issues, whilst providing a unified voice for the community to communicate ideas and queries to others.

30

It is within the remit of each individual group to decide on its own roles, responsibilities, aims and objectives. For more information please see The Flood Hub.

Detailed information describing the achievement of a Community Group at Churchtown and future opportunities for other Flood Action groups can be found on this link:

https://thefloodhub.co.uk/wp-content/uploads/2019/12/Churchtown-Flood-Action-Groupcase-study.pdf

Lancashire Resilience Forum

The Lancashire Resilience Forum (LRF) is a multi-agency partnership made up of representatives from local public services, including the emergency services, local authorities, the NHS, the Environment Agency, United Utilities, Maritime Coastguard Agency and others. These agencies are known as Category 1 Responders, as defined by the Civil Contingencies Act.

These multi-agencies work together to prepare and respond to emergencies in Lancashire, including flooding. You can find out more about the Lancashire Resilience Forum here.

2.10 Funding for FCERM

FCERM Investment Programme 2021 - 2027

The Flood and Coastal Erosion Risk Management (FCERM) Investment Programme is a Defra capital investment plan to better protect homes and non-residential properties, such as businesses, schools and hospitals, from flood risk and coastal erosion. The conditions of the Investment Programme are that schemes must attract at least 15% of partnership funding and deliver 10% efficiency saving on projects. This flood and coastal erosion resilience partnership funding policy was introduced to spread the cost between government funding and local funding partners.

In the 2020 Budget, the government announced that it will double its investment in flood and coastal defences in England, compared to the previous capital investment plan, to £5.2 billion to better protect a further 336,000 homes and non-residential properties as well as avoiding £32 billion of wider economic damages to the nation.

The Central Government also announced a new £200 million resilience fund to pilot innovative approaches to improving flood resilience between 2021 and 2027. This will support 25 local areas to take forward wider innovative actions that improve their resilience to flooding and coastal erosion.

In addition to doubling its spending on flood and coastal defences, the government has worked with the Environment Agency to update how the level of government funding is allocated to projects. The changes will take account of the wider environmental and social benefits that come with reducing the risk of flooding.

The changes will include:

- updated payments to account for inflation and based on new evidence on the overall impacts of flooding, such as mental health;
- increased payments for flood schemes which also create a range of environmental benefits:
- more funding for flood schemes which also protect properties that will later become at risk of flooding due to climate change; and
- a new risk category which will enable schemes that prevent surface water flooding to qualify for more funding.

New funding streams will also mean:

- more money for flood defence schemes that help to protect critical infrastructure such as schools, hospitals, roads and railways; and
- more money to upgrade existing Environment Agency defences.

Funding for Delivering Projects

The following funding sources allow the LLFA to reduce flood and coastal erosion risk through the delivery of projects:

- Flood Defence Grant in Aid (GiA) This is money from Defra which is administered by the Environment Agency. The amount of Grant in Aid available to each capital scheme is calculated by the Outcome Measures delivered by the project. Outcome Measures reflect financial, environmental, health and FCERM benefits. Where there is a shortfall in Grant in Aid, funding contributions are required to achieve project viability.
- Local Levy The North West RFCC (and Yorkshire RFCC for Earby) can choose to support projects that are either not eligible for Grant in Aid, or to support projects where there is a shortfall in Grant in Aid by the allocation of Local Levy.
- Partnership Funding Where Grant in Aid and/or Local Levy does not fully support the delivery of a project, the LLFA can provide additional funding through their own contributions or by seeking external contributions from partners and communities who may benefit from the project.
- Section 106 funding through the Town and Country Planning Act 1990 as amended, which allows contributions to be made by Developers towards the costs of planning obligations. However, contributions can only be requested where they meet statutory legal tests, so the opportunity to secure contributions for Flood Risk Management can be limited.
- The Community Infrastructure Levy is a charge which can be levied by local authorities on new development in their area. It is an important tool for local authorities to use to help them deliver the infrastructure needed, including flood risk management, to support development in their area. However, the levy only applies in areas where a local authority has consulted on and approved a charging schedule which sets out its levy rates and has published the schedule on its website.

Funding allocations for these sources are subject to a successful, approved business case.

More information on investment in FCERM can be found in the North West RFCC Business Plan (available on *The Flood Hub*) and statistics can also be found on *GOV.uk*.



3.1 Local Flood Risks

Increasing local flood risks as a result of climate change

The <u>UK Climate Projections 2018 (UKCP18)</u> illustrate a range of future climate scenarios until 2100. In relation to managing the risk of local flooding average summer rainfall could decrease by up to 47% by 2070, while there could be up to 35% more precipitation in winter. What rainfall does occur will be more intense over a shorter duration, which could lead to an increase in surface water flood risk.

This is complicated by sea levels which are projected to rise over the 21st century and beyond under all emission scenarios, meaning we can expect to see an increase in both the frequency and magnitude of extreme water levels around the UK coastline. This can impact on local flood risk by affecting the ability of catchments to discharge.

UKCP18 can be used as a tool to guide decision-making and boost resilience – whether that's through increasing flood defences, designing new infrastructure or adjusting ways of farming and land management for drier summers. It will also help us at a local level to feed into future development plans to ensure they take account of and are resilient to flood and coastal erosion risks.

Most Lancashire <u>Local Authorities</u> have declared a <u>climate emergency</u> committing to taking action to reduce carbon emissions, raise awareness about climate change and mobilise change through local action.

Inherited local flood risk from historical development

Development today is well regulated through the planning process, and this includes measures to understand, mitigate and manage flood risks from all sources on prospective sites. As well as planning regulation, building regulations and design specifications have changed and improved over time to reflect advances in knowledge and understanding of drainage and in response to our changing climate.

It is therefore not surprising that older developments, constructed at a time when due consideration to drainage did not occur as it does now, are finding they are at flood risk today as a result of our changing climate and pressures on historical drainage systems not designed and constructed to modern standards.

Predominant surface water flood risk

Surface water flooding from short, intense storms can occur in urban areas and along highways when drains are overloaded by the sheer amount of rainfall and/or runoff.

Groundwater risks in low lying areas

In low-lying areas the water table is usually at shallower depths, but during very wet periods, with all the additional groundwater flowing towards these areas, the water table can rise up to the surface causing groundwater flooding.

Groundwater flooding is most likely to occur in areas situated over permeable rocks, called aquifers. These can be extensive, regional aquifers, such as chalk or sandstone, or may be more local sand or river gravels in valley bottoms underlain by less permeable rocks.

Hence groundwater flood risks in Lancashire tend to be prevalent in lower lying areas underlain by permeable rocks and soils as is typical throughout the West Lancashire plain and the Fylde Peninsula.

Drainage infrastructure which is aging and at capacity in areas

Lancashire has an intricate network of ageing culverts, sewers and drains, many dating from the 1800s when cotton industry was expanding during the Industrial Revolution.

This ageing infrastructure, along with pressures from development and a tendency for increased paving such as driveways, poses particular problems to the drainage network. As a result, some areas have experienced flooding from sewers which occurs when their capacity is overcome by the amount of water trying to enter the network.

In urban areas watercourses are typically modified with straightened and walled channels, and there are many culverts: watercourses which have been re-directed through pipes and tunnels.

Many watercourses reflecting land that has been reclaimed and/or managed

Lancashire's western districts are characterised by large areas of reclaimed land with a distinctive pattern of rectangular fields of dark peaty soil with deep drainage ditches. This land is highly fertile, top grade agricultural land with a vibrant intensive farming economy.

It is common to find the suffix "Moss" in the names of local places. As is usual in these types of areas, the settlements tend to be on any available hill, many formed by sandstone outcrops, to avoid the risk of flooding.

Of course, this reclaimed land relies on a series of managed ditches and dykes, providing a complex network of 'feeder' watercourses that eventually outfall into tidal estuaries or main river channels. Large parts of these catchment are pumped by satellite drains and pumping stations, many of which are maintained by the Environment Agency. There is a risk around the longevity and sustainability of these pumped catchments with multi-agency discussions ongoing between asset, business and landowners.

Changing Land use and Development

In recent years changes to Planning regulations have created opportunities for development in areas that would have been classed as "Green Belt". It is essential to learn from the inherited development risk and maintain watercourses, ponds and rivers in the natural environment building these into development and not filling them in or building over them.

There is opportunity within these developments to mitigate flood risks by changing and improving drainage, leaving a legacy that will increase issues of flooding.

LLFA and RMA's are working with Planning Authorities to implement a Sustainable Drainage Proforma that will ensure developers have considered and implement sustainable drainage systems in their developments.

Revision to National Planning Policy also present the opportunity for Planning Authorities to prepare their policy and SPD providing developers with guidance and policy in respect of specific requirements in Lancashire districts.

Additionally, in the life of this strategy work will continue with Planning Authorities to address and promote sustainable drainage in residential areas, also promoting the creation of green spaces, tree planting, permeable paving and the use of water butts.

3.2 Local Challenges

The local flood risks Lancashire faces are made more complex by a number of challenges. We will work in accordance with the guidance in the National FCRM strategy to address the challenges which include:

Social deprivation in highly populated urban areas which can lead to lower uptake of flood insurance in at risk areas.

Challenges in the management of flood risk are shown to exist and impact in areas where social deprivation is prevalent. As well as elevated flood risk exposure through old and/or poorly-maintained public and private infrastructure, there can be love take-up of flood warnings and advise from the drainage authorities, communication problems during flooding events which delay access to assistance, and during recovery if residents don't have adequate insurance cover.

Following a joint initiative between the Government and insurance companies, Flood Re was established in 2016. The aim of this initiative is to secure affordable and available insurance for qualifying properties that are at risk of flooding or have been flooded. However, a recent study has indicated that there are still concerns around affordability of insurance in areas of social deprivation. The study, carried out by Doncaster Council identifies ten recommendations. These are applicable across the country as well as in Lancashire, where we strive to address this challenge and enable Flood Re to support our residents.

Engagement with diverse communities Overall, this Local Flood Risk Management Strategy aims to impact positively on everyone who lives, works or visits Lancashire. The Equality Act 2010 introduced the term "protected characteristics" and makes it unlawful to discriminate against a person who belongs to one of the groups who are protected under the act.

The groups identified by the Equality Act 2010 are: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation. These groups with protected characteristic may require further consideration and consultation as the strategy is implemented. It is important to ensure the needs of these groups are considered as part of the Flood Risk Management, for example some groups may have difficulty in accessing interpreting or acting on flood warnings and we need to ensure that flood risk management schemes do not have a negative impact on the ability of people to use the highway and pathways and that specific places are acknowledged.

Long term sustainability of pumped catchments

New development in low-lying areas has to be carefully managed as many of the drainage ditches and pumping stations are operating at or near full capacity and at or close to sea level with minimal fall available to move water away to the coast. A small increase in the volume of flows or a change in the drainage regime could lead to a large increase in flood risk. One of the biggest challenges of the next 6 years is the maintenance of these assets as many are reaching capacity and are not sustainable. Alternative integrated solutions need to be investigated to mitigate this challenge and also reduce the carbon impact of pumping stations.

Poor water quality of watercourses

Watercourses are one of Lancashire's most natural and important assets and help provide protection from flood risk. But often the runoff from land creates poor quality of water by washing off chemical fertilizers, manual untreated animal droppings, soil, silt and vegetation, which often impacts the rivers and coast and their much-needed habitats.

During the course of this strategy we will work with landowners to establish a programme to improve poor water quality in watercourses.

Regulation and maintenance of watercourses

Lancashire contains some of the highest grade and most productive agricultural land in the UK. The rural economy plays a very important role in the region and employs a large number of people.

However, much of the land used for farming is drained by an extensive network of watercourses such as ditches, streams and rivers. Water levels are also managed in some locations with the aid of pumping stations.

Maintaining water infrastructure related to agriculture has a cost and in the current economic climate, funding for these activities is under significant pressure. This is especially true when there is a strong focus on protecting people and property over agricultural land. We are working with our RMA partners to develop governance options or water

management in rural areas, with a view to balancing the needs of agricultural productivity, flood risk management and sustainable drainage practices.

However, the challenge may be partly mitigated if the work with landowners developing innovative solutions to ensure there is regulation and maintenance of watercourses. LLFA's have responsibility for consenting and enforcing on ordinary watercourses, Developers have responsibility to apply for consent. The Planning Authorities can ensure that Developers pay strict attention to their responsibilities for application by applying planning conditions

Engagement with diverse communities Overall, this Local Flood Risk Management Strategy aims to impact positively on everyone who lives, works or visits Lancashire. The Equality Act 2010 introduced the term "protected characteristics" and makes it unlawful to discriminate against a person who belongs to one of the groups who are protected under the act on developments. Lancashire expects Developers to ensure that the places they are building have environmental net gain and do not have a detrimental impact on existing watercourses.

Riparian and Land Ownership

The identification of ownership and those legally responsible for the maintenance of watercourses is a recognised challenge.

The National Flood and Coastal Erosion Risk Management Strategy for England "seeks to build a nation of people who understand their risk to flooding and coastal change and know their responsibilities and how to take action"

The challenges for funding and maintaining are described below. During the life of the strategy we seek for Lancashire to become a County where residents understand their risk and responsibility is clear.

Highway drainage

Lancashire's Highway Authorities have responsibility for maintaining and cleaning gullies. Improved communication with residents on gully cleaning programmes and for accessibility to gullies will ensure gulleys in more vulnerable areas are cleaned more easily and reliably.

In line with the National strategy this Local strategy will encourage infrastructure providers to "build back better", installing more resilient infrastructure making investment on road and rail networks climate-resilient including addressing drainage capacity issues.

Capital and Maintenance Challenges

There is a collective responsibility for everyone to maintain assets and protect our natural environment to prevent flood risk, this includes maintenance of watercourses, ponds rivers and all sources of drainage assets. Lancashire's LLFAs receive funding to carry the specific duties in respect of the Flood and Water Management Act (2010).

LLFAs do not receive any funding for the maintenance of the watercourses, rivers and the like for which they hold regulatory responsibilities.

The challenge in the lifetime of this strategy will be to identify ownership of the watercourses, ponds and rivers to ensure those responsible are able to maintain them.

Where there is danger of flooding to property, LLFAs and RMAs can apply to the Environment Agency for Grant in Aid funding. There is further information regarding funding in 2.10 of this strategy.

Gaps in knowledge

Aligned to the challenges around maintenance is the gap in knowledge in respect of the location of all watercourses, ponds and rivers.

This challenge can be mitigated by engaging early with Communities and ensuring that local knowledge is used to explore all future options of flood risk management.

Holistic Water management and interaction between drainage systems

Challenges are faced in many areas of Lancashire where either through lack of knowledge of drainage systems or the implications of the limitations on Developers recognition of the impact their drainage may have outside their development boundary.

This strategy proposes that in all circumstances there is an holistic and catchment wide approach to water management particularly on Development that could impact already saturated drainage systems.



Flooding at Croston in December 2015

Flood Risk to Farmland

The long-term vision of the National Strategy is to progress toward a Nation resilient to flooding and coastal change, one of its three ambitions is for Climate Resilient Places. Our Local Strategy recognises that, to archive the National ambition we need to work in different ways with farmers and landowners to achieve this.

The strategy is to consult our farming communities and deliver nature-based solutions, restore natural processes and take a catchment-based approach. An additional challenge we will face is the access to Grant In aid funding to progress schemes that will ultimately join up the landowners' actions within the catchment to others.

Effective Community Engagement

Significant progress has been made by the implementation of the flood forums and the Flood Hub, particularly the work within some communities. The National Strategy requires that we "build a nation who understand their risks to flooding and coastal change". Effective communication is required, a Communication and Engagement Plan will assist in addressing this challenge.

Flood Re and Flood Insurance

Flood re is a joint initiative between the Government and insurers to enable more affordable flood cover in household insurance policies. Further information is on the Flood Re website www.floodre.co.uk

Developing and retaining flood risk professionals for Lancashire

Strategic objective 3.5 of the National FCERM states that "between now and 2030 the nation will be recognized as a world leader in researching and managing flooding and coastal change" and its measure 3.4.1 states that "by 2025 risk management authorities and other organizations will work with education providers to encourage opportunities for ongoing learning and career development in engineering and social sciences."

As described in this strategy Lancashire will see an investment of £230m between 2021 and 2027. In order to deliver this investment, LLFAs will address the National challenge and will work with schools and universities to engage with students, and to appoint apprentices and graduates to ensure we can deliver the investment whilst developing and retaining flood risk professionals.

3.3 District Fact Files

Blackburn with Darwen

General Geography and Topography

- The Blackburn with Darwen Borough Council study area is located in Lancashire in the North West of England and covers an area of 137 sq km. It lies to the north of the West Pennine Moors on the southern edge of the Ribble Valley and the northern edge of the Irwell catchment.
- Blackburn is bounded to the south by Darwen, with which it forms the unitary authority area of Blackburn with Darwen Borough. The original settlement of Blackburn was located to the north of the River Blakewater with Darwen located within the steep narrow sided River Darwen valley. The two towns dominate the northern half of the borough, whilst the southern half is more rural. The Leeds Liverpool Canal flows through the northern part of the borough for approximately 7.5km and the two towns are separated by the M65 motorway.
- The Borough is characterised by relatively compact urban areas set within countryside. This is most pronounced in Darwen, much of which sits within a relatively steep-sided valley with ridgelines to the east and west. Within the main urban areas both Town Centres are surrounded by large areas of high-density terraced housing, parts of which are in poor condition. Both towns also have significant areas of "suburban" development, comprising a mix of larger older properties and more recent development, some of which has spilled beyond the confines of the valley sides.
- The central parts of Blackburn, where the River Darwen and Blakewater meet, lie at a
 height of approximately 100 metres above sea level. Darwen lies at approximately 220
 metres above sea level and occupies the narrow valley between Darwen Moor and Grey
 Stone Hill. Darwen is surrounded to the west, east and south by moorland.
- The southern part of the Borough falls within a second river catchment, the River Irwell, which drains south to the Mersey Basin. The boundary between the Darwen and Irwell catchment rises to a height approaching 400 metres on Turton Moor and Causeway Height. The rural population centres are largely located to the west, south and east in river valley or reservoir valleys and include the villages of Edgworth and Turton Bottoms, Belmont and Hoddlesden.

Potential Sources of Flooding

- Flooding from rivers
 - intense or prolonged rainfall causing runoff rates and flows to increase in rivers, which
 then exceeds the capacity of the channel. This can be exacerbated by wet conditions
 leading up to the prolonged rainfall and where there are significant contributions of
 groundwater;
 - constrictions in the river channel, reducing capacity and causing flood water to backup, i.e. culverts, bridges, pipe-crossings etc;
 - blockage of structures or the river channel causing flood water to backup; and
 - high water levels and/or locked flood gates preventing discharge at the outlet of a tributary into a river
- Flooding from groundwater
- Flooding from surface water
- Flooding from sewers
- Flooding from artificial sources (docks, canals, reservoirs, lakes).

Superficial Geology/ General Soil Types

- The geology of the Blackburn area yields numerous resources. Mineable coal seams have been used since the 16th century and Millstone Grit has been quarried for millstones and for providing building stone for many of the older properties. The centre of Blackburn Town Centre is where the geological strata changes from coal measures to Millstone Grit. South of the town centre coal deposits are present in a narrow band extending south through Darwen and to the borough's boundary. The Coal deposits are overlain by superficial glacial sand/gravel and till deposits. North of Blackburn Town Centre the underlying geology is Millstone Grit overlain by Till.
- The relatively impermeable Coal and Millstone Grit and the steep nature of the upper catchments of the both the Darwen and Blakewater would give rise to limited infiltration and a rapid response to rainfall events. Hydrological analysis undertaken as part of a Flood Risk Management Strategy for the River Darwen and Blakewater suggests that the critical duration for the River Darwen, Blakewater and their tributaries, i.e. the time it takes for the watercourses to typically reach peak flow or level after a storm event, varies between 1.25 hours and 4.75 hours.

Known Risks (during a major rainfall event)

- The primary source of flooding is from the Rivers Darwen and Blakewater. The heavily urbanised nature of the catchment in conjunction with the steep and narrow nature of the watercourses results in a rapid response to heavy rainfall events. The confined nature of the channel, which is a result of historical development that closely borders the watercourse, and the presence of numerous structures means that there is an inadequate capacity within the watercourse resulting in overtopping and flooding of surrounding land, primarily where there are no flood defences.
- This flooding generally results in overland flow along the path of the watercourses, impacting numerous properties and infrastructure. Where there are flood defences, the majority provide a level of protection that is greater than a 1% AEP (1 in 100yr) flood event, however, in some places the standard of protection is lower than this and approximately 7% of them provide a standard of protection equivalent to a 20% AEP (1 in 5yr) flood event or less.

Blackpool

General Geography and Topography

Blackpool is flanked by the Authorities of Fylde and Wyre. The area is predominantly flat. Due to the flat topography there are extensive networks of agricultural land drains and ponds many of which have been subject to development and cannot be seen.

Potential Sources of Flooding

- Coastal/Tidal
- Main Rivers
- Surface water including direct rainfall (pluvial), ordinary watercourses, groundwater and Surcharging drainage systems and sewers

Flood mitigation carried out

- Central and Anchorsholme Coast Protection
- SuDS installation at Carlton Cemetery
- Installation of gully monitoring
- Sand Dunes
- Ongoing studies into flood events with Partners

Superficial Geology/ General Soil Types

• Superficial geology can influence surface water flood risk and in this area is a mixture of marine and windblown sands, gravels and mudstone along the coast and glacial till deposits.

Known Risks (during a major rainfall event)

- High groundwater levels in some localised areas.
- Local flooding is likely to be widespread but shallow with low velocity.
- In many cases flooding will be contained within the highway but may impact on access and egress and travel in general.
- Drainage systems are less effective than in hillier areas as gradients are less and pipes may be affected by siltation.
- The only main river is Bispham Dyke but Blackpool is flanked in the North by Wyre and the River Wyre can impact Blackpool North as can Royals Brook Watercourse in Wyre as they flow through and around Blackpool before discharging to the sea. As a result, it is likely that some combined flooding will occur in the event of an extreme rainfall event, with surface water and sewer flooding combining with either tidal or fluvial flooding. $\begin{array}{c} \text{Page 105} \\ \text{45} \end{array}$

Surface Water Flooding

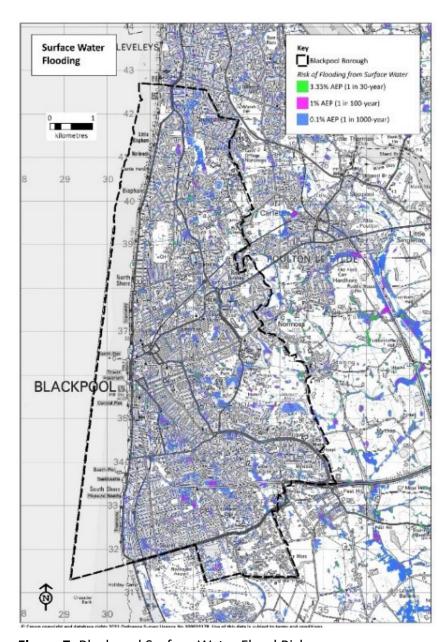


Figure 7: Blackpool Surface Water Flood Risk

Case Study: Anchorsholme Coast Protection.

The £19 million Anchorsholme Coastal Protection Scheme provides coast protection in the North of Blackpool. It was developed through the Fylde Peninsular Coastal programme consisting of Blackpool, Wyre and Fylde Councils, working together in partnership with principal contractor Balfour Beatty Civil Engineering Limited (BBCEL) and main funding body the Environment Agency. The scheme built upon a wealth of learning from previous schemes along the Fylde coast in particular the Cleveleys and Blackpool central schemes. The physical elements of the scheme involved renewing 1km of failing seawalls and promenade whilst preserving the beach frontage to better protect over 4,500 properties from coastal flooding from the Irish Sea. However, the true value of the works is far greater than property protection alone. It is an excellent example of using opportunities to combine coast protection and regeneration. Working in Partnership with United Utilities, (the coast protection scheme) together with United Utilities bathing water investment in Anchorsholme Park and the local Community, provided the opportunity to combine these two major investments and create and enhance the environmental, social and economic opportunities in the Anchorsholme Blackpool Area.

The scheme demonstrates a broadening of the scope and vision of what coast defence schemes can achieve for society. The interaction between the users and beneficiaries of the new works in jointly developing a vision for the area in which the coastal defence scheme is a catalyst for wider neighbourhood improvements through the development of high quality public space formed a key element of the scheme.



Figure 8: Park and coast protection

Burnley

General Geography and Topography

- The main urban areas are Burnley and Padiham.
- Urban development advanced significantly during the industrial revolution as centres
 for coal mining and cotton spinning expanded. These centres exploited the hydropower
 available from the many watercourses.
- These non-residential developments were constructed immediately alongside, and in some cases, over watercourses. These former mill buildings have now been vacated, reoccupied, redeveloped or demolished. Many sites have been replaced with residential developments, which are more vulnerable to flood events.
- Outside of the urban centres, there are small settlements within the foothills and valleys and beyond these there is open moorland.
- The topography consists of flat valley floors and rising hills to upland moorland.

Potential Sources of Flooding

- Main Rivers
- Ordinary watercourses
- Reservoirs
- Surface water
- Groundwater
- Surcharging sewers and drainage networks

Flood mitigation carried out

- Padiham flood risk management scheme (ongoing)
- Lowerhouse Lane drainage survey/repairs/improvements
- Manchester Road, Dunnockshaw drainage survey/repairs/improvements

Known Risks (during a major rainfall event)

 Areas of steep topography where direct run-off is likely to result in shallow high velocity flooding. Flooding is likely to occur with little warning but likely to be short in duration.
 Flooding of this kind can be hazardous to people and may be affected as a result of the velocity of flows channelled down roads and around buildings. The shallow nature may result in less risk to property.

- Minor watercourses within culverts in densely developed urban areas are a risk if there
 was to be a collapse or blockage. This could result in deep, high velocity surface water
 flows along the former natural course of the watercourse. Flooding may occur with little
 warning and will be along a defined flow path. This may result in damage to properties
 within the flow path. The velocity and depth will be hazardous to people.
- Areas of flatter topography, typically in valley bottoms or on river floodplains, are likely
 to experience widespread flooding with localised areas of deep ponding. This flooding
 occurs from direct run-off from steeper areas or as a result of surcharging or blocked
 drainage systems. This type of flooding is less hazardous to people but may result in
 higher levels of property damage.
- Complex interactions with watercourses, including Main Rivers are likely.

Case Study: Padiham Flood Risk Management Scheme

Situated alongside the River Calder and a smaller watercourse, Green Brook, Padiham flooded significantly on 26/12/2015 when the River Calder reached a record water level with 149 properties were reported as flooded. Flooding again occurred on 09/02/2020 during Storm Ciara. Water levels on the River Calder were lower than in 2015 and property level resilience (e.g. floodgates) have been installed on buildings since the last floods. The flooding in Padiham causes significant impacts to residential homes, businesses, public buildings and infrastructure in the town.

Since the 2015 floods, the Environment Agency, Burnley Borough Council and partners have been working together to develop proposals for a Padiham Flood Risk Management Scheme. This includes flood walls and earth embankments as well as modifications to highways. The proposals will better protect over 150 homes, businesses, public buildings and key infrastructure in central Padiham. It will manage flood risk from the River Calder, Green Brook and surface water.

Lowerhouse Lane – drainage survey/repairs/improvements 08/06/2016 – localised storm event caused internal flooding to approx.29 properties. Lancashire County Council and United Utilities then carried out surveys, repairs and improvements to the local drainage systems.

Manchester Rd, Dunnockshaw – drainage survey/repairs/improvements 26/12/2015 - 5 properties suffered from internal flooding from surface water sources, and as a result property protection were installed by residents and highway improvements were carried out.

Chorley

General Geography and Topography

- The main urban centre is Chorley with smaller centres in Clayton-le-Woods, Whittle-le-Woods, Adlington, Euxton, Buckshaw Village, Coppull, Croston and Eccleston. There are other semi-rural communities around the district and large areas of farmland and open countryside.
- The district has two distinct types of topography. To the west of the M61 the area is
 predominantly flat and to the east the topography rises gently at first but then more
 steeply.
- The settlements developed extensively during the industrial revolution with mills and factories being constructed close to rivers. Over time these watercourses have been culverted and canalised through the urban areas.
- Overtime these industries have disappeared leaving poorly maintained, hidden culverts.
- The excellent transport links have attracted new development both in terms of industry and housing.

Potential Sources of Flooding

- Main Rivers
- Ordinary Watercourses
- Canal
- Reservoirs
- Groundwater
- Surcharging drainage systems and sewers

Mitigation projects

Croston Dam

Superficial Geology/ General Soil Types

- Superficial Geology and general soil types include:
 - Predominantly glacial till;
 - Localised fluvially deposited sands, silt gravels and peat deposits;
 - Mainly peat over high ground in the east.

- The flat topography west of the M6 motorway is likely to experience widespread shallow flooding which would result in disruption to people and services as a result of standing water. It is unlikely that large number of properties would suffer from internal flooding.
 Internal flooding may occur in localised low points where deeper flooding may occur.
- There are many land drains and Ordinary Watercourses that are culverted, reducing capacity or introducing pinch points on drainage systems.
- Overland flows of surface water run-off are not usual and where they do occur are likely
 to be related to Ordinary Watercourse of Main Rivers where deeper and faster flowing
 flood water may be encountered. This has potential to pose a greater hazard to people
 and property. There is potential for flooding through the interaction of Main Rivers,
 Ordinary Watercourse and sewers and surface water drainage systems. Flooding would
 occur because Ordinary Watercourse and field drains would be unable to discharge into
 Main Rivers.
- Combined sewers (foul and surface water mixed in a single system) are likely to pose
 a significant risk. Surcharging combined sewers can result in surface water becoming
 contaminated with untreated sewage.
- Historic culverts may have capacity issues or may be in poor condition. Flooding from these watercourses represent a hazard as surcharging, blockage or collapse of a culvert can result in deep, fast flowing flooding.
- Flooding in the eastern part of the district is likely to be significantly different than that
 seen in the west as a result of the steeper terrain. There are likely to be distinct flowpaths and whilst flooding is expected to be less extensive run-off will be deeper and
 fast flowing along distinct flow paths. This will present a greater hazard to people and
 properties as flooding may occur with little or no warning.
- Deeper flood depths will also result in more properties suffering internal flooding, although in the steepest areas there is less concentrated development.
- Flow-paths are likely to follow roads and other artificial paths. This will represent a significant hazard to users of these routes.
- Ordinary Watercourse in the east of the district will likely have a flash response to
 extreme events with water levels rising and also falling rapidly. This has a potential to
 cause flooding downstream particularly in areas that are culverted.



Figure 9: Working in partnership with Lancashire and Chorley Councils "Croston Dam" protects 400 homes and businesses from flooding.

Fylde

General Geography and Topography

- Fylde abuts the unitary authority of Blackpool.
- The main urban settlement is along the coast at Lytham St Annes and inland Kirkham. There are numerous smaller villages and hamlets spread across the district.
- The area is predominantly flat. Due to the flat topography there are extensive networks of land drains and ponds.

Potential Sources of Flooding

- Coastal/Tidal
- Main Rivers
- Surface water including direct rainfall (pluvial), Ordinary Watercourses, groundwater and surcharging drainage systems and sewers

Flood mitigation carried out

- Fylde Coast Protection scheme 2020
- SUDS installation at Lytham Cemetery



Storm Ciara and Storm Dennis Dunes Damage Feb 2020 - High Tide at North Beach Car Park Entrance

Superficial Geology/ General Soil Types

Superficial geology can influence surface water flood risk and in this area is a mixture
of marine and windblown sands, gravels and mudstone along the coast and glacial till
deposits and peat alongside the River Ribble.

- High groundwater levels in some localised areas.
- Local flooding is likely to be widespread but shallow with low velocity.
- In many cases flooding will be contained within the highway but may impact on access and egress and travel in general.
- Drainage systems are less effective than in hillier areas as gradients are less and pipes may be affected by siltation.
- Rural areas are likely to suffer extensive shallow flooding, with a likely cause being the
 inability of land drains and watercourses to cope with the large volumes of run-off
 generated.
- Two Main Rivers, Liggard Brook and Whitehill Watercourse, flow through and around Lytham St Annes before discharging to the sea. As a result, it is likely that some combined flooding will occur in the event of an extreme rainfall event, with surface water and sewer flooding combining with either tidal or fluvial flooding.

Case Study: Fylde Council SuDS Project

To reduce the waterlogging to the eastern extent of the cemetery and provide formal memorial foundations with maintainable drainage and to address the introduction of a new visitor parking area (980m2) with additional access roads, utilising Sustainable Drainage Systems.

The site is not formally drained and is therefore considered to be 100% permeable. Generally, the site is Devensian Till overlying Singleton Mudstone. However, it is known that there are pockets of wind-blown sand and peat on the site.

The increased area of hardstanding and access road resulted in an increase in surface water runoff rates and volumes, discharge is controlled from the detention basin before passing through an existing small wastewater treatment facility. Storage volume in the detention basin was calculated as 344m3 for the 6hr, 1 in 100 year rainfall event plus 40% climate change allowance.

The area of the proposed detention basin was discovered to have at its base granular deposits thus some infiltration proved possible. Likewise, the proposed area of the visitor parking also had a formation which allowed a permeable paved construction. Shallow swales were constructed to three sides of the parking area to contain and channel any overflow to green areas around the periphery.

Drainage beneath the memorial slabs comprised a half-perforated pipe, with crushed stone no-fines media, wrapped in filter media, in the form of trench drains. Thus, providing additional storage and filtration. Oversize carrier drains to the detention basin provide additional online attenuation within the pipe network. The extent of the existing burial plots throughout the site meant great care had to be taken during construction. The principle drainage areas are indicated in red below.



Figure 10: Fylde Council SuDS

Hyndburn

General Geography and Topography

- There are a number of urbanised areas within Hyndburn, with Accrington being the main centre.
- Smaller centres are Rishton, Oswaldtwistle, Clayton-le-Moors, Great Harwood and Church and these tend to lie within the foothills and valleys.
- Accrington is located in the upper reaches of the River Hyndburn catchment and the topography is very steep. The area is heavily urbanised with high density terraced houses and former mill buildings.
- The southern part of the district is mainly open moorland and part of Oswaldtwistle Moor falls within the West Pennine Moors Site of Special Scientific Interest (SSSI) area.

Potential Sources of Flooding

- Main River
- Ordinary Watercourses
- Groundwater
- Surcharging drainage systems and sewers
- Culvert capacity or condition

Superficial Geology/ General Soil Types

• Underlying geology of limestones and millstones and coal although the superficial geology is made up of mainly glacial deposits, sands and gravels.

- In low lying areas there is potential for high groundwater level.
- The topography means the area is at high risk of surface water flooding with high velocity, shallow flooding of streets and widespread flooding of valley bottoms.
- Flash flooding is likely to represent a significant hazard.
- Historic culverts may have capacity issues or may be in poor condition. Flooding from these watercourses represent a hazard as surcharging, blockage or collapse of a culvert can result in deep, fast flowing flooding.
- Sewer flooding reflects higher population concentration but may also be linked to aging sewer and drainage networks.

Lancaster

Recent mitigation from flooding

Morecambe Wave Wall

Potential Sources of Flooding

- Coastal/Tidal
- Main Rivers
- Mill Race
- Canal
- Reservoirs
- Surface water including direct rainfall (pluvial), Ordinary Watercourses, groundwater, and surcharging drainage systems and sewers

- The district has a number of large distinct areas of residence and employment, Lancaster, including Galgate and South Lancaster area, Morecambe/Heysham, Carnforth and Halton.
- There are numerous other semi-rural and rural villages many of which have developed along the River Lune and other watercourses.
- The district is split divided by the M6/A6/West Coast main line and Lancaster Canal corridors. To the east is mainly villages, and the larger population is found to the west.
- The topography of the area is characterised by higher ground of the Forest of Bowland and Yorkshire Dales to the east, and the lower-lying floodplain to the west.
- Morecambe and Heysham are likely to experience widespread shallow flooding due
 to the flat topography with less effective drainage systems in comparison to the hillier
 locations. Drainage outfalls may suffer from tide-lock. This could cause surcharging and
 blockage of drains and Ordinary Watercourses.
- Lancaster and surrounding areas are likely to experience widespread flooding of flat areas alongside the River Lune, River Condor and River Keer with high amounts of run-off along key flow paths.
- In areas with steeper topography there will be distinct flow paths. Flooding along these will be deeper and faster with ponding at low-points or pinch-points.
- There is flood risk associated with the River Keer to the North of the District around Carnforth and Wenning and the associated villages.

- The centre of Lancaster is at significant risk from surface water flooding from surface water runoff and flooding from drainage systems, as are Galgate from the river Condor, Burrow Beck and Halton from the River Lune.
- The interactions of surface water drainage with water levels in Main Rivers and the sea are likely to be complex and will have a significant impact on flood risk in many areas.
- In flat areas the drainage of flood waters will be predominantly reliant on artificial drainage systems. These systems may be subject to silting, running full or tide-locking. Therefore flooding could be more prolonged.
- There are many watercourses within the study area and a blockage or collapse could result in flooding at unexpected locations.
- Low-lying coastal areas have a potential for high groundwater levels.
- Caton Road is vulnerable to surface water flooding.





Power Station at Lancaster

Pendle

General Geography and Topography

- The urban areas are Nelson and Colne with smaller settlements of Brierfield, Barnoldswick, Earby and Trawden.
- The landscape is diverse with historic industrialisation in the urban areas. The smaller settlements tend to be located within the foothills and valleys. Beyond the valleys there is upland farmland and moorland.

Potential Sources of Flooding

- Main Rivers
- Ordinary Watercourses
- Surface water
- Groundwater

- Areas of steep topography where direct run-off is likely to result in shallow high velocity flooding. Flooding is likely to occur with little warning but likely to be short in duration.
 Flooding of this kind can be hazardous to people and road transport may be affected as a result of the velocity of flows channelled down roads.
- Minor watercourses within culverts in densely developed urban areas are a risk if there
 were to be a collapse or blockage. This could result in deep, high velocity surface water
 flows along the former natural course of the watercourse. Flooding may occur with
 little warning and would occur along a defined flow path. This may result in damage to
 properties within the flow path. The velocity and depth will be hazardous to people.
- Areas of flatter topography, typically in valley bottoms or on river floodplains, are likely
 to experience widespread flooding with localised areas of deep ponding. This flooding
 occurs from direct run-off from steeper areas or as a result of surcharging or blocked
 drainage systems. This type of flooding is less hazardous to people but may result in
 higher levels of property damage.
- In low lying areas there is a potential for high ground water which could lead to flooding
 in localised low points such as road cuttings, basements and on open land.

Preston

General Geography and Topography

- Preston urban area is built across several watercourse catchments and the topography of these influence surface water flood risk across the area.
- Preston has become increasingly urbanised with many of the previously rural locations becoming developed with open fields with land drains and ditches being replaced with piped systems

Potential Sources of Flooding

- Coastal/Tidal
- Main Rivers
- Canal
- Surface water including direct rainfall (pluvial), ordinary watercourses, groundwater and surcharging drainage systems and sewers

Mitigation Projects

Preston & South Ribble Flood Risk Management Scheme

- The Preston urban area is built across several watercourse catchments. The drainage system within the centre of Preston is mainly culverted and historic; much of the system is made up of combined sewers. Surface water flooding can occur during periods of heavy rainfall.
- Preston's industrial history has resulted in man-made flow-paths. The largest is the former Longridge railway line which runs from Longridge (Ribble Valley), approximately 10km to the north-east of Preston, to join the West Coast Main Line immediately to the north of Preston railway station. This man-made feature has the potential to act as a highly efficient "watercourse" for surface water flows, channelling flooding into Preston City Centre. As this dis-used railway line connects to the West Coast Main Line, the local line presents a flood risk to the Main Line.

Case Study: Preston & South Ribble Flood Risk Management Scheme

The original defences were built intermittently from the 1920s to 1980s and are coming to the end of their life, so they need repairing or replacing and ideally brought up to a 75 year standard of protection. The aim of the scheme is to improve the protection to over 4800 business and residential properties by raising the existing defences and building new walls to protect properties within the scheme. Over 200 homes and businesses flooded on Boxing Day (26 December 2015); this was a near miss for other properties and businesses as the event only just missed high tides.

Preston & South Ribble Scheme









Preston: Riverside



Preston - Riverside: Replacement of the existing concrete wall (left), with a new concrete wall with glass panels on top (right), running on the river side of the road in front of the Continental Public House restaurant.

Existing Wall Height: 0.90 - 1.09m

Proposed Wall Height: 1.78 – 2.53m (incl. 800mm high glass panel)

Official

Figure 12: Preston & South Ribble Flood Risk Management Scheme

Ribble Valley

General Geography and Topography

- The district is predominantly rural and dedicated to farming. However, there are large settlements in Longridge, Wilpshire and Whalley with Clitheroe being the main town.
- Villages are historically farming communities and as such have developed around ordinary watercourses and it is not uncommon to see buildings constructed (historically) immediately adjacent to a watercourse.
- Extensive networks of ordinary watercourses transfer water rapidly from hillsides to river valleys. In villages many of these watercourses have been culverted.
- The River Ribble is a relatively narrow floodplain within the wider valley bottom. Clitheroe is built on a series of flat or gently sloping terraces to the River Ribble.
- The River Hodder has varying topography with areas of wider valley bottoms with constrained steeper channels.
- Bolton-by-Bowland has a unique geomorphology. Of particular note upstream it has glacial terraces which make it highly responsive to rainfall as water runs off quickly with nowhere to go, but below the village it widens significantly with a large flood plain as it approaches the confluence with the Ribble.
- The Hodder Valley is similar to Bolton-by-Bowland.
- The Ribble Valley also picks up the lower end of the River Calder.



King Street, Whalley in December 2015

Potential Sources of Flooding

- Main Rivers
- Reservoirs
- Surface water including direct rainfall (pluvial), Ordinary Watercourses, surcharging drainage systems and sewers.
- Note that groundwater is not considered a significant risk due to the steep topography.

Mitigation Projects

Strategic Plan for Whalley

Superficial Geology/General Soil Types

The superficial geology is relatively uniform. The majority of the area is covered by glacial till deposits. Within close proximity of the main rivers there are fluvial deposits of sands, gravels, silts and river terrace deposits.

- Till deposits often contain large amounts of clay and other relatively impermeable material.
- Flooding would typically be varied across the area with steeper areas being characterised by flooding along distinct flow-paths, whilst flatter areas would experience more widespread, shallow surface water ponding.
- Flood risk is highly localised because of the distributed nature of urban development. Damages are likely to be localised and occur in small clusters across the district footprint.
- Flooding in some areas is likely to pose a significant hazard particularly where major flowpaths or Ordinary Watercourses flow through urban areas or along busy transport routes.
- The Forest of Bowland has steep topography and large numbers of Ordinary Watercourses. Steep areas tend to produce surface water events that are characterised by shallow but high velocity flows, often concentrated within well-defined flow-paths. The onset is short, with a small amount of time between the rainfall event and generation of surface flows. The rapid nature makes it difficult to react to incidents.
- Flood risk in flatter parts do not produce the high velocity flows and instead suffer from widespread, shallow flooding. Concentration of flood water into localised low points can result in significant depths, particularly if a drainage system becomes blocked or surcharged. Due to the lack of gradient, flooding can be prolonged.
- Many watercourses within villages and larger settlements have been culverted as settlements have expanded. This has introduced pinch-points which can increase the risk of flooding in extreme events.
- In some areas the combination of impermeable superficial geology and steep topography increases the risk from surface water run-off as little rainfall is likely to infiltrate into the ground.

Rossendale

General Geography and Topography

- The district is a combination of large towns: Bacup, Haslingden and Rawtenstall, and small former mill towns centred on the valley of the River Irwell, as well as rural villages.
- The steep hills, narrow valleys and wooded ravines change to lowland pastures to the south.

Potential Sources of Flooding

- Main Rivers
- Ordinary watercourses
- Reservoirs
- Surface water
- Groundwater
- Surcharging sewers and drainage networks

Mitigation Projects

- Irwell Vale flood risk management scheme (ongoing)
- Strongstry flood risk management scheme (ongoing)

- There is a long history of flooding in these upper reaches of the River Irwell catchment, to which the majority of the land drains.
- Surface water flooding has been regularly experienced and levels in the watercourses rise rapidly in response to rainfall events.

Case Study

Irwell Vale - Flood risk management scheme

- 26/12/2015 & 09/02/2020 approx. 60 properties suffered from internal flooding during both storm events from surface water and main river sources.
- Lancashire County Council installed a permanent pump to deal with surface water issues in the section of the village that lies south of the River Irwell.
- Since the 2015 floods, the Environment Agency and Lancashire County Council have been working together to develop proposals for a flood risk management scheme.

Strongstry - Flood risk management scheme

- 26/12/2015 & 09/02/2020 approx. 20 to 30 properties suffered from internal flooding during both storm events from surface water and main river sources.
- Since the 2015 floods, the Environment Agency and Lancashire County Council have been working together to develop proposals for a flood risk management scheme.

South Ribble

General Geography and Topography

- The main urban settlements are Leyland, Penwortham, Walton-le-Dale and Bamber Bridge. Outside of these areas there are numerous rural settlements and farmland.
- The topography is predominantly flat.

Potential Sources of Flooding

- Tidal
- Main Rivers
- Surface water including direct rainfall (pluvial)
- Ordinary Watercourses
- Groundwater
- Surcharging drainage systems and sewers combined

Superficial Geology/General Soil Types

 The superficial geology of the area is relatively uniform. The majority of the area is covered by glacial deposits of till and localised deposits of fluvially deposited sands, silt gravels and peat deposits.

- Flooding is likely to be shallow but widespread leading to disruption. Internal property
 flooding is less likely but flooding contained within the highway or on land surrounding
 properties is more likely. Flooding may be prolonged and could be contaminated by foul
 sewerage where sewers are surcharged or tide locked.
- Low-lying western areas have potential for high groundwater levels, evidence by presence
 of ponds and network of land drains. High groundwater levels can cause flooding in
 localised low points such as road cuttings, basements or open land following extreme
 rainfall events.
- There are numerous Ordinary Watercourses across the area many of which are culverted.
 Culverting can reduce capacity or introduce pinch points on drainage systems. Ordinary
 Watercourses may be unable to discharge into Main River during an extreme event, when river levels are high. This may cause watercourses to back up or overtop.
- Interaction of surface water flooding with Main Rivers (combined flooding) is likely to be a key feature of local flood risk.
- Some Ordinary Watercourses may be poorly maintained and culverts and structures may
 be in a state of disrepair. The cost of carrying out remedial works can be high and may not
 be able to be met by the riparian landowner.

Case Study: Preston & South Ribble Flood Risk Management Scheme

The original defences were built intermittently from the 1920s to 1980s and are coming to the end of their life, so they need repairing or replacing and ideally brought up to a 75 year standard of protection. The aim of the scheme is to improve the protection to over 4800 business and residential properties by raising the existing defences and building new walls to protect properties within the scheme. Over 200 homes and businesses flooded on Boxing Day (26 December 2015); this was a near miss for other properties and businesses as the event only just missed high tides.

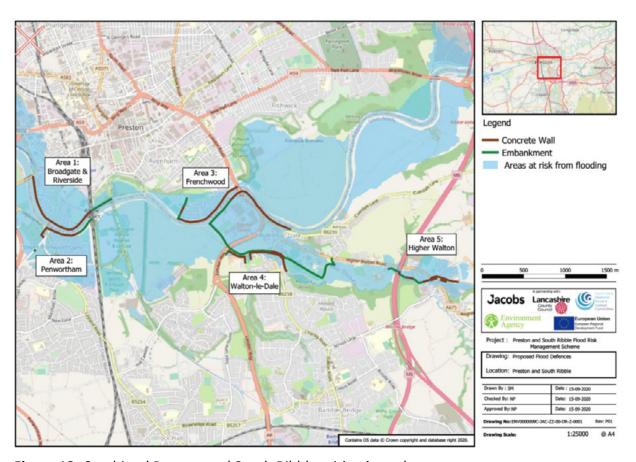


Figure 13: Combined Preston and South Ribble mitigation scheme

West Lancashire

General Geography and Topography

- The main urban centres are Skelmersdale, Aughton, Ormskirk, Hesketh Bank and Burscough.
- Much of West Lancashire is relatively flat with gently rolling coastal plain and flat moss land situated less than 10m above sea level. However, in the east of the borough the land begins to rise to form the Upholland Ridge which extends toward the M6 and the uplands of south Lancashire beyond. More centrally, the land rises steeply out of Ormskirk to form localised high ground, before falling gently away toward the surrounding flatter areas to the south, east and west.
- Outside of the urban areas there are small rural communities surrounded mainly by arable land. On this land there are numerous land drainage networks and ponds. The complex network of raised drainage ditches and dykes is a reminder of the area's heritage of wetland reclamation.

Potential Sources of Flooding

- Canal
- Reservoirs
- Railway
- Tidal
- Main River/Trunk drains
- Ordinary Watercourses
- Land drains
- Pump failure
- Sewer capacity
- Surcharging drainage
- Groundwater

Superficial Geology/ General Soil Types

- Wind-blown sands
- Sandstone
- Mudstone
- Clay deposits
- Peat deposits

- There would be widespread flooding across the coastal plain and mossland areas. The lack of natural gradient means that drainage is less effective than in hillier areas and pipes are more likely to be affected by siltation.
- Many drainage systems are likely to be reliant on pumping networks to discharge
 effectively. Failure of these pumps, or blocked drainage systems, is likely to represent a
 significant flood risk.
- In the urban areas flooding would likely be shallow with low velocity. Deeper flooding will occur at localised low points. Flooding is unlikely to represent a serious hazard to people but may affect some properties internally.
- In Ormskirk the Main River has a significant flood plain and has the potential to flood large numbers of residential properties. There are also a large number of culverted watercourses which may have capacity or unknown defects which could lead to flooding.
- In Skelmersdale there is likely to be extensive flooding of pedestrian walkways and underpasses below the natural ground level. These maybe affected by deep fast flowing flood water and represent a significant hazard to people.
- Both Parbold and Appley Bridge are situated on the banks of the River Douglas with land rising steeply to the east and north, respectively. These maybe affected by fast flowing flood water and each has the potential to suffer flooding to large numbers of residential properties.
- There are widespread issues with the capacity of drainage systems across West
 Lancashire. This is the case within Burscough and Hesketh Bank where an extreme
 rainfall event is likely to overwhelm the surface water drainage system and any pumping
 infrastructure.
- There are many land drains and Ordinary Watercourses across West Lancashire and these
 are likely to represent a significant flood risk due to siltation, lack of maintenance and
 unconsented development.

• The interaction of surface water with Main Rivers is likely to influence flooding characteristics in many areas. This is particularly true where surface water drainage outfalls into Main Rivers and maybe affected by tide locking or river levels. Due to the flat topography this could have wide-ranging impacts.

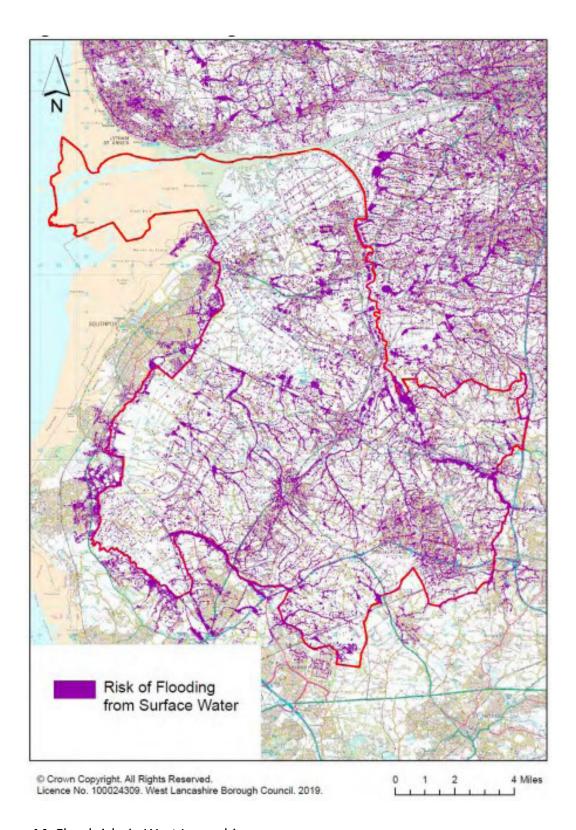


Figure 14: Flood risks in West Lancashire

Wyre

General Geography and Topography

- The district's main urban areas are Fleetwood, Thornton-Cleveleys, Poulton-le-Fylde and Garstang.
- The district is predominantly flat, rising in the east of the district towards the upland areas of central and eastern Lancashire.
- Wyre abuts the unitary authority of Blackpool and is a mixture of coastal, estuary, semirural and rural areas with smaller settlements having developed along the River Wyre and other watercourses.
- Due to the generally flat topography there are extensive networks of land drains and ponds. These are used to keep the mainly arable land drained and suitable for agriculture.

Potential Sources of Flooding

- Coastal/Tidal
- Main Rivers
- Canals
- Reservoirs
- Surface water including direct rainfall (pluvial), Ordinary Watercourses, groundwater and surcharging drainage systems including sewers

Mitigation projects

- Rossall Coast Defence
- Churchtown Community Action

Superficial Geology/General Soil Types

 Superficial geology can influence surface water flood risk and in this area is a mixture of sands, gravels and mudstone along the coast and glacial till deposits and peat alongside the River Wyre

Known Risks (during a major rainfall event)

 Interactions of surface water drainage with Main Rivers, the sea and Ordinary Watercourses are likely to be complex.

- Drainage in many areas is likely to be reliant upon outflow into Main Rivers and then into the sea. Prolonged high flow conditions with the Main Rivers can therefore significantly increase the risk of flooding from drains and prolong flooding for long periods after an extreme rainfall event.
- Due to the proximity of Blackpool Unitary Authority and the flat nature of the topography, many of the sewerage and other drainage networks encompass land within Blackpool or flow into Blackpool to discharge. As a result of this flooding within Thornton-Cleveleys and Poulton-le-Fylde will be cross-boundary in nature

Case Study: Rossall Coast Protection

The £63 million Rossall Coastal Defence Scheme (Figure 13) was opened on the 1st June 2018. It was developed through the Fylde Peninsular Coastal programme consisting of Blackpool, Wyre and Fylde Councils, working together in partnership with principal contractor Balfour Beatty Civil Engineering Limited (BBCEL) and main funding body the Environment Agency.

The scheme built upon a wealth of learning from previous schemes along the Fylde coast in particular the Cleveleys and Blackpool Central schemes. The physical elements of the scheme involved renewing 2kms of failing sea walls and promenade whilst preserving the beach frontage to better protect over 7,500 properties from coastal flooding from the Irish Sea. However, the true value of the works is far greater than property protection alone. This includes the value added to communities, the environment and the local economy by linking engineering to social, economic and environmental improvement.

The scheme demonstrates a broadening of the scope and vision of what coast defence schemes can achieve for society. The interaction between the users and beneficiaries of the new works has developed a joint vision for the area in which the coastal defence scheme is a catalyst for wider neighbourhood improvements through the development of high-quality public space.



Figure 13: Rossall Coastal Defences Before & After

The open promenade allows for wide areas for cycling, running and taking in the everchanging sea views as well as open access to the sea for other recreational activities.



New FCERM Investment Programme 2021 - 2027

In the 2020 budget the Government committed expenditure of £5.2b to flood and coastal risk management. The proposed allocation in 2021 – 2027 for Lancashire is an investment of £230m to better protect 32,000 properties from coastal erosion and surface water flooding.

To allocate investment opportunities for the 2021 – 2027 investment programme used the information contained in strategies e.g. Coastal Strategies and Shoreline management plans and those that have already gone through a process as described in Figure 16 below.

This schematic describes how studies and schemes will be prioritised.

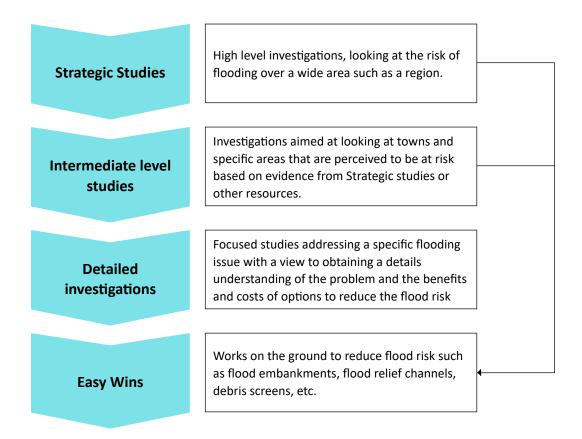


Figure 16: How studies and schemes will be prioritised.

Given the size of Lancashire, the extent of local flood risk and our limited budgets, it is not practical to attempt to implement all the required works or studies across the whole of Lancashire in the short term. We accept that we cannot invest in all areas to prevent flooding but we can address resilience and adaptation measures in all places

It is therefore necessary to prioritise the potential actions and target resources towards the most significant risks and where interventions can offer the best value for money.

It is important that this prioritisation remains flexible to account for emerging opportunities and local and wider priorities. Information on past flooding and future risk has been

continually assessed since the LLFAs commenced their roles in 2010. This information will assist in the future prioritisation of schemes and provide future opportunities for Lancashire. For projects that cannot be justified through the process above or do not meet the criteria set out by the Grant in Aid process, we will work with partners to seek opportunities for resilience measures and/or innovative methods of flood risk management. There are new and emerging investment opportunities that have been demonstrated particularly by our partners. For example, the Wyre Investment Readiness Project brings together investment from United Utilities, Environment Agency, Rivers Trust and private investors. This proposed Natural Flood Management project will provide habitat creation, water quality improvements, carbon sequestration, social impact and innovative investment and opens up the opportunity for further 2021 – 2027 investment in Lancashire.

The delivery of multiple benefits from flood and coastal schemes

In the 2015-2021 FCERM programme of works there was an investment of £145m to deliver projects across Lancashire to provide protection to 28,335 properties. These schemes also provided many additional benefits to communities and business. The coast protection schemes in Blackpool, Fylde, Morecambe and Wyre saw an investment of £115m providing multiple benefits and protection to 23,000 properties.

These schemes demonstrated the multiple benefits of linking engineering, economic and environmental improvements.

All five schemes have provided the primary protection to people and place and also created an environment that provides amongst many benefits, multiple health benefits, providing health walks, habitat creation, horticultural therapy, and outdoor schools.

The investment in flood protection has also proved to encourage confidence in investment partners enabling regeneration in many areas.

We will continue to drive opportunities in the 2021 - 2027 investment period, working with partners to expand and deliver multiple benefits through flood and coastal schemes.



Figure 17: Blackpool and Fylde Sand Dunes

Over the last 3 years, the UK's rarest lizard has been successfully reintroduced back to the Fylde Sand Dunes after coastal protection works to extend and improve the sand dune habitat made such a release programme possible. Captive-bred sand lizards have been released as part of a long-term project to restore the species status and historic range within the UK. This is now the lizards' most northerly site in England and a fantastic example of nature recovery in action and organisations working together to share expertise.

Opportunities to manage local flood risks through development, as appropriate (SuDS)

Under its Business Plan, the North West Regional Flood and Coastal Committee (RFCC) has set up a Sustainable Drainage System (SuDS) Task Group to support Local Planning Authorities and Flood Risk Management Authorities understand the implications of and prepare for the introduction of new sewer adoption code, <u>Design and Construction</u> Guidance (DCG), from 1 April 2020.

The Lancashire Strategic Partnership has identified this as a huge opportunity to ensure all Local Authorities adopt the SuDS pro-forma. This will enable planning authorities together with their lead local flood authority officers to guide and encourage Developers to implement suitable SuDS solutions in all developments in Lancashire.

Making the most of our water

We aim to make the best use of our water resources by integrating them within urban design and regeneration opportunities and taking an holistic approach to water management. Some new developments provide good examples e.g. North West Preston where Developers have worked closely to manage water reaching the new local highways. This can be further extended to incorporate surface water from properties.

The National Flood and Coastal Erosion Risk Management Strategy for England recognises that "every place is different" and we need to maximize opportunities for each place. In some areas there is an opportunity particularly where existing or new open water bodies can be utilized for flood resilience and as a recreation provision.

Lancashire has demonstrated by its £115m investment in coast protection schemes how flood and coast protection can provide regeneration opportunities, a boost to the economy and generate investment.

Defra define "Natural Capital is the sum of our ecosystems, species, freshwater, land soils, minerals, our air and our seas. These are all elements of nature that either directly or indirectly bring value to people and the country at large. They do this in many ways but chiefly by providing us with food, clean air and water, wildlife, energy wood, recreation and protection from hazards."

We have the opportunity to make the most of our water by integrating into design for natural capital gain.

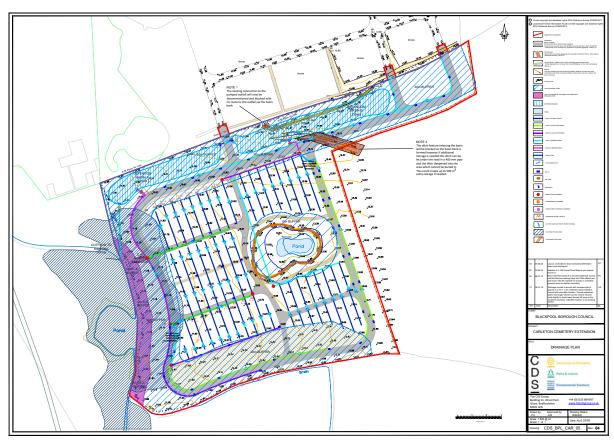


Figure 18: Carleton Cemetery



Figure 19: SuDS application Carleton Cemetery, Blackpool

Catchment based approach/ Natural Flood Risk Management/Nature Based Solutions

In certain circumstances, working with natural processes can help reduce the impact of flooding. Examples of this may be tree planting, riverbank restoration or storing water temporarily on open land. We should not expect that these measures alone will offer 100% protection to areas at greatest risk of flooding or during the most significant flood events but well-designed and well-integrated flood management will see these measures incorporated alongside more traditional measures, where appropriate.

We will develop a deeper understanding of this type of solution and work with multi- agency partners and voluntary organisations to provide integrated infrastructure resilience using innovative Nature Based Solutions (NBS) and infrastructure techniques to reduce costs to, and maximise benefit for, communities and the environment.

Case Study: Claver Hill Natural Flood Management Scheme

The Claver Hill Natural Flood management scheme was constructed in 2020. It comprises a series of small ponds to slow the flow of water off the site, a reedbed to reduce any pollution in the flow, and a balancing pond to create a habitat for wildlife and a resource for the Community.

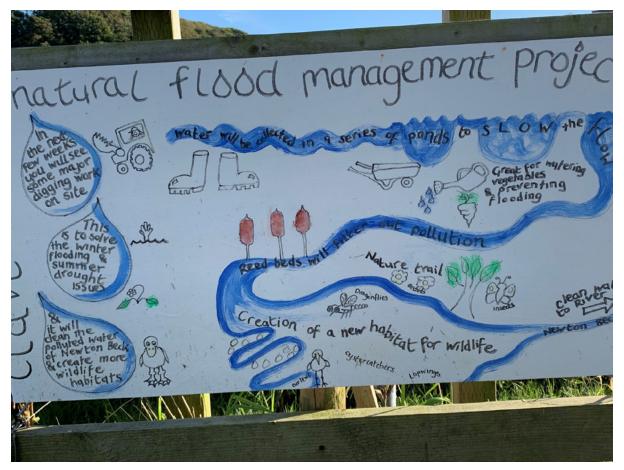


Figure 20: Claver Hill Natural Flood Management Project

Opportunity exists in hilly areas and flashy catchments to implement peat restoration and gully planting.

We seek opportunities for a wetter farming pilot. This would present an opportunity to test an innovative, practical / nature based solution to improve resilience to flooding, generate new evidence, demonstrate alternative land use choices on peat soils, and help (farming) communities adapt to climate change by making space for water and which would support wider environmental benefits, such as carbon emission reductions.

Work towards a climate resilient highway network (Smart Monitoring & SuDS)

During many of the recent storm events Lancashire has experienced disruption on its highways due to flooding. This has also caused significant damage to infrastructure and disruption to communities and business.

Lancashire with its Partners and Developers can mitigate flooding to highway through planning policy and commitments set out in Local Plans and Strategic Flood Risk Assessments (SFRAs). These will help ensure that development is regulated to provide protection from flooding from new development. In areas of development, SFRAs are needed to evaluate flood risk from development.

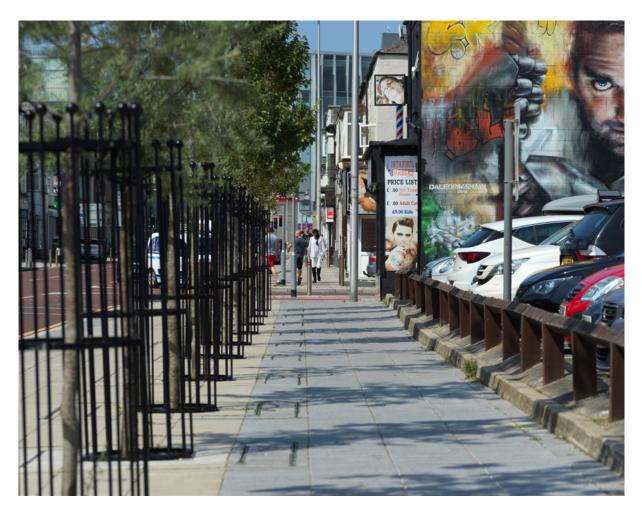
Lancashire will use this opportunity to ensure suitable sustainable drainage systems are included in the design of new roads and retrofitted in existing areas that would benefit from mitigation of this nature.

Additional measures of planting of trees and grass verges to increase water infiltration provide also provide an opportunity to provide a climate resilient and a sustainable environment.

Highway Opportunities

Highway Authorities have the opportunity to retro fit sustainable drainage in highways as part of maintenance and improvement projects.

The introduction of digital monitoring provides an opportunity for early intervention in times of flood. An example of this is the introduction of gully sensors in some parts of Lancashire. e.g. use of gully sensors is being trialled in Blackpool to provide up-to-date information for maintenance and performance.



Tree planting in urban areas provides an opportunity to reduce flood risk, create habitats and improve the "place", benefiting residents.

Expansion of the Flood Hub

<u>The Flood Hub</u> has been funded by the Regional Flood and Coastal Committee. It is unique as it is the only single point of access supporting communities across the North West.

The Flood Hub provides guidance to businesses and communities across Lancashire containing information and guidance on flood resilience. The Flood Hub gives access to interactive maps and information on flood schemes.

The Flood Hub also gives further opportunity to create a dedicated Lancashire resource for sharing and dissemination hub for the public, community groups and FLAGs. One particular opportunity that we shall explore through the Flood Hub is to work with partners on innovative digital flood monitoring solutions.

The Flood Hub

The Flood Hub can provide valuable information, both for water volume management and water quality management so that the benefits can be understood and shared with partners. The data collected can then inform the design of other similar schemes across Lancashire. Where future schemes are planned, comprehensive information will allow the completion of benefit: cost analyses based on proven and quantified benefits

Any equipment installed would be as innocuous as possible and would be designed so that it does not disturb the wildlife, or detract from the calm, green environment that the Community have created.

An excellent example of working together with Developers is described in the case study below.



Figure 21: White Carr Lane Wetland creation, September 2021

2021 Case Study: White Carr Lane River and Floodplain Restoration Project

Following an invitation onto the Wyre Making Space for Water Group in 2019, the Wyre Rivers Trust have been working with the four local flood risk management authorities; Lancashire County Council (Lead Local Flood Authority), Environment Agency, United Utilities and Wyre Council. Much of this work has been focussed on Thornton, which has over 3000 houses at risk of surface water and fluvial flooding, along with 10,000 + houses at risk from coastal flooding. Initial conversations were promising, and a morning of visits to sites with potential for the delivery of urban natural flood risk management led to an opportunity arising. A former government site at Norcross which is being redeveloped for housing was visited and the developer was very interested in the delivery of flood risk management works which went above and beyond the statutory requirement. We asked if they would consider re-meandering a section of Royles Brook which was historically straightened, disconnecting the flood plain and leaving a lifeless trapezoidal channel. The answer was yes, and we immediately set to work.

The aims of the project were to store water at the site during times of peak flow for around 12-18 hours, thus creating additional capacity within Royles Brook. This is important as it will allow local surface water drains to discharge into the brook for longer during periods of heavy rain, reducing the risk of surface water flooding in and around White Carr Lane. It will also store water upstream of Thornton, allowing other watercourses and surface water drains in Thornton to discharge. The works will also reduce the amount of surface water which finds its way into foul sewers, ensuring that capacity is retained within the United Utilities network.

Working closely with Wyre Council and using robust formulae we designed a new channel based upon the amount of water which can be held within the existing channel when it is full. The new re-meandered channel is around 7m wide along its 250m length, it also features a number of meanders and areas of varying depth to ensure that natural morphological processes can take place within the channel.

The creation of the channel began in November 2019 and was completed before Christmas. We then had to apply for permits to connect the channel to Royles Brook, thus allowing it to store water in times of peak flow. It is expected that the channel will store around 1,300m3 of water, at the same time it will act as a silt trap, reducing the issue of siltation in local culverts. The connections to the channel were completed in September 2020 along with a large wetland area, that will store an additional 350m3 of flood water. Along with flood risk reduction, the project has a wide array of other benefits: the creation of floodplain wetland will support a wide variety of species of flora and fauna, the wetland and channel will also $\begin{array}{c} Page \ 143 \\ 83 \end{array}$

capture silt, removing it from the watercourse and improving water quality. The reconnected floodplain will also store water itself, potentially storing an extra 1000m3 of water during flood events. The value of using natural solutions to reduce flood risk is many- fold: the solutions are resilient to change, sustainable and offer excellent value for money. They also provide a wide range of benefits that go above and beyond a typical traditional flood risk project. Because of the heavily modified nature of our environment and more extreme weather patterns seen due to climate change, these solutions do not offer a 'silver bullet' to reducing flood risk. In most cases they act to augment and increase the resilience of traditional solutions and to extend their design life by reducing the number of times that they are called in to action throughout a typical year.

The project was completed in September 2020. It was planted with a wide range of native wetland plants in Spring 2021. It is expected that around 3000m3 of storage will be created at the site following the completion of phase two, which will see the reconnection of a paleochannel which runs through the site. There will be reductions of FIO's such as E.coli and reductions in the concentrations of nutrients and other contaminants which enter the wetland complex. The wetlands will also have a wide range of benefits for local flora and fauna, supporting a wide range of species through creating a mix of habitats by direct intervention and benign neglect. Furthermore, the wetlands will act to sequester large amounts of carbon, helping to combat climate change. The wetlands will be subject to regular monitoring, allowing the Wyre Rivers Trust, Wyre Waters Catchment Partnership and local communities to assess the wide range of ecosystem services that these wetlands will provide.

Management through development

Development of land can have a significant impact on the management of flood risk, in Lancashire we have an opportunity through our role as a statutory consultee to control the impact of Planning and Development by the use of planning conditions and planning enforcement.

To assist in this process Lancashire operates a pre-application service for flood risk and land drainage consents. This service provides developers with advice in advance of the formal application to the LPA to clarify evidence requirements, and to give comments on initial proposals, site constraints and land drainage consent advice (Land Drainage Act 1991) as consenting can impact on site layout. This gives a much-needed opportunity to influence the impact of development and to manage the risk of flooding.

In addition, recent revisions to NPPF policy will help to drive the necessary changes to manage flood risk on new developments.

Influencing regional governance and national thinking

Lancashire has developed a strong Partnership and grasps the opportunity to influence governance and national thinking through its proposed innovative resilience proposals.

Lancashire's recent involvement in shaping the SuDS pro-forma and The Flood Hub are excellent examples of the strength to cease this opportunity to further influence regional governance and national thinking.

By developing a Lancashire-wide policy review we can now focus on facilitating ongoing innovative working to see long-lasting improvement programmes, and delivery of resilience to ensure long- term programmes. This will be achieved through management of agriculture, new developments and re-development improving urban areas flood resilience. For example, off-site Flood Risk Management will help to protect both proposed developments and other existing communities.

Innovative Partnership Working and Potential for Lancashire Devolution

Through the partnership and wider associated beneficiaries, Lancashire is proposing in some areas to set up innovative investment models & projects to support multi- benefit and multi-layered resilience delivery learning from the Wyre Investment Readiness Project described above.

A strong partnership has been formed with multiple organisations across Lancashire and this partnership will expand into communities and incorporate flood action groups and flood forums.

This Strategy recognises the potential for local government reorganisation, also for changes in private company management. Whilst these arrangements may change, water continues to move across administrative boundaries and we will continue to work in partnership across those boundaries to maximise our opportunities to manage flood risk.





High Tide



By 2027, Lancashire will be a more flood resilient place that is better prepared for and more adaptive to risks, challenges and opportunities supporting a sustainable future for the people of Lancashire.

Lancashire LLFAs will work collaboratively with partner flood risk management authorities, individuals, communities and organisations to reduce local flood risk. We will achieve this through the vision and themes set out in this strategy, under which we will deliver our objectives.

Our Strategy sets out actions that we will deliver over the next flood risk planning cycle to 2027 to move closer to the long-term ambitions set out in the National Flood and Coastal Erosion Risk Management Strategy to 2100.

The LLFAs will, through their flood and coastal erosion activities, manage the local risk to people and property through the six key themes set out below. Our objectives will sit under each of these themes, and the delivery of objectives will be monitored through our Business Plan which is appended to this Strategy.

Theme 1. Delivering Effective Flood Risk Management Locally

We will review and develop updated policies and procedures to ensure compliance with new and revised legislation, national policies, standards and guidance. In doing so we will incorporate lessons learnt since the adoption of we adopted our previous Local Flood Risk Management Strategy.

We will work together with our partners to ensure we raise awareness and support education of local flood issues in our Lancashire communities.

Theme 2. Understanding our Local Risks and Challenges

We will continue to build on our understanding of local risks of flooding by working with our partners organisations and communities to identify the causes and effects of local flooding.

We will take actions to better understand and communicate to our affected communities the challenges which complicate our efforts to address local flood risks.

Wherever possible, we will bid for and procure mapping and modelling works to continually improve our understanding of flood risks.

Theme 3. Supporting Sustainable Flood Resilient Development

We will work with our Local Planning Authorities to ensure Local Plans, Masterplans and relevant evidence base documents fully take account of local flood risks and have policies in place to manage these risks and require developments take account of them now and into the future.

We will ensure that guiding principles for sustainable development are applied and inappropriate development is avoided in existing and future areas at risk of local flooding. We will continue to advise Local Planning Authorities to require the use of high quality sustainable drainage systems which meet industry standards and ensure appropriate maintenance arrangements are secured.

We will encourage developers and planners to use sustainable drainage systems components, where possible, to enhance biodiversity and add amenity value to development in line with national and local planning requirements.

Theme 4. Improving Engagement with our Flood Family

Our flood family includes our public and private sector partners, other organisations such as charitable trusts, landowners, communities and businesses and anyone who has a role in managing flood risks in Lancashire.

We will continually improve how we work together to address local flood risks and facilitate better water management practices through our partner and partnership arrangements.

We will increase public awareness of the effects of climate change and the implications on flood risk by engaging with those specifically at risk of flooding to encourage them to take action to manage and/or mitigate the risks that they face and to make their property more resilient.

Theme 5: Maximising Investment Opportunities to better protect our Businesses and Communities

We will work with our Local Planning Authorities to ensure Local Plans, Masterplans and Where financially viable and cost-beneficial we will bid, build, maintain and improve local flood and coastal infrastructure and systems to mitigate or reduce the likelihood of harm to people and damage to the economy, environment (natural, historic, built and social) and society as a whole.

We will link our aspirations for flood alleviation schemes with other wider agendas, and vice versa, to support viability of schemes and to use flood risk funding as an enabler to investment in Lancashire wherever possible.

Theme 6: Contributing towards a Climate Resilient Lancashire

We will support and assist those bodies responsible for improving the detection, forecasting and issue of warnings of flooding. Plan for and co-ordinate a rapid response to flood emergencies and promote faster recovery from flooding.

We will embrace water management as a key agenda for facilitating a better adapted and more flood resilient Lancashire in the face of the climate emergency. We will work with our partners, communities and businesses to encourage collective social responsibility and greater awareness of climate resilience and adaptation and encourage investment in the local communities to support this.



To deliver our strategy efficiently, effectively, transparently and in a way that is coordinated with our partners and communities we have developed a Business Plan to steer and focus our actions.

A Business Plan is an action-led plan focusing on delivering tasks which meet statutory responsibilities and/or contribute towards delivering our vision.

In addition, our North West Regional Flood and Coastal Committee (RFCC) may ask flood risk management authorities in Lancashire to coordinate and deliver work on a Lancashire-wide basis. The Lancashire FCERM Partnership may also identify local priorities which are Lancashire-wide. Such work streams will be built into our Business Plan which will exist as a 'live' document with final objectives for delivery agreed annually by the Lancashire FCERM Partnership. Therefore, the Business Plan outlined in this document represents the minimum we will deliver across Lancashire to 2027.

4.1. Monitoring and Reporting Progress

Successful delivery of our Strategy relies on partnership working. We will therefore report progress and monitor delivery transparently and cooperatively with our partners at the Lancashire FCERM Partnership. Through the Lancashire FCERM Partnership, we will hold each other and ourselves accountable for the delivery of our Business Plan and therefore, for the delivery of our Strategy.

Delivery of objectives within the Business Plan will be closely monitored through a progress report provided to the Strategic Partnership Group on a quarterly basis. The report will monitor progress of objectives against timescales and expected outputs and outcomes.

We will also publish an annual monitoring report of our business plan, reflecting progress in delivering actions from our strategy.

4.2. Continually Improving: A Mid-Term Review

This Strategy will have a six year lifespan to 2027, in line with the new flood risk planning cycle and Investment Programme.

We recognise that flood and water management has a framework which is relatively fluid, in part due to the six-yearly flood risk planning cycle and also because flood and water management is a relatively new statutory function having only commenced in its current form in 2010. This means lessons are being learnt along the way and the legislation and policy frameworks amended to reflect this.

It is therefore acknowledged that a mid-term review of this Strategy in 2024 would be sensible to ensure it remains current and captures any additional actions or amendments needed to support delivery of effective local flood risk management in Lancashire in line with legislative and policy framework.

The Lancashire FCERM Business Plan

| | | | | | Delivery |
|---|---|---|--------------------------------|--|------------------------|
| Theme | Objective | Output / Outcome | Objective Owner | Support From | Milestone |
| 1. Delivering Effective Flood Risk Management | 1.1 Maintain, apply and monitor the Lancashire Local Flood Risk Management (LFRM) Strategy 2021 - 2027 | A monitoring framework for the Lancashire LFRM Strategy is established and delivery monitored. | LLFA | Lancashire FCERM Partnership (Strategic and Tactical) PartnershipCoordinator | Ongoing to 2027 |
| Locally | 1.2 Review and revise existing Section 19 Flood Investigation Report Policy, incorporating lessons learnt since 2010. | A new Section 19 Flood Investigation Policy is adopted and implemented by LLFAs. | LLFA | Environment Agency W&SCo Partnership Coordinator | March 2024 |
| | 1.3 Review and revise Consenting and Enforcement policy for regulating Ordinary Watercourses.` | A new Ordinary Watercourse Regulation Policy is adopted and implemented by LLFAs, including a clear position on culverting. | LLFA | Partnership Coordinator | March 2024 |
| Page | 1.4 Work proactively with Local Planning Authorities to ensure effective local policies are in place for managing flood risk and coastal erosion through the Land and Marine Planning Processes | Local Plan policy and evidence base review are informed by direct input from flood risk management authorities. | Local Planning Authorities | Environment Agency LLFA W&SCo Coast Protection Authorities | Various and Ongoing |
| e 152 | 1.5 Address the need for a Highway Drainage Connection Policy. | Highway Drainage Connection Policy is created, adopted and implemented by the Highway Authority. | Highway Authority | LLFA | March 2023 |
| | 1.6 Consider the need for a 'Designation of Flood Risk Features' Policy. | 'Designation of Flood Risk Features' Policy considered and, if appropriate, created and adopted. | LLFA Environment Agency | Partnership Coordinator | March 2024 |
| | 1.7 Deliver LLFA actions and engage with the delivery of actions that require partnership working contained within the National FCERM Strategy Action Plan. | Relevant actions identified in the National FCERM Strategy Action Plan are delivered. | LLFA | Environment Agency W&Co District Councils Other as identified | Various |
| | 1.8 Undertake a mid-term review of the Strategy. | Strategy is reviewed and updated appropriately. | LLFAs | Partnership Coordinator Environment Agency | October 2024 |
| 2. Understanding our Local Risks and Challenges | 2.1 Deliver any outstanding Surface Water Management Plans (SWMP), and identify further studies needed. | Surface Water Management Plans are delivered and used to inform bids into the Investment Programme as appropriate. Further SWMPs are added to Investment Programme. | LLFA | Project Advisor District Councils Environment Agency W&SCo | Various to 2027 |
| | 2.2 Bid for funding to install groundwater monitoring equipment to | Groundwater monitoring equipment is installed in targeted areas agreed by flood risk | LLFA or District Council(s) | Project Advisor | March 2024 |

| Delivery Milestone | | March 2027 | March 2025 | Ongoing | March 2023 | March 2026 | March 2023 |
|-----------------------|--|--|--|---|---|---|--|
| Support From | | Project Advisor Environment Agency | Project Advisor | Asset Management | District Councils W&SCo Environment Agency Highway Authority | Environment Agency LLFA Highway Authority District Councils | Environment Agency |
| Objective Owner | | LLFA | LLFA | LLFA | LLFA | United Utilities | LLFA |
| Output / Outcome | management authorities, and data used to inform decision making. | All Ordinary Watercourses in Lancashire are mapped and fed back into national mapping collated by the Environment Agency. | GIS model and mapping showing opportunities by type of natural flood risk management / sustainable drainage | Flood Risk Asset Register will grow in size to include new and existing flood risk assets, and is integrated appropriately for use within each LLFA e.g. through GIS. | GIS mapping system showing locations which have flooded including key details in the attribute table. | All source flood risk map is created and made available to all flood risk management authorities. It is to be accompanied by a clear maintenance pathway. | Established and consistent process in place for gathering information from residents and businesses that have been flooded from local sources. |
| Objective | improve our understanding of groundwater flooding in targeted areas in Lancashire. | 2.3 Bid for funding to map all ordinary watercourses in Lancashire, and feed this mapping and any modelling into national maps to improve all risk management authority understanding of local ordinary watercourse networks. | 2.4 Bid for funding to improve understanding of opportunities for natural flood management and strategic surface water management across Lancashire through sustainable drainage retrofit. | 2.5 Continue to populate the Flood Risk Asset Register and Record and utilise this data in managing local flood risks. | 2.6 Spatially map all historic and new known flooding incidents across Lancashire since 2013 and categorise accordingly e.g. internal / external, property / business etc. | 2.7 Support development of an 'all source' flooding map for the North West, to place all sources of flood risk on an equal footing. This could be achieved through Drainage and Wastewater Management Plan (DWMP) | 2.8 Consider how Council processes can be improved to make it easier to gather information from residents and businesses which are affected / |
| Theme | | | | Page 1 | 53 | | |

| Objective have been flooded from local sources (i.e. from ordinary |
|--|
| water, from groundwater). 2.9 Benchmark LLFA datasets to ensure all available data is utilised in other sources' of data are scoped, considered and implemented into databases. |
| 3.1 Support and provide input to Local Planning Authorities during plan erosion and sustainable drainage are adopted, making to ensure evidence base and informed by high quality evidence provided documents, policies and guidance are by flood risk management authorities. Suitable and take account of best practice, climate change, biodiversity |
| 3.2 Work with Local Planning Local Planning Authorities will require a locally Authorities to encourage adoption of adapted SuDS pro-forma through their Local Planning Validation Checklist for 'Major' development. |
| 3.3 Be represented on the North West RFCC's Planning Sub Group to ensure Lancashire is contributing to and learning from best practice across the region and nationally in relation to planning, development and SubS. |
| 3.4 Establish a process which ensures 'As built' SuDS assets are captured in Flood Risk captured in Flood Risk Asset Registers. |
| 3.5 Support the development of a Lancashire's natural capital accounting / natural capital accounting / biodiversity net gain approach for flood and coastal benefits. Lancashire, ensuring flood and coastal matters can be valued. |
| 3.6 Explore the feasibility of developing Feasibility of delivering a 'SuDS Suitability' guide a Lancashire-wide 'SuDS Suitability' for Lancashire is understood and, if possible, a |

| Theme | Objective | Output / Outcome | Objective Owner | Support From | Delivery Milestone |
|---|---|--|-------------------------------|--|-----------------------|
| | guide, based on mapping of ground conditions and integrated with other agendas such as the Lancashire Ecological Network and blue-green infrastructure network. | guide developed with colleagues in planning and ecology and other technical areas to help support the delivery of high-quality SuDS and ecology across Lancashire, contributing to a blue-green Lancashire. | | | |
| | 3.7 Encourage all flood risk management authorities in Lancashire to become members of the Association of SuDS Authorities (ASA). | Increase in member of ASA from flood risk management authorities in Lancashire. | Partnership Coordinator | LLFA | March 2022 |
| P | 3.8 Where appropriate, recommend to Local Planning Authorities that developers provide a contribution (S106 / CIL monies) to FCERM schemes that provide benefits to better protecting the development / community from flood risks prior to the grant of planning permission. | Where appropriate, developers are required to provide a contribution towards a FCERM scheme through S106 or CIL monies prior to the grant of planning permission. | Local Planning Authorities | Project Advisor LLFA Environment Agency | March 2024 |
| age 155 | 3.9 Produce 'LLFA Standing Advice for Minor Planning Applications' to enable Local Planning Authorities to assess minor planning applications in relation to local flood risks without direct LLFA consultation in most circumstances. | LLFA Standing Advice for Minor Applications is produced and issued to all Local Planning Authorities in Lancashire. | LLFA | Local Planning Authorities | September 2022 |
| 4. Improving Engagement with our Flood Family | 4.1 Improve the 'The Lancashire Partnership' webpage on The Flood Hub, including by setting out who our flood family is. | The Lancashire Partnership webpage on The Flood Hub is refreshed and improved, including a 'Lancashire Flood Family' section which identifies immediate and wider partners, and key communities and business, as appropriate, that we engage with. | Partnership Coordinator | Partnership Chair | March 2022 |
| | 4.2 Update Local Authority 'flooding' webpages and ensure they link to The Flood Hub to support community awareness, engagement and resilience. | All Local Authority webpages in Lancashire are refreshed and include a link to The Flood Hub website to support community resilience. | LLFA District Councils | Partnership Coordinator | March 2022 |
| | 4.3 Continue to support maintenance and development of The Flood Hub, including the launch of a new material. | Lancashire is represented at The Flood Hub website maintenance meetings, and a communications plan is developed for how Lancashire changes, news and issues can be fed up to The Flood Hub team. | Partnership Coordinator | LLFA District Councils United Utilities Environment Agency Highway Authority | Ongoing |

| Delivery Milestone | June 2022 | March 2024 | Ongoing to March 2027 | March 2023 | December 2021, then ongoing |
|---------------------------|---|--|--|---|--|
| Support From | LLFA | Partnership Coordinator | Environment Agency LLFA | Communications The Flood Hub | Partnership Coordinator |
| Objective Owner | Partnership Coordinator | Environment Agency W&SCo Highway Authority District Councils | Partnership Coordinator | Partnership Coordinator | Councillor Representative(s) |
| Output / Outcome | Following GDPR consent, contact details for FIAGs in Lancashire are published on The Flood Hub so that those at risk in the community can easily find and contact their local FIAG. | Asset maintenance regimes are reviewed, revised and considered in a risk-based manner, and with a partnership focus to identify opportunities to deliver a more efficient multiagency service. | Natural flood management and other schemes and projects are funded and delivered in Partnership where possible. | Communication and Engagement Plan for Lancashire. | The Lancashire FCERM Partnership has an has an appointed representative(s) to a every attend every RFCC meeting, and RFCC formed. Sub-groups as formed. Lancashire shares best practice and learning with colleagues across the North West region, |
| Objective | 4.4 Ensure Flood Action Groups (FIAGs) in Lancashire who consent to their 'get in touch' details being shared on The Flood Hub are published on the map and on the Partnership webpage. | 4.5 Work better together to deliver more effective, targeted and partner-focused asset maintenance regime for those assets owned by flood risk management authorities. | 4.6 Continue to attend and work proactively with Catchment Partnerships to identify local opportunities to work together to cofund and co-deliver natural flood management and other schemes within the community and private landownership. | 4.7 Develop a Communication and Engagement Plan showing clear lines of communication and reporting, within and amongst flood risk management authorities, wider partners and the people of Lancashire. This will include proactive communications and responsive communication to, for example, flood/weather alerts. This should also include a progress for how good practice is captured from across Lancashire, including from Catchment Partnership and wider partners, and shared appropriately with our flood family and the people of Lancashire. | 4.8 Ensure Lancashire is represented at every North West Regional Flood and Coastal Committee's (RFCC) and its sub-groups as formed, to ensure we are working effectively with regional partners, sharing best practice and |
| Theme | | | Pa | ige 156 | |

| Theme | Objective | Output / Outcome | Objective Owner | Support From | Delivery Milestone |
|---|--|--|--|---|---------------------------------------|
| | influencing any decisions or recommendations made to the RFCC and sub-regional FCERM Partnerships. | and feeds back to the Partnership from other areas. | | | |
| | 4.9 Ensure all flood risk management authorities are proactively engaged with the Lancashire Resilience Forum (LRF) to continually improve our multiagency and operational responses to flooding incidents. | Continuous improvement is built into both the LRF and operational flood responses. | LLFA District Councils United Utilities Environment Agency Highway Authority | Partnership Coordinator | June 2022 |
| | 4.10 Include separate Highway Authority and infrastructure provider representation on the Lancashire FCERM Partnership, at relevant levels, as appropriate, to ensure highway and other infrastructure flood risks are also captured. | Highway and other infrastructure flooding issues are better understood and, where possible, used to inform capital bids in the Investment Programme 2021 – 2027 to increase long term infrastructure resilience to help build a more flood resilient economy. | Highway Authority Infrastructure Providers | Partnership Coordinator | March 2022 |
| Page 157 | 4.11 Promote the educational resources provided on The Flood Hub and United Utilities SuDS for Schools programme via Local Authority Schools Portal / Educational Leads. | Educational material on flood risks are distributed to schools and teachers throughout Lancashire in order to embed into key stage syllabus and lesson plans relation to geography and climate change. | LLFAS | Environment Agency United Utilities The Flood Hub | March 2022 |
| 5. Maximising Investment Opportunities to Better Protect our Businesses | 5.1 Deliver schemes within the Investment Programme 2021 – 2027 to time and cost, including meeting partnership funding and efficiency requirements of grant funding. | Schemes in the Investment Programme 2021 – 2027 are delivered by March 2027. | Environment Agency LLFA Highway Authority | Project Advisor United Utilities | Ongoing to March 2027 |
| and Communities | 5.2 Proactively monitor the delivery of the programme at every level of the Lancashire FCERM Partnership and hold delivery leads accountable, and ensure this is consistent with best practice established from across the region and/or other RFCC areas. | A collective monitoring framework is established and shared at all levels of the Partnership and measured against quarterly with a progress report provided. Monitoring must include against delivering efficiencies and achieving the required partnership funding contributions, as well as timescales and outcomes projected. | Partnership Councillors | Project Advisor Partnership Coordinator | June 2022, then ongoing to March 2027 |
| | 5.3 Share the programme with partners at all levels and with Catchment Partnerships to identify any collaboration opportunities. | Investment Programme 2021 – 2027 is shared with Catchment Partnerships, and opportunities for collaboration in delivery are identified to | Partnership Coordinator Project Advisor | 1 | June 2022 |

| Delivery Milestone | | Ongoing | March 2023 | March 2022 | March 2025 | When opportunities arise | As required, and ongoing |
|-----------------------|--|--|--|--|--|--|---|
| Support From | | Project Advisor Partnership Coordinator Catchment Partnerships | Environment Agency LLFA United Utilities District Council Highway Authority | Project Advisor Partnership Coordinator | Partnership Councillors | Project Advisor North West RFCC | Project Advisor LLFAs District Councils |
| Objective Owner | | LLFA Environment Agency W&SCo Highway Authority District Councils | Project Advisor | Partnership Chair | Environment Agency LLFA | LLFAs | Partnership Coordinator |
| Output / Outcome | drive efficient and successful partnership working projects, as appropriate. | New schemes continue to be identified from flood risk management authority investigations, studies and partnership meetings. | 'Funding catalogue' is created, shared, maintained and used to enable delivery of identified projects, particularly those which are not viable or borderline. | A 'Quick Win' Protocol is established for The Lancashire FCERM Partnership and shared with colleagues across the North West as best practice. | Lancashire proactively volunteers to work with national colleagues to influence and provide evidence of flooding impacts on our communities and businesses. | Government are made aware of funding challenges Lancashire experiences, relating to both funding flood risk management authority duties and investment in areas at risk of local flooding (surface water, groundwater and flooding from ordinary watercourses) where it is appropriate to do so. | The Flood Hub reflects delivery of flood risk management schemes in Lancashire. |
| Objective | | 5.4 Continue to identify opportunities / need for investment in flood risk management infrastructure and ensure these are captured in the Investment Programme 2021 – 2027 at the earliest opportunity to secure an allocation, where viable. | 5.5 Develop a 'funding catalogue' of all potential sources of funding from public, private, voluntary and other sectors. Explore opportunities to collate this for the region, working with other Project Advisors to achieve this. | 5.6 Establish a process for the Partnership which facilitates quick allocation, approval and delivery of 'Quick Win' funding allocated annually to the Partnership. This includes governance and a re-allocation of funding if not spent as agreed. | 5.7 Influence national thinking on flood insurance and grants for those affected by flooding to encourage a consistent approach from government rather than on a storm basis. | 5.8 Where opportunities arise and where appropriate to do so, make government aware of funding challenges experienced in Lancashire, relating to funding duties of flood risk management authorities and investment in areas at risk of local flooding. | 5.9 Ensure The Flood Hub is updated with flood risk schemes in progress and completed on a periodic basis. |
| Theme | | | | Page 158 | | | |

| Theme | Objective | Output / Outcome | Objective Owner | Support From | Delivery Milestone |
|---|---|---|--|--|--------------------------|
| 6. Contributing Towards a Sustainable, Climate Resilient Lancashire | 6.1 Work with climate change action groups set up following Local Authority declaration of a climate emergency to ensure actions to address flood risk and coastal erosion are incorporated within climate change action plans. | Attendance at and input to products and outcomes from climate change action groups. Climate change action plan includes measures to address flood risk and coastal erosion. | LLFA Environment Agency United Utilities Highway Authority District Councils | Environment Agency United Utilities Partnership Coordinator | As required, and ongoing |
| | 6.2 Ensure a climate change allowance is incorporated into all proposed new sustainable drainage systems on developments consistent with national and/or local planning requirements and published guidance. | All new sustainable drainage systems on developments incorporate an allowance for climate change consistent with national and/or local planning requirements. | Local Planning Authority | LLFA Environment Agency United Utilities Highway Authority District Councils | December 2021 |
| Page 1 | 6.3 Investigate the feasibility of retrofitting SuDS in schools and other local authority owned buildings across Lancashire to improve their resilience and provide an educational resource. | There is an increase in schools and other public sector across Lancashire with SuDS retro-fitted to better manage surface water and remove, where feasible, existing flows from the public sewer network. | Education/Asset Departments in Local Authorities (County, District and Unitary Councils) | United Utilities | March 2024 |
| 59 | 6.4 Explore the feasibility of delivering a series of 'water resilient parks' in council owned parks across Lancashire to retrofit SuDS and natural flood management measures to contribute towards surface water storage where evidence shows this would be beneficial and financially viable. | SuDS and natural flood management measures are retrofitted on council owned parks where feasible. | Parks and Blue-Green Spaces (County and District Councils) | LLFA Catchment Partnerships Environment Agency | March 2025 |
| | 6.5 In contributing towards a climate resilient highway network and economy, consider how Highway Authorities in Lancashire could adopt SuDS components under the Highways Act 1980. Work with United Utilities to share learning following introduction of the Design and Construction Guide (DCG) for Sewers. | Highway SuDS Adoption Code to be considered and, if appropriate, produced. Production to be support by shared learning from United Utilities colleagues. | Highway Authority | United Utilities LLFA | March 2024 |

| Theme | Objective | Output / Outcome | Objective Owner | Support From | Delivery Milestone |
|-------|---|--|-------------------------------|--|-----------------------|
| | 6.6 Support Local Planning Authorities in undertaking a climate change review of Planning Policy and the Use and Management of Water in Lancashire to identify actions they can take to better manage flood risks presented by development and urban creep. | Local Plans in Lancashire are reviewed in the context of climate change and development management actions identified to better manage urban creep. Flood risk management authorities will support and engage with the Climate Change and the Use and Management of Water workshop. | Local Planning Authorities | LLFA Environment Agency United Utilities | September 2022 |
| | 6.7 Work with The Flood Hub and partner flood risk management authorities to promote property flood resilience measures, and signpost to reputable suppliers if this is possible. | The Flood Hub promotes property flood resilience and land flood resilience campaign via social media at least once a year. Reputable supplier list is provided on The Flood Hub. | The Flood Hub | LLFA Environment Agency United Utilities | September 2022 |

Jenkins Review



Appendix A: Key Duties and Powers of Flood Risk Management Authorities

Local Authority Statutory Responsibilities

Local authorities are a risk management authority as both the Lead Local Flood Authority (LLFA) and Highway Authority. This section outlines their roles and responsibilities in this capacity.

As the LLFA, County and Unitary Councils are required to oversee and participate in the management of local flood risk, which includes the risk of flooding from surface water, groundwater and from ordinary watercourses.

Section 19 Flood Investigation Reports

LLFAs have a duty to investigate flood incidents in their area and are responsible for ensuring all risk management authorities are working together to resolve flood problems in their respective areas.

The Flood and Water Management Act is clear that the LLFA's responsibility for investigation only extends as far as establishing which of the risk management authorities has a flood risk management function and whether they have, or will be, exercising that function. It may be the responsibility of one of the other risk management authorities, or even the land or property owner themselves, to take action to resolve the issue.

Section 19 of the Flood and Water Management Act allows LLFAs to define 'the extent that it considers it necessary or appropriate' to investigate a flood incident in their area and therefore to set investigation parameters.

Reports prepared under Section 19 of the Flood and Water Management Act must be published and made publicly available by the LLFA.

Flood Risk Asset Register and Record

LLFAs are required, under Section 21 of the Flood and Water Management Act 2010, to maintain a register of structures and features which are likely to have a significant effect on flood risk in their area. This register is called the flood risk asset register. Section 21 of the Flood and Water Management Act also requires LLFAs to record information about those registered structures and features, notably in relation to their ownership and state of repair. This is called the flood risk asset record.

Together this register and record enable LLFAs to collate important information about assets which may help inform better local flood risk management in the long term.

Delivering Sustainable Development

The Flood and Water Management Act 2010 requires flood and coastal erosion risk management authorities (that did not previously have such a duty) to aim to contribute towards the achievement of sustainable development when exercising their flood and coastal erosion risk management functions.

The Flood and Water Management Act also requires the Secretary of State to issue guidance on how those authorities are to discharge their duty, including guidance about the meaning of sustainable development. The *guidance for England* was published in October 2011.

Sustainable development in the context of flood and coastal erosion risk management (FCERM) includes:

- taking account of the safety and wellbeing of people and the ecosystems upon which they depend,
- using finite resources efficiently and minimising waste,
- taking action to avoid exposing current and future generations to increasing risk, and
- improving the resilience of communities, the economy and the natural, historic, built and social environment to current and future risks.

Designation of Flood Risk Structures and Features

About two thirds of physical flood risk management assets, such as walls, embankments and other raised features, are neither owned nor operated by public risk management authorities.

Under Schedule 1 of the Flood and Water Management Act 2010 the Environment Agency and Council as LLFA, both have the power to formally designate a structure or feature which either of them may believe may have an effect on flood or coastal erosion risk. These authorities are referred to as 'designating authorities'.

The Flood and Water Management Act also refers to the 'responsible authority' which is defined as 'the authority which made the designation' unless the designation has been adopted by another of the designating authorities. Councils, as LLFA, will therefore become the responsible authority for the designation of any structure or feature it designates, unless that designation is adopted by one of the other designating authorities.

A designation is a legally binding notice served by the designating authority to the owner of the structure or feature and the notice is a Local Land Charge. There are implications for a landowner if a flood risk management structure or feature is designated on their land. The landowner will need to apply for consent from the relevant designating authority if they wish to alter, remove or replace the structure or feature. A designation also acts as a Local Land Charge which is attached to the property or to the parcel of land.

Ordinary Watercourse Consenting and Enforcement

An 'ordinary watercourse' is a watercourse that does not form part of a main river and includes rivers, streams, ditches, drains, cuts, culverts, dikes, sluices, sewers (other than public sewers within the meaning of the Water Industry Act 1991) and passages, through which water flows.

On 6th April 2012, Schedule 2 (Sections 31, 32 and 33) of the Flood and Water Management Act 2010 amended the Land Drainage Act 1991 and transferred powers for the regulation of ordinary watercourses from the Environment Agency to the LLFA.

The powers of the LLFA to regulate ordinary watercourses are set out in the Land Drainage Act 1991 in three key sections:

Section 21: Enforcement of obligations to repair watercourses, bridges, etc.

Section 23 & 24: Prohibition on obstructions etc. in watercourses.

Section 25: Powers to require works for maintaining flow of watercourse.

These regulations broadly consist of two elements:

- 1. The issuing of consents for any changes to ordinary watercourses that might obstruct or alter the flow of an ordinary watercourse;
- 2. Enforcement powers to rectify unlawful and potentially damaging work to a watercourse.

Sustainable Drainage Systems and Planning (in all flood zones)

Schedule 4 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 lists the LLFA as a statutory consultee for 'major' development proposals in all flood zones validated from 15th April 2015. Major development is defined as 10 or more properties, or the equivalent for other land uses (as defined in Section 2 of *Statutory Instrument 2015 No. 595*)

This means that the Local Planning Authority (LPA) must consult with the LLFA prior to determining a planning application and that the LLFA must provide the LPA with a 'substantive response' within 21 calendar days, unless otherwise agreed.

The LLFA may also wish to ask the LPAs to consult them in non-statutory circumstances, or visa versa; for example because the LLFA has identified such circumstances as having the potential to impact on local flood risk or the management of local flood risk carried out by the LLFA. This is agreed through local arrangements with the LPAs.

As a statutory consultee, the LLFA has a legal duty to provide a substantive response to the LPA providing an informed view on development proposals which have surface water implications within 21 calendar days. The performance of the LLFA is closely monitored by the Secretary of State to whom the LLFA is required to report annually on their performance.

Highway Authority Responsibilities

Highways Authorities (Highways England and Local Authorities) have the lead responsibility for providing and managing highway drainage and roadside ditches under the Highways Act 1980. The owners of land adjoining a highway also have a common-law duty to maintain ditches to prevent them causing a nuisance to road users.

They co-operate with the other Risk Management Authorities to ensure their flood management activities are well coordinated.

Coast Protection Authorities

Local Authorities in coastal areas are Coast Protection Authorities. They lead on coastal erosion risk management activities in their area and are responsible for developing and delivering Shoreline Management Plans (SMPs) which provide a long-term holistic framework for managing the risk of coastal change on their section of the coast.

Coast Protection Authorities in Lancashire are Blackpool, Fylde, Lancaster, West Lancashire and Wyre Councils.

The Environment Agency has a strategic overview to ensure that decisions about the coast are made in a joined-up manner.

Environment Agency Responsibilities

The Environment Agency has a strategic overview of all sources of flooding and coastal erosion (as defined in the Flood and Water Management Act 2010) in England.

The Environment Agency's work includes:

- Developing long-term approaches to FCERM. This includes developing and applying the National FCERM Strategy.
- Working with others to prepare and deliver Flood Risk Management Plans (FRMPs) and Drainage and Wastewater Management Plans (DWMPs)
- Monitoring and reporting on flood and coastal erosion risk management. This includes reporting on how the National FCERM Strategy is having an impact across the country.
- Responsibility for flood and coastal erosion risk management activities on main rivers and the coast, including issuing <u>Environmental Permits</u> for flood risk activities and undertaking enforcement action as appropriate
- Providing planning advice during plan making and when determining planning applications in Flood Zones 2 and 3
- Regulating reservoir safety

- Working in partnership with the Met Office to provide flood forecasts and warnings and a Category 1 Responder during flood incidents (under the Civil Contingencies Act)
- Establishing Regional Flood and Coastal Committees in England
- Allocation of national government funding to projects to manage flood and coastal erosion risks from all sources
- Delivering projects to manage flood risks from main rivers and the sea
- Providing evidence and advice to support others. This includes national flood and coastal
 erosion risk information, data and tools to help other Risk Management Authorities and
 inform Government policy, and advice on planning and development issues

Water and Sewerage Company (W&SC) Responsibilities

Water and Sewerage Companies (WaSCs) are risk management authorities (RMAs) and manage the risk of flooding to water supply and sewerage facilities and flood risks from the failure of their infrastructure.

The majority of the public sewerage system in Lancashire is owned and maintained by United Utilities, however the northwest corner of Lancashire, around Earby, is the responsibility of Yorkshire Water.

The main roles of water and sewerage companies in managing flood and coastal erosion risks are to:

- make sure their systems have the appropriate level of resilience to flooding, and maintain essential services during emergencies
- maintain and manage their water supply and sewerage systems to manage the impact and reduce the risk of flooding and pollution to the environment. They have a duty under Section 94 Water Industry Act 1991 to ensure that the area they serve is "effectually drained". This includes drainage of surface water from the land around buildings as well as provision of foul sewers.
- provide advice to LLFAs on how Water and Sewerage Company assets impact on local flood risk
- work with developers, landowners and LLFAs to understand and manage risks for example, by working to manage the amount of rainfall that enters sewerage systems
- work with Local Planning Authorities during plan making
- work with the Environment Agency, LLFAs and Local Authorities to coordinate the management of water supply and sewerage systems with other flood risk management work.

Where there is frequent and severe sewer flooding, sewerage undertakers are required to address

This through their capital investment plans, which are approved and regulated by Ofwat. This happens every 5 years through the Price Review (PR) process. Water and Sewerage Companies have outcome delivery incentives (ODIs) that they agree with customers and partners. All water and sewerage companies have sewer flooding ODIs.

Voluntary SuDS Adoption by English Water and Sewerage Companies

In April 2020 Ofwat approved new guidance from Water UK for use by developers when planning, designing and constructing foul and surface water drainage systems intended for adoption under an agreement made in accordance with Section 104 of the Water Industry Act 1991.

The guidance is significant as it provides the mechanism by which water companies can secure the adoption of a wide range of SuDS components that are compliant with the legal definition of a sewer. This process remains voluntary i.e. the developer must offer the SuDS to the water and sewerage company for adoption.

There are however some notable exceptions to the adoptable components including green roofs, pervious pavements and filter strips. These components may form part of the drainage design as long as they are upstream of the adoptable components. You can read more *here* and *here*.

Appendix B: Strategic Environmental Assessment

Strategic Environmental Assessment

This strategy is being informed by the Strategic Environmental Assessment (SEA) 2014. The SEA seeks to ensure that the objective and actions in the strategy's business plan take into account the environment, social and socio-economic and health concerns and take advantage of opportunities for wider benefits at the same time.

The scoping of the SEA has determined that the following issues should be investigated further in the assessment phase:-

- Bio-diversity: flood risk to designated sites; other habitats and associated species; changes to habitats and direct and indirect species mortality; natural flood control, enhancing the resilience of the ecological network through habitat creation and enhancement; carbon sequestration through habitat creation and restoration; maintaining and enhancing habitat connectivity.
- Local Community: flood risk to properties community facilities and businesses, or their connectivity; flood risk to environments in deprived areas.
- Recreation: flood risk to recreational facilities or features; access to recreational routes/ facilities.
- Geology and soils: flood risk to geological features; land use conflict with soils; land use conflict with geological features.
- Water Environment: compliance with River Basic Management Plan; risk of water pollution; long term ability to achieve "good" status or "good potential."
- Climatic factors: construction CO2 emissions.
- Landscape and Townscape: flood risk to landscape and townscape character.
- **Historic Environment:** access to land use or design conflict with historic features designated or non-designated historic feature; flood risk to historic assets.

In order to maintain a future perspective the environmental impacts associated with the strategy, the SEA will ensure environmental monitoring is incorporated as part of the overall approach to monitoring the delivery of the strategy's objectives and measures.

The SEA assessment will also address the requirements of the Habitats Regulation Assessment (HRA) under the Conservation of Habitats and Species Regulations 2010. The HRA will consider the potential effects of a development plan on the biodiversity of Designated European Sites including Special Protection Areas and Special Areas of Conservation. We have already highlighted the benefits of Partnership Working and the need to ensure that Ecologists should be an integral member of Partnerships particularly when discussing proposed flood risk management projects.

Appendix C: Glossary of abbreviations and phrases

Glossary of abbreviations and phrases

Asset Register

Register of structures or features which are considered to have an effect on flood risk.

BwDBC

Blackburn with Darwen Borough Council

Catchment

The extent of land which catches and holds rainwater

CFMP

Catchment Flood Management Plan, produced by the EA to give an overview of the flood risk in the primary catchments in the Lancashire region.

Civil Contingencies Act 2004

Defines Category 1 and 2 responders to flooding emergencies

Consenting

Process of obtaining permission to add/amend structures in/near a watercourse or flood defence structure

Defra

Department for Environment, Food and Rural Affairs, responsible national emergency planning for flooding

EΑ

Environment Agency, responsible for the strategic overview role for flood and coastal erosion risk management

FCERM

Flood and Coastal Erosion Risk Management

Foul water flooding

Flooding that is contaminated with sewage

Flood and Water Management Act 2010

Act introduced in response to Sir Michael Pitt's Review on the Summer 2007 floods

Flood Risk Regulations

Transposition of the EU Floods Directive into UK law.

Fluvial flooding

Flooding from rivers

FRM

Flood Risk Management

FRR

Flood Risk Regulations 2009

FWMA

Flood & Water Management Act 2010

Groundwater flooding

Flooding when water levels in the ground rise above the surface

HA

Highways Authority

LA

Local Authority

LDA

Land Drainage Act, introduced to consolidate the functions of local authorities in relation to land drainage

LFRM

Local Flood Risk Management

LLFA

Lead Local Flood Authority, responsible for taking the lead on local flood risk management

Local Flood Risk

Flooding from sources other than Main Rivers and the sea

LRF

Local Resilience Forum

NERC

Natural Environment and Rural Communities

Ordinary Watercourse

A statutory type of watercourse including river, stream, ditch, drain, cut, dyke, sluice, sewer (other than a public sewer) that is not classified as main river

Pitt Review

Comprehensive independent review of the 2007 summer floods by Sir Michael Pitt, which provided recommendations to improve flood risk management in England.

PFRA

Preliminary Flood Risk Assessment

Pluvial Flooding

Flooding causing from direct rainfall runoff (before it enters drains or watercourses).

Risk

Risk = probability of an occurrence x its potential consequence

RMA

Risk Management Authority, organisations that have a key role in flood and coastal erosion risk management as defined by the Flood and Water Management Act 2010.

SEA

Strategic Environmental Assessment

SFRA

Strategic Flood Risk Assessment

SuDS

Sustainable Drainage System

Surface water flooding

Flooding caused by high intensity rainfall that generates flows over the ground and collects in low lying areas. Also known as pluvial or flash flooding.

UU

United Utilities

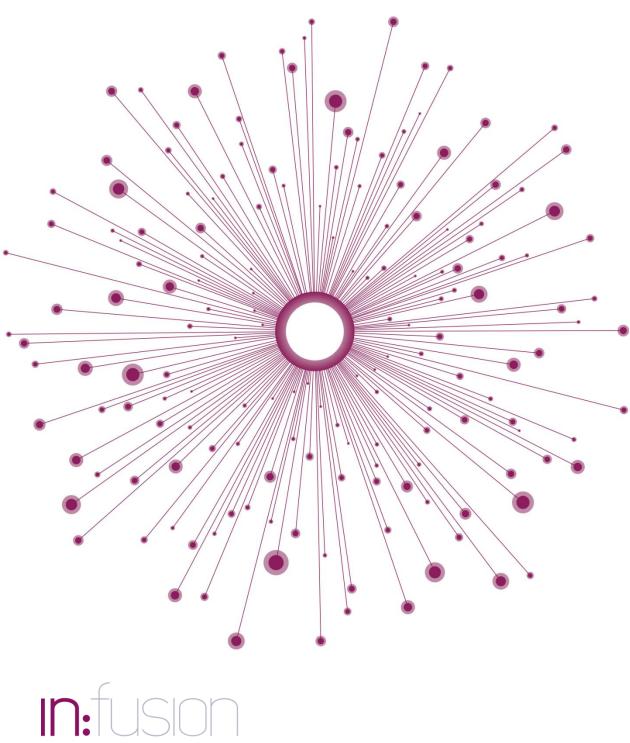
W&SCo

Water and Sewerage Company

YW

Yorkshire Water Services Limited

Lancashire Flood Risk Management Strategy Consultation: Data Analysis April 2021



Contents

| 1. | Summary and Recommendations | . 3 |
|----|-----------------------------|-----|
| 2. | Methodology | 6 |
| 2 | Posults | Q |

1. Summary and Recommendations

General Comments

- The crucial part of the strategy is the vision, themes and actions. These were the most
 understood and welcomed parts of the document, suggesting broad consensus amongst
 respondents over the direction. A number of additional suggestions were made across the
 rest of the consultation exercise which reflected a lack of clarity from some respondents to
 aspects of the document;
- The team responsible for developing the strategy should develop a response to the points raised in this report, to be published alongside the revised strategy.
- Individuals responding to the survey were a lot less likely to be clear on questions requiring factual knowledge than those responding on behalf of an organisation.

Definition and roles

- Whilst the majority of respondents felt that the definition of "local flood risk" was clear, respondents highlighted that this would not be the case for the general public;
- A majority of respondents felt that the diagram explaining the roles and responsibilities of the flood risk management authorities was clear, but the total proportion was lower than those who found the definition of "local flood risk" clear.

Legislative and Strategic Framework

- Just under half of respondents felt that the relevant legislation was included, but many did not feel in a position to comment, and two suggested specific acts of parliament;
- Slightly fewer respondents than the above question said they agreed that relevant
 assessments and plans were included, and a significant amount of suggestions were made
 about others which could be included, such as waste plans and local plans;
- Whilst over half of respondents felt that the descriptions of individual responsibilities and the governance involved was clear, it was evident from the comments that there was confusion over the diagram and how it related to the governance process;
- Although over half respondents commented that the strategy referenced all of the other groups that the Flood Risk Management Authorities would work with, 21 specific suggestions were received on other organisations;
- Fewer than half of respondents felt insufficiently informed to suggest additional funding sources

Local Risks and Challenges

- The top flood risks identified were:
 - Drainage Infrastructure aging and at capacity (109)
 - Increasing local flood risks as a result of climate change (78)
 - Predominant surface water flood risk (76)

All of these are already included in the action plan, suggesting no further changes are needed, although a review of the detailed comments may highlight useful additions;

- Four challenges to flood risk management were identified as being more important than the other options:
 - Regulation and maintenance of watercourses (104)

- Developing and retaining flood risk professionals for Lancashire (64)
- Long-term sustainability of pumped catchments (55)
- Public awareness of and resilience to flood and coastal risks (52)

Opportunities

- The main opportunities to improve flood risk management identified from the options given were more numerous than in the "risks and challenges" question:
 - More effective and integrated working between flood risk management authorities to alleviate issues (90)
 - o More resources to regulate local flood risk, including on private land (86)
 - o Funding bids for flood alleviation schemes are prioritised (69)
 - o Greater education, awareness and understanding of local flood risks is needed (49)
 - Property level protection measures (41)

Vision and Aims

- Just under half of respondents agreed that the vision fits with the national strategy, with 8
 disagreeing. Whilst this is positive, a substantial number of comments suggested ways in
 which the vision could be changed. These should be considered in detail for their fit with the
 strategic direction suggested by the evidence base;
- Over 60% of respondents agreed that there was a fit between local themes and national
 ambitions, with this relatively high figure potentially reflecting that these were more easily
 interpreted and understood than questions of governance and technical definitions. The
 comments received were diverse, only being made by one or two respondents. This
 potentially suggests that they reflect personal interests and that the local themes do not
 require as much additional consideration as other aspects of the strategy;
- Similarly, nearly ¾ of respondents agreed to some extent that they agreed with the vision and themes of the strategy, again suggesting that these were broadly welcomed and comprehensive.

Actions

• The diversity of suggestions made about contents of the action plan should feed into a review of the action plan by the Lead Local Flood Authorities as part of the post-consultation review of the strategy.

Updating the Strategy

- There was clear support (49%) for quarterly monitoring of the strategy by the partnership and the production of an annual report, and this should be actioned;
- There was resounding support (85%) for a review of the strategy taking place after 3 years, and this should be built into the action plan.

Recommendations

- The team intends to produce a non-technical summary document to assist the general public in understanding and interpreting the strategy. This should take account of the comments made regarding the terminology used and diagrams included in the strategy;
- To evidence consideration of the consultation responses, the team should produce a
 document which outlines key themes and points, whether these will be addressed and why
 this position was reached

2. Methodology

This consultation exercise addresses the legal requirement on the Lead Authorities on the Strategy (Blackpool, Blackburn with Darwen and Lancashire Councils) to engage with stakeholders and the public on the content of the Local Flood Risk Management Strategy. The survey was undertaken wholly online due to the national lockdown imposed in response to the Coronavirus pandemic, with an option to request a hard copy if needed.

The survey questions were based on a scope developed by the three officers from the Lead Authorities. This included a draft questionnaire covering most aspects of the strategy. This was refined to remove questions of less direct relevance to the vision, strategy and delivery of the strategy, improve the flow of the survey and ensure a balanced approach.

The survey (see Appendix A) included a web link to the draft strategy, but also included all of the salient information so that respondents could respond in an informed way without needing to commit to reading the full strategy. Some information, such as local district profiles, were omitted as these were contextual and not open to discussion as part of the scope of this exercise. There are instances where respondents have called for more information that may already be provided in the strategy itself. The questionnaire mostly followed the format and content of the strategy, dealing with each aspect of the document consecutively, although some topics and questions were combined to shorten the survey. This report summarises the responses to each question asked.

The three lead authorities undertook promotion of the survey via a press release to local media, regular posts on social media accounts, and through targeted distribution of the survey link to key stakeholders, with reminder emails as necessary.

169 responses were submitted from **February 12 to March 19 2021**. This includes 25 partial responses. Partial responses include surveys that people had saved their responses to but not returned to complete and submit the form, and surveys that people had partially completed then navigated away from the web page. These are included in this analysis.

6 further responses were received where the respondent did not complete the questionnaire but chose to comment in an open-ended fashion. These were all on behalf of stakeholder organisations or from individuals working with in them, with several including supplementary information or relevant documents. Due to the need for these to be considered on their own terms, they are not covered in the analysis below. The emails and accompanying documentation have been supplied to the team and should be treated in the same way as the literal comments from survey respondents.

Note that percentage totals may not sum to 100% due to rounding.

The role of this report

This report provides an overview of common issues identified by respondents. Inevitably, in a consultation on a technical document, many of the respondents had clearly made significant time and effort to offer challenges and suggestions not picked up in the grouping of responses. A spreadsheet including verbatim comments (redacted to remove information which could identify individuals, offensive or libellous statements, and profanities) is provided as Appendix B. To comply with consultation practice and principles, it is strongly recommended that Subject Matter Experts

review these comments to see whether there are implications for the detail of the strategy, and develop a position to be shared with the revised strategy.

Who responded?

From identified respondents, 35 responses (20.8%) were responses on behalf of organisations and 133 responses (79.2%) were from individuals. Detailed analysis of the data shows that, for more than half of the questions asked, 100% of those saying that they did not feel in a position to comment, or who responded that they didn't understand the issue, were individuals, with the remaining questions also seeing a very high proportion of individuals saying similar. This reflects the technical nature of the document.

98 of the individual respondents were homeowners (79%), 11 responses were from councillors (8.9%), 4 responses from landowners/farmers (3.2%) and 3 responses were from RFCC (Regional Flood and Coast Committee) members (2.4%).

From 124 responses made by individuals, 117 respondents (94.4%) stated they were a Lancashire resident and 37 (29.8%) stated their property had been affected by flooding.

Responses by the type of organisation and role of those with their organisations are shown in the charts below:

Figure 1: Response by organisation

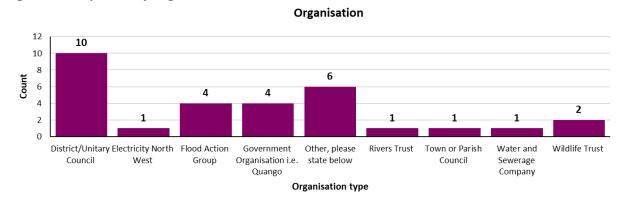
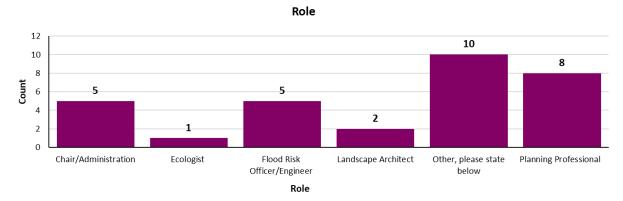


Figure 2: Response by role



3. Results

Definition and roles

The first section of the questionnaire looked at the definitions of the problems being addressed and the roles of agencies involved.

Question 1 presented a definition of the local flood risk. 19% of respondents felt this was "very clear" and 57% felt it was "clear", whilst a total of 13% felt it was "unclear" or "very unclear".

When asked to explain why the explanation of "local" sources of flooding was "unclear" or "very unclear", excluding "no, N/A and not applicable" comments, 24 comments highlighted the following issues:

- 8 comments suggested the definition was vague, particularly to those who were not
 professionals/experts in this area, including the highlighting of "ordinary watercourse" as a
 term which was unclear;
- 7 comments focused on the explanation of risk, including wanting more information around the mitigation of risk and how the risk of flooding is presented;
- Other comments focused on language needing to be simplified and further clarification being needed in the strategy, including four comments that made reference to the following question.

Question 2 referred to a diagram included in the strategy which showed the responsibilities of various agencies around flooding and the way in which they related to each other. 14% felt this was "very clear" and 53% "clear", slightly fewer than in question 1. 22% felt it was "unclear" or "very unclear", with 40 comments received:

- 20 comments said that the role and responsibility of bodies needed further clarification;
- 7 suggested that definitions should be included within the diagram (with several again querying what an "ordinary watercourse" was);
- 5 said that the diagram itself was visually unclear, with a further two taking a negative view of the diagram;
- 4 queried the inclusion/exclusion of organisations on the diagram;
- The other comments were not directly relevant to the question.

Legislative and Strategic Framework

The next section looked at the context within which the strategy was being delivered, and explored whether the draft document had adequately accounted for the legal framework and networks within which the lead authorities operate.

Question 3 asked whether the strategy covered all of the legislation relevant to local flood risk management. 47% agreed, 15% said it "somewhat" covered the legislation, whilst 7% said it did not and a further 31% did not know, or were unsure.

Of those expressing reservations, 34 commented in more detail:

• 11 made general comments about their individual circumstances or other observations which were not directly applicable;

- 10 highlighted specific legislation being "missing" or not explained clearly, with two suggesting specific acts of parliament;
- Other comments were of a more general nature or suggested that the respondent wasn't in a position to comment on the legislation included.

Question 4 asked whether the strategy covered all of the relevant assessments and plans. 41% agreed, 22% said it "somewhat" covered them, with 8% saying "no" and 30% not knowing or being unsure.

40 made further comments:

- 19 made comments which were not applicable to the question. Of those with more general relevance, some suggested the strategy was not relevant to real world outcomes, or that roles and responsibilities were unclear;
- 18 suggested specific additional local plans, or wanted further explanation of the assessments;
- 3 said they lacked knowledge on this topic or that the terminology used was unclear.

Questions 5 and 6 presented some definitions of parties with a specific responsibility around flood management, and a diagram of governance arrangements. It is worth noting that the presentation of the questions appears to have affected responses, with some respondents considering both questions together when making comments. 13% said that the explanation of the role of individuals and communities was "very clear", with 54% saying it was "clear". A total of 17% felt it was "unclear" or "very unclear".

24 made further comments around the role of communities, but these mostly related to governance. 8 cited that the relationships between the groups were unclear (which refers to the governance diagram), 8 said that the input or accountability of individuals or organisations was unclear, 4 referred to the diagram being unclear (again, a reference to the governance diagram), with the other comments being more general in nature.

57% of respondents answered that the governance explanation was clear, with 22% saying it was "somewhat" clear and 11% saying "no". Of the 31 respondents choosing to explain their answers, 10 cited that the relationships between the groups were unclear (some of which refers to the governance diagram), 6 cited the language used, and a further 3 called for more information on the responsibilities of each party involved.

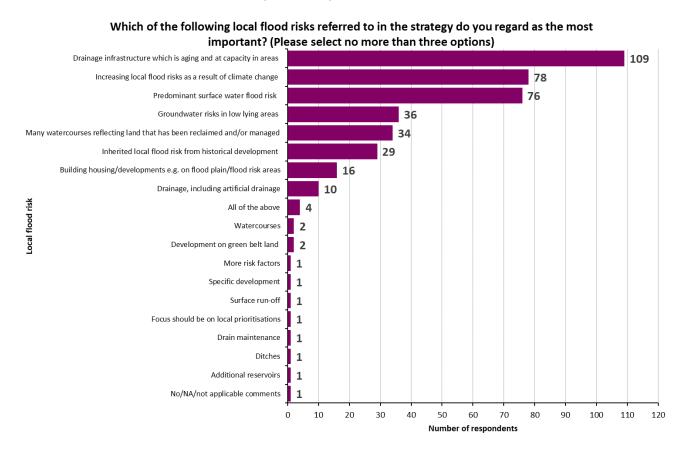
Question 7 presented details of partner organisations for consideration and asked whether this was comprehensive. 56% said it was, with 17% saying it was not, and 27% being unsure. 34 comments were received, with 21 suggesting specific organisations and 4 stating it was unclear, whilst other comments covered issues which were not applicable or less relevant to the question.

Question 8 asked about sources of funding for risk management. This was the question in this section which respondents felt least informed to make a response on, with 45% feeling unable to comment, and just 43% saying yes (i.e. that the list provided covered all funding sources). 29 comments were received, of which 16 referenced specific or general sources of funding.

Local Risks & Challenges

This section considered some of the practical issues with delivering local risk management.

Figure 3 below covers **Question 8c** on the local flood risks referred to in the strategy that respondents regarded as the most important, based on the selection of three options each, and shows a clear distinction between the top three responses and other answers:

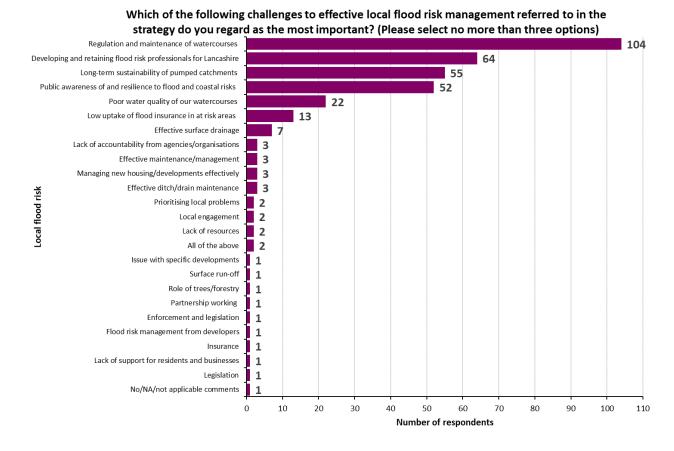


In addition, 39 comments were received making various observations, including from respondents who had ticked "other":

- 16 commented on housing developments, for example building on flood plains, and a further 2 around development on green belt land;
- 10 suggested drainage, including artificial drainage, with a further comment around drain maintenance;
- Other comments tended to be more diverse or not directly relevant to the question.

Question 8e then asked respondents to consider the challenges involved in effective flood risk management, which is shown in **Figure 4** (overleaf). In this case, four of the available options are clearly considered as more important to the other potential responses.

36 further comments were received, with the level of diversity in these meaning that many suggestions were categorised individually or only with one other response. Of the most numerous, 7 cited effective surface drainage, with 3 respondents citing each of the following: Managing new housing/developments effectively, effective maintenance and management in general, and lack of accountability from agencies and organisations.

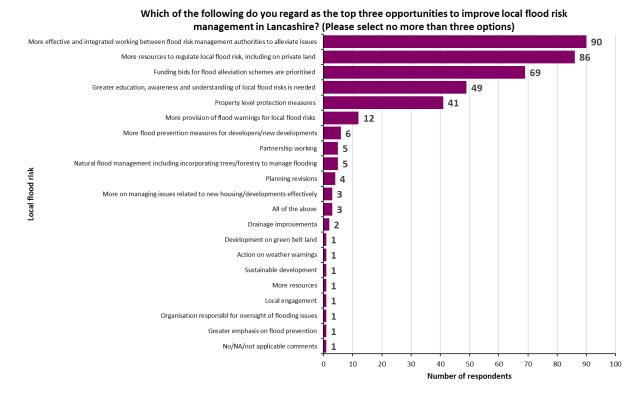


Question 9a asked respondents to reflect on whether the previous questions reflected the local risks and challenges across Lancashire. 44% said yes, with a further 31% saying that they did "somewhat", whilst 13% said "no". This question attracted a large number of comments and suggestions of "other" risks, with a significant proportion of these reflecting some of the comments in the previous two questions:

- 16 talked about managing issue related to new housing and developments effectively;
- 8 wanted a greater focus on drainage issues;
- 6 talked about effective management and/or maintenance, including upland and sand management;
- 4 sought action on flooding issues;
- Other responses tended to be in their own category or together with only one other response, or to not be relevant to the topic.

Opportunities

This section sought to provide balance with the previous focus on risks, asking about the biggest three opportunities to improve local flood risk management. The distinction between respondents' chosen options was less clear than on the previous questions, with five options attracting a large majority of responses:



33 comments were received suggesting "other" opportunities:

- 6 suggested there needed to be more flood prevention measures for developers and new developments;
- 5 wanted to see more partnership working;
- 5 wanted to see greater use of natural flood management;
- 4 would seek planning revisions;
- 3 wanted to see more effective management of new housing/developments;
- Other comments were in categories of their own, or with one other response.

Vision and Aims

These sections asked about the fundamental purpose of the strategy – i.e. to set out the direction of work in this area in the future.

Question 10 set out the national vision and the proposed local vision, and asked whether respondents felt that the local vision fitted with that of the national strategy. 48% felt it did, with a further 24% saying it "somewhat" did, and 20% saying they didn't know or were unsure. 8% (12 respondents) said that it did not.

Of those answering "no" or "somewhat", 44 offered detailed comments:

- 7 of these were not directly or indirectly applicable to the question;
- 5 considered the timeframe unrealistic;
- 5 emphasised the need for action on flooding;
- 4 suggested looking at the development and planning process;
- 4 suggested the language should be simplified;
- Other comments made by one or two respondents covered a wide range of issues, particularly around the emphasis of the vision.

Question 11 set out the ambitions of the national strategy, and the themes of the local strategy. Positively, 60% of respondents felt there was a fit between the two, 19% said they "somewhat" fit, and 6% saying they did not fit, with 15% saying they didn't know or weren't sure, making this one of the better understood and agreed elements of the strategy. 27 further comments were received, of which 4 were irrelevant to the question, and 3 called for developer accountability. Other responses were only made by one or two respondents, covering a total of 18 other topics.

Question 12 asked to what extent respondents agreed or disagreed with the vision and themes of the strategy. 73% either "strongly agreed" or "agreed", with 6% "disagreeing" or "strongly disagreeing". As with the previous question, there was little consistency with suggestions on how the vision or themes should change, with 21 relevant comments covering 19 different topic areas and only "accountability for developers" recurring more than twice. 4 further comments were not applicable.

Actions

Recognising that strategic action plans tend to evolve and adapt over time, this section included details of the proposed actions and sought open-ended comments on them. The diversity of comments received reflect the complexity of the issue, and should be treated as a valuable source of ideas.

Theme 1: Delivering effective flood risk management locally received 58 comments, of which 7 were in agreement with the theme or specific actions identified, with 1 suggesting it didn't address the issues. 19 broad areas were suggested, with the most frequently occurring being comments that focussed on specific actions (8), suggestions of specific policies or information to be included (6), reviewing house building and developments (6) and observations on partnership or collaborative working (4).

Theme 2: Understanding our local risks and challenges attracted 49 comments, of which 4 were in general agreement or specific items, and 2 which disagreed. Mapping was most commonly cited (10 respondents), with a further 4 comments calling for the inclusion of specific policies or information. A further 14 relevant categories of comment were recorded.

Theme 3: Supporting sustainable flood-resilient development attracted 54 comments, with 4 in agreement and 1 sceptical about the theme. Responses tended to group together more than across other themes, with 10 commenting about the need to review housebuilding and developments, 10 focusing on sustainable drainage, and 6 on partnership working. A further 11 relevant types of comment were recorded, some of which linked closely to aspects of the development process.

Theme 4: Improving engagement with our flood family attracted 37 comments. 4 agreed, with 1 disagreeing and a further respondent expressing scepticism. 6 noted that communication was not clear, with a further 14 comments being recorded.

Theme 5: Maximising investment opportunities to better protect our businesses and customers saw comments from 34 respondents. 4 agreed, with one being sceptical. Suggestions around lobbying and funding attracted 5 respondents, with the other categories being more disparate.

Theme 6: Contributing towards a sustainable, climate-resilient Lancashire gained 38 comments, with 4 in agreement and none expressing scepticism or disagreement. 3 suggested the inclusion of specific policies or information, but no other categories attracted significant numbers of comments.

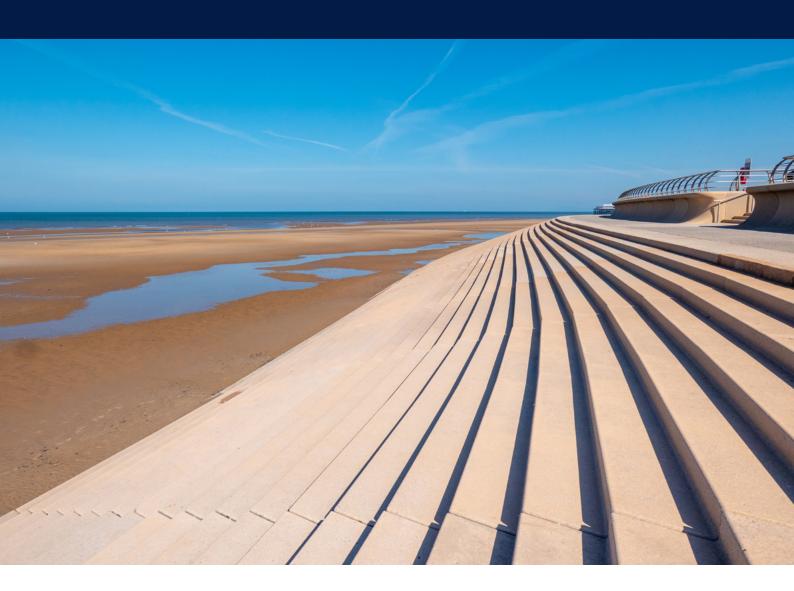
Updating the strategy

The final section asked about the process for reporting on and reviewing the strategy. 26% sought quarterly monitoring via partnership governance, 14% wanted an annual progress report, and 49% wanted both. 22 comments were received, most of which amplified the option respondents selected.

This section also asked about the review period, with a suggestion that it was reviewed mid-term to ensure it remains up-to-date. This was supported by 85% of respondents, with three calling for an earlier review, two suggesting it needed ongoing review, and one calling for an annual review. In practice, the distinctions between these are likely to be around definitions, as the governance process would suggest that tracking the progress of actions would take place relatively frequently, with the formal review process being a more intensive exercise which would not be needed as often.

Equality Analysis Toolkit

Lancashire Local Flood Risk
Management Strategy 2021-2027







Question 1 - What is the nature of and are the key components of the proposal being presented?

The report to Executive seeks approval of the Lancashire Local Flood Risk Management Strategy 2021 - 2027 (the Local Strategy) and associated documents listed below to ultimately discharge its statutory duty under Section 9 of the Flood and Water Management Act (2010) (FWMA) to produce a Local Flood Risk Management Strategy that is updated and monitored.

In addition to the Local Strategy, the proposal is also for the approval of associated documents including:

- Non-technical Summary of the Local Strategy (covering the key points of the Local Strategy)
- Consultation Report on the Public Consultation of the Local Strategy
- Strategic Environmental Assessment (SEA)
- Habitats Regulations Assessment (HRA)

The previous Local Strategy was adopted in 2014. Now that the new National Flood and Coastal Erosion Risk Management (FCERM) Strategy (the National Strategy) has been published by the Environment Agency in September 2020, Lead Local Flood Authorities are required to update their Local Strategies to ensure they are consistent with the National Strategy in accordance with Section 9(5) of the FWMA 2010.

The revised Local Strategy is a joint document produced by Blackpool, Blackburn-with-Darwen and Lancashire County Councils as the Lead Local Flood Authorities (LLFAs) across Lancashire. It is proposed that the Local Strategy will be published on all three Council websites so our residents can easily find it, but that publication on our websites will not happen until all three Councils have granted approval of the Local Strategy.

The Lancashire Local Flood Risk Management Strategy 2021 - 2027 proposed for approval is the publication version. An earlier consultation version underwent a five-week public consultation, the feedback from this can be found in the Consultation Report. The publication version has been amended to take account of this feedback and is therefore not subject to further amendment.

Question 2 - Scope of the Proposal

Is the proposal likely to affect people across the county in a similar way or are specific areas likely to be affected – e.g. are a set number of branches/sites to be affected?

The Local Strategy aims to impact positively on everyone who lives and/or works in Lancashire, regardless of age, disability, sex/gender, gender identity/ reassignment, race, ethnic background, religion or belief, sexual orientation, pregnancy and maternity, marital status or civil partnership, or employment and/or education status.

This will also extend to those (with or without protected characteristics) who are visiting, passing through or temporarily located in Lancashire for whatever purpose

Question 3 – Protected Characteristics Potentially Affected

Could the proposal have a particular impact on any group of individuals sharing protected characteristics under the Equality Act 2010, namely:

- Age
- Disability including Deaf people
- Gender reassignment
- Pregnancy and maternity
- Race/ethnicity/nationality
- Religion or belief
- Sex/gender
- Sexual orientation
- Marriage or Civil Partnership Status

And what information is available about these groups in the County's population or as service users/customers?

Specific projects that are raised within the LFRMS will not be subject to an EIA at this point but will be addressed appropriately at a project level.

With regards to groups with protected characteristics:

Age – Additional consideration may be identified to ensure this group is not disadvantaged.

Disability, including deaf people - Additional consideration may be identified to ensure these groups are not disadvantaged.

Gender reassignment/gender identity - No separate consultation or consideration identified at present.

Race/ethnicity/nationality - Additional consideration may be identified to ensure these groups are not disadvantaged.

Sex/gender - No separate consideration identified at present.

Pregnancy or maternity - No separate consideration identified at present.

Religion or belief - No separate consideration identified at present.

Sexual orientation - No separate consideration identified at present.

Marriage or civil partnership status (in respect of which the s.149 requires only that due regard be paid to the need to eliminate discrimination, harassment or victimisation or other conduct prohibited by the Act) - No separate consideration identified at present.

Question 4 – Engagement/ Consultation

How have people/groups been involved in or engaged with in developing this proposal?

The Lancashire Local Flood Risk Management Strategy 2021 – 2027, and associated documents, has been lead by Blackpool Council and developed by officers in Blackpool, Blackburn-with-Darwen and Lancashire County Councils.

Five-week public consultation sought engagement and views from all groups in society.

Stakeholders were also consulted, including Councillors, district councils, town/parish councils, Environment Agency, Natural England, English Heritage, Earby and Salterforth Internal Drainage Board, United Utilities, Yorkshire Water, North West and Yorkshire Regional Flood and Coastal Committees, National Farmers Union, Network Rail, British Waterways, Lancashire Wildlife Trust, Rivers Trusts, Flood Action Groups (for which we have contact details) and other involved or interested parties.

A total of 175 consultation responses were received to the 5 week public consultation. Feedback has been collated, analysed and incorporated appropriately.

Question 5 – Analysing Impact

Could this proposal potentially disadvantage particular groups sharing protected characteristics and if so which groups and in what way? This pays particular attention to the general aims of the Public Sector Equality Duty:

- To eliminate unlawful discrimination, harassment or victimisation because of protected characteristics;
- To advance equality of opportunity for those who share protected characteristics;
- To encourage people who share a relevant protected characteristic to participate in public life;
- To contribute to fostering good relations between those who share a relevant protected characteristic and those who do not/community cohesion;

Age – This group includes those who are digitally excluded and is more likely to be over-represented amongst older people. There may be potential issues with receiving notice of the publication of the Local Strategy, particularly if only published using social media and other electronic means. It is important to ensure that the method of communication is appropriate to the groups potentially affected and this will be reflected in the Launch Plan for the consultation which is in development.

Disability (including deaf people) – There could be a range of disabled people who require alternative formats including those who are visually impaired, people who have learning disabilities and the deaf community whose first language is often British Sign Language and not English. It is important to ensure that the method of communication is appropriate and accessible versions of the Local Strategy are available to these groups.

The non-technical summary document will provide a shorter version of the key aspects of the Local Strategy and should help ensure the document is accessible to all groups.

For blind, partially sighted/visually impaired people a basic plain text, large print black and white version of the Strategy and the Non-Technical Summary will be made available online. Diagrams and information boxes in this version will be minimised and/or removed.

Blackpool Council will provide an Easy Read version of the Strategy, and the Non-Technical Summary will also be available in Braille upon request.

For deaf and hard of hearing people, a British Sign Language or subtitled video about the Strategy could be made available online as part of any launch materials to ensure any such material is accessible to all groups.

Race/ethnicity/nationality – Potential issue with ability to understand and read the Strategy, particularly if English is not a first language. It is important to ensure that the method of communication is appropriate to the groups potentially affected, by ensuring a copy of the document is available in another language upon request.

Sex/gender – No negative impacts expected.

Gender reassignment/gender identity – No negative impacts expected.

Religion or belief – No negative impacts expected.

Sexual orientation – No negative impacts expected.

Pregnancy or being on maternity leave – No negative impacts expected.

Marriage or civil partnership status (in respect of which the s. 149 requires only that due regard be paid to the need to eliminate discrimination, harassment or victimisation or other conduct prohibited by the Act) – No negative impacts expected.

Having young children – No negative impacts expected.

Living in an area of deprivation – No negative impacts expected.

Living in a rural area – No negative impacts expected.

Children looked after – No negative impacts expected.

Teenage parents – No negative impacts expected.

Carers – No negative impacts expected.

Offenders, people out of work, problem drug users etc. – No negative impacts expected.

Question 6 – Combined/Cumulative Effect

Could the effects of this proposal combine with other factors or decisions taken at local or national level to exacerbate the impact on any groups?

No.

However, Blackpool Council recognises that flooding and flood risk may be high in the minds of the public due to local events and experiences over recent years.

The public consultation generated significant interest and number of responses from our communities and stakeholders. We therefore anticipate publication of the Local Strategy will also generate interest. The Launch Plan will ensure we work closely with Corporate Communications to ensure the Local Strategy is visible and accessible to all groups as outlined in this assessment.

Question 7 – Identifying Initial Results of Your Analysis

As a result of the analysis has the original proposal been changed/amended, if so please describe.

No - The Local Strategy has not been changed or amended.

However, it is noted that publication of the Strategy and its associated documents will need to be give further consideration to accessibility - see Question 8 for detail.

Question 8 - Mitigation

Will any steps be taken to mitigate/reduce any potential adverse effects of the proposal?

The Launch Plan for the publication of the Local Strategy will need to ensure that:

- It gives due consideration to those that are digitally excluded and/or who find using technology more difficult to ensure they have access to publication announcements and materials.
- It gives due consideration to providing accessible copies of the Local Strategy upon request, as outlined in Section 5 of this assessment.

Question 9 – Balancing the Proposal/Countervailing Factors

This weighs up the reasons for the proposal – e.g. need for budget savings; damaging effects of not taking forward the proposal at this time – against the findings of the analysis.

The proposal is to seek approval and publication of the new Local Flood Risk Management Strategy 2021-2027 for Lancashire to fulfil our duty under Section 9 of the Flood and Water Management Act 2010.

The requirement under the Act is to 'develop, maintain, apply and monitor' the Local Strategy and to 'publish a summary of the Local Flood Risk Management Strategy'.

It is therefore necessary to proceed with publication of the Local Strategy and associated documents, in accordance with Section 9 of the Act, whilst ensuring appropriate adjustments and considerations are made as outlined in this document.

Question 10 – Final Proposal

In summary, what is the final proposal and which groups may be affected and how?

The final proposal is to seek the approval and publication of the Lancashire Local Flood Risk Management Strategy 2021 – 2027 and its associated documents outlined in this document.

Whilst the consultation will be of interest to and affect all electoral divisions, there is a clear need to ensure that the groups who have the potential to be affected (age, disability and race/ethnicity/nationality) are appropriately considered and measures put in place to ensure they can equally access the Local Strategy documentation should they so wish.

Question 11 – Review and Monitoring Arrangements

What arrangements will be put in place to review and monitor the effects of this proposal?

There will be:

- A direct contact published on the webpage to enable groups affected to get in touch to request further support.
- Non-web based publication materials provided under Launch Plan.
- Non-technical summary of the Strategy published alongside the full Strategy document.
- Further EIA undertaken at a project level as appropriate.

Equality Analysis Prepared By Clare Nolan-Barnes

Position/Role Head of Coastal and Environmental Partnerships

Equality Analysis Endorsed by Andy Divall Blackpool Council

Strategic Environmental Assessment of the Lancashire Local Flood Risk Management Strategy

Environmental Report January 2014

Amended September 2021





BlackpoolCouncil





Document control sheet BPP 04 F8

Version 15; March 2013

Project

Lancashire Local Strategy

Client

Lancashire County Council (Amended Blackpool Council 2021)

Project No:

B1610802

Document title:

Strategic Environmental Assessment of the Lancashire Local Flood Risk Management Strategy (Amended September 2021)

| | Origir | nated by | Checked by | Review | ed by |
|---------------------------|-------------------------|---|--|---------------|----------|
| | NAME | | NAME | NAME | |
| ORIGINAL | Dominic Flynn | | Simon Bird | Scott Johnson | |
| Approved by David Dickson | | As Project Manager I confirm the above document(s) have been successful Jacobs' Check and Review protestat I approve them for issue | subjected to | INITIALS | |
| 7/1/14 | 7/1/14 Document status: | | : Draft for Client review | | |
| REVISION 1 | NAME | | NAME | NAME | |
| | | | | | |
| Approved by | d by NAME | | As Project Manager I confirm the above document(s) have been a Jacobs' Check and Review proceeds that I approve them for issue | subjected to | INITIALS |
| Document status | | s: | | | |
| REVISION | NAME | | NAME | NAME | |
| | | | | | |
| Approved by | NAME | | As Project Manager I confirm the above document(s) have been success. Check and Review process that I approve them for issue | subjected to | INITIALS |
| DATE | | Document status | | | |

Jacobs U.K. Limited

This document has been prepared by a division, subsidiary or affiliate of Jacobs U.K. Limited ("Jacobs") in its professional capacity as consultants in accordance with the terms and conditions of Jacobs' contract with the commissioning party (the "Client"). Regard should be had to those terms and conditions when considering and/or placing any reliance on this document. No part of this document may be copied or reproduced by any means without prior written permission from Jacobs. If you have received this document in error, please destroy all copies in your possession or control and notify Jacobs.

Any advice, opinions, or recommendations within this document (a) should be read and relied upon only in the context of the document as a whole; (b) do not, in any way, purport to include any manner of legal advice or opinion; (c) are based upon the information made available to Jacobs at the date of this document and on current UK standards, codes, technology and construction practices as at the date of this document. It should be no ted and it is expressly stated that no independent verification of any of the documents or information supplied to Jacobs has been made. No liability is accepted by Jacobs for any use of this document, other than for the purposes for which it was originally prepared and provided. Following final delivery of this document to the Client, Jacobs will have no further obligations or duty to advise the Client on any matters, including development affecting the information or advice provided in this document.

This document has been prepared for the exclusive use of the Client and unless otherwise agreed in writing by Jacobs, no other party may use, make use of or rely on the contents of this document. Should the Client wish to release this document to a third party, Jacobs may, at its discretion, agree to such release provided that (a) Jacobs' written agreement is obtained prior to such release; and (b) by release of the document to the third party, that third party does not acquire any rights, contractual or otherwise, whatsoever against Jacobs and Jacobs, accordingly, assume no duties, liabilities or obligations to that third party; and (c) Jacobs accepts no responsibility for any loss or damage incurred by the Client or for any conflict of Jacobs' interests a rising out of the Client's release of this document to the third party.

Contents

| 1. Introd | luctio | on | 1 |
|----------------|---------|---|----|
| | 1.1 | Background | 1 |
| | 1.2 | Status and key aims of the Flood Risk Management Strategy | 2 |
| | 1.3 | Introduction to Strategic Environmental Assessment (SEA) | 2 |
| | 1.4 | Purpose of this document | 4 |
| 2. Flood | Risk | and Scope of the SEA | 5 |
| | 2.1 | Objectives of the Flood Risk Management Strategy | 5 |
| | 2.2 | Current and future flood risk | 8 |
| | 2.3 | Detailed Environmental Baseline Information | 10 |
| | 2.4 | Spatial scope of the SEA | 12 |
| | 2.5 | Temporal scope of the SEA | 14 |
| | 2.6 | Technical scope of the SEA – topics and SEA criteria | 14 |
| 3. Key Li | nks b | etween the LFRMS and Other Policy, Plans, Programmes and Strategies | 18 |
| | 3.1 | Requirement and scope | 18 |
| | 3.2 | Document review for Lancashire and Blackpool | 18 |
| | 3.3 | Future review | 19 |
| 4. Asses | smer | nt of Generic FRM Measures | 20 |
| | 4.1 | Introduction | 20 |
| | 4.2 | Method of assessment | 21 |
| | 4.3 | Limitations of the SEA and key assumptions | 21 |
| | 4.4 | Assessment of generic flood risk management measures | 22 |
| | 4.5 | Conclusions and recommendations of the SEA | 25 |
| 5. Futur | e Ass | essment of Flood Risk | 27 |
| | 5.1 | Introduction | 27 |
| | 5.2 | Method of assessment | 28 |
| 6. Cumu | lativ | e Effects of the Strategy | 29 |
| | 6.1 | Introduction and approach | 29 |
| | 6.2 | Effects of the Strategy acting alone | 29 |
| | 6.3 | Effects of the Strategy and other plans / projects | 33 |
| 7. Moni | torin | g and Next Steps | 42 |
| | 7.1 | Recommended SEA monitoring measures | 42 |
| | 7.2 | Consultation and next steps | 44 |
| | Refe | rences | 45 |
| | Figur | es | 45 |
| Append | lix A | - Detailed Baseline Information for the Flood Risk Areas | 46 |
| Append | lix B - | Review of Relevant Policy, Plans, Programmes and Strategies | 53 |
| A 10 10 0 10 d | iv C | Accordment of Generic EPM Measures | 62 |

1. Introduction

1.1 Background

The wide-scale flooding that occurred in the summer of 2007 caused devastation across large swathes of northern and central England and south Wales. It is estimated that 55,000 homes and businesses were flooded and nearly £3 billion of insured losses occurred. Two-thirds of these properties were estimated to have been flooded not from rivers or from the sea, but from surface water flooding resulting from intense rainfall (Pitt, 2008). The flooding exposed significant gaps in the way that flood risk was assessed and managed by the Environment Agency, local authorities and water companies.

As a result of the flooding, the 2008 Pitt Review and the resulting Flood Risk Regulations 2009 and Flood and Water Management Act 2010 ('the Act') made local authorities responsible for assessing and managing flooding from local sources within their area. These local authorities include unitary authorities such as Blackpool Borough Council (BBC), and Blackburn with Darwen (BDC), also county councils such as Lancashire County Council (LCC), all of which are designated as Lead Local Flood Authorities (LLFAs).

The local sources of flooding required to be considered by LLFAs include the following.

- Surface water runoff rainwater (including snow and other precipitation), which is on the surface of the ground (whether or not it is moving), and has not entered a watercourse, drainage system or public sewer. Flooding from surface runoff is sometimes called pluvial flooding. Note that the term 'surface water' is used generically to refer to water on the surface;
- Ordinary watercourse any river, stream, ditch, cut, sluice, dyke, culvert which is not a
 main river (main rivers are watercourses legally defined and marked as such on the main
 rivers map. Generally, they are larger streams or rivers, but can be smaller watercourses.
 The Environment Agency has flood risk management responsibility for them);
- Artificial water-bearing infrastructure includes reservoirs, sewers, water supply
 systems and canals. Flooding from sewers is not assessed unless wholly or partly caused
 by rainwater or other precipitation entering or otherwise affecting the system. Floods
 of raw sewage caused solely, for example, by a sewer blockage do not fall under the
 Regulations. The Regulations also do not apply to floods from water supply systems, e.g.
 burst water mains; and
- Groundwater water which is below the surface of the ground and in direct contact with
 the ground or subsoil. It is most likely to occur in areas underlain by permeable rocks,
 called aquifers. (However as explained and discussed in Section 1.2, within Lancashire and
 Blackpool, it is not considered appropriate to address groundwater flooding separately to
 surface water flooding).

The Act places a range of new powers, duties and responsibilities on the LLFAs. One of these key new responsibilities is the requirement to prepare a Local Flood Risk Management Strategy (LFRMS), which must be subject to Strategic Environmental Assessment (SEA) (discussed further in Section 1.3).

1.2 Status and key aims of the Flood Risk Management Strategy

Alongside this SEA Environmental Report, LCC, BBC, BDC are currently producing a draft LFRMS (also referred to herein as a 'the Strategy'). The joint LFRMS addresses:

- Pluvial flooding;
- Groundwater flooding;
- Flooding from ordinary watercourse; and
- Artificial water-bearing infrastructure.

In accordance with the Act, the LFRMS contains the following:

- The risk management authorities within the study area and what functions they exercise (Section 2.6 of the LFRMS);
- The six key themes for managing local flood risk to people and property (Section of the
- The objectives that sit under these themes as outlined in the Business Plan (Section of the LFRMS);
- How the Business Plan is to be monitored and reviewed (Section of the LFRMS); and
- How the Strategy contributes to achieving wider environmental objectives (Appendix B of the LFRMS).

The objectives of the LFRMS are repeated in Section 2.1 of this Environmental Report. "Measures" proposed at this stage (in accordance with the Act) for achieving the LFRMS objectives are procedures and general approaches to how flood risk will be managed. Some of these measures are a continuation of what the Flood Risk Management Authorities (RMAs) already do e.g. inspecting and maintaining highway drainage and ordinary watercourses on council-owned land. Others are new activities which have been introduced by the Strategy. These include, for example, investigating certain flood incidents. It will not be possible to deliver all of the measures immediately due to the limited funds and availability of resources within the LLFAs also within the partner organisations. Consequently, the measures have been assigned delivery milestones.

Delivery of objectives within the Business Plan will be closely monitored through a progress report provided to the Strategic Partnership Group on a quarterly basis. The overall Strategy will have a six-year lifespan to 2027, in line with the new flood risk planning cycle and Investment Programme.

1.3 Introduction to Strategic Environmental Assessment (SEA)

SEA is a process that ensures appropriate consideration is given to the environment during development of certain plans and programmes. It is used to guide the development of the LFRMS, in terms of avoidance and reduction of negative environmental consequences and maximising opportunities for environmental benefits. Flood risk management measures are typically focused on protecting property rather than environmental features, and can have adverse effects on the environment. However, there are also opportunities for environmental benefits where the LFRMS can help improve the environment.

Carrying out an SEA in conjunction with developing the LFRMS helps influence flood risk management at an early stage, and influences the selection of preferred measures or ways forward where alternatives exist. The SEA will be produced in accordance with the SEA Regulations (S.I. 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004) which transpose the EC SEA Directive 2001/42/EC into UK legislation.

Table 1.1: Stages of the SEA

| What is involved | Why we do this | Related strategy development tasks |
|--|--|--|
| Data and other information is gathered to establish the current and future 'baseline' – i.e.the status of the environment now and as it would evolve without the LFRMS in place. Relevant environmental issues are identified to decide on the scope and approach of the SEA. | This information is used to ensure that the scope of our SEA is focused on the relevant issues for flood risk management. These include areas where the environment is sensitive to change and could be adversely affected by flood risk management measures and policies, as well as opportunities to improve the environment. | Gathering data. Review of funding arrangements. Equality Impact Assessment. Consultation and Engagement Plan. |
| Consultation is carried out with the consultation bodies ¹ and other key stakeholders on the scope of the SEA. | The information received during the consultation is used to improve understanding of the current baseline and refine the approach to the assessment where appropriate. | Include the results of the scoping stage in the report and communicate with key stakeholders. |
| The environmental effects of the LFRMSare assessed to enable the suggestion of alternative measures and development of mitigation measures. 'Indicators' (i.e. measures of environmental performance) oractivities are suggested which should be undertaken to monitor the effects of the LFRMS. This assessment has been documented in this SEA Environmental Report. | It needs to be established whether any of the flood risk management measures are likely to have adverse environmental effects so that alternative measures, or ways to mitigate the adverse effects, can be considered. This information is used to identify aspects of the LFRMS that can be changed to better protect or improve the environment. The SEA is an important element in selecting the preferred measures or policies. Monitoring is suggested in order to account for uncertainty in the SEA and allow for appropriate responses | Review consultation comments when developing measures. Develop an action plan to manage flood risk in specific locations. Integrate the SEA results and recommendations. |
| | Data and other information is gathered to establish the current and future 'baseline' — i.e. the status of the environment now and as it would evolve without the LFRMS in place. Relevant environmental issues are identified to decide on the scope and approach of the SEA. Consultation is carried out with the consultation bodies¹ and other key stakeholders on the scope of the SEA. The environmental effects of the LFRMS are assessed to enable the suggestion of alternative measures and development of mitigation measures. 'Indicators' (i.e. measures of environmental performance) or activities are suggested which should be undertaken to monitor the effects of the LFRMS. This assessment has been documented in this SEA | Data and other information is gathered to establish the current and future 'baseline' – i.e.the status of the environment now and as it would evolve without the LFRMS in place. Relevant environmental issues are identified to decide on the scope and approach of the SEA. Consultation is carried out with the consultation bodies¹ and other key stakeholders on the scope of the SEA. The environmental effects of the LFRMSare assessed to enable the suggestion of alternative measures and development of mitigation measures. 'Indicators' (i.e. measures of environmental performance) oractivities are suggested which should be undertaken to monitor the effects ofthe LFRMS. Thisassessment has been documented in this SEA Environmental Report. This information is used to ensure that the scope of our SEA is focused on the relevant issues for flood risk management. These include areas where the environment is sensitive to change and could be adversely affected by flood risk management measures and policies, as well as opportunities to improve the environment. The information is used to improve understanding of the current baseline and refine the approach to the assessment where appropriate. It needs to be established whether any of the flood risk management measures are likely to have adverse environmental effects so that alternative measures, or ways to mitigate the adverse effects, can be considered. This information is used to identify aspects of the LFRMS that can be changed to better protect or improve the environment. The SEA is an important element in selecting the preferred measures or policies. Monitoring is suggested in order to account for uncertainty in the SEA and |

¹ The Government has designated English Heritage, Natural England and the Environment Agency as 'consultation bodies' who must be consulted during the SEA process.

| SEA stage | What is involved | Why we do this | Related strategy development tasks |
|--------------|--|--|--|
| Consultation | The consultation bodies, other key stakeholders, and the public are consulted on the LFRMS and the results of the SEA. | Comments are taken into account in finalising the LFRMS. | Include consultation comments in the LFRMS. Account for any amendments to the SEA as a result of consultation. |

There are a number of stages involved in carrying out the SEA and in developing the LFRMS, as summarised in Table 1.1.

1.4 Purpose of this document

The purpose of this Environmental Report is to report the findings of the SEA of the Joint Lancashire, Blackpool, and Blackburn with Darwen LFRMS. This Environmental Report summarises:

- How the SEA has been conducted and how it informs the current emerging LFRMS;
- The likely significant effects of the emerging LFRMS on people, communities, the economy and the environment; and
- How the SEA will continue to inform the implementation of the emerging LFRMS, such as through recommended mitigation and monitoring.

This report will assist anyone participating in the consultation on the LFRMS. In order to achieve the above, this Environmental Report summarises relevant information from the SEA scoping stage, after statutory consultation on the SEA Scoping Report. The SEA Scoping Report determined the scope of the assessment, as well as the background information – the social, economic and environmental baseline – used to inform the assessment reported herein.

2. Flood Risk and Scope of the SEA

2.1 Objectives of the Flood Risk Management Strategy

The objectives of the draft LFRMS provide an indication of the scope of the Strategy in terms of the range of flood risk management measures and other actions it may lead to. This in turn has informed our consideration of the scope of the SEA.

As part of the development of the draft LFRMS, 54 objectives have been established for managing flood risk. Some of these objectives will lead to the identification and implementation of action plans and the development of flood management measures in order to achieve the objective. The objectives of the draft Strategy are detailed below in Table 2.1.

| Table 2.1 - The Local Strategy Objectives by Key Themes | | | | |
|---|---|--|--|--|
| Themes | Objectives | | | |
| Delivering Effective Flood Risk Management Locally | 1.1 Maintain, apply and monitor the Lancashire Local Flood Risk Management (LFRM) Strategy 2021 – 2027 1.2 Review and revise existing Section 19 Flood Investigation Report Policy, incorporating lessons learnt since 2010. 1.3 Review and revise Consenting and Enforcement policy for regulating Ordinary Watercourses. 1.4 Work proactively with Local Planning Authorities to ensure effective local policies are in place for managing flood risk and coastal erosion through the Land and Marine Planning Processes 1.5 Address the need for a Highway Drainage Connection Policy 1.6 Consider the need for a 'Designation of Flood Risk Features' Policy 1.7 Deliver LLFA actions and engage with the delivery of actions that require partnership working contained within the National FCERM Strategy Action Plan. 1.8 Undertake a mid-term review of the Strategy. | | | |
| Understanding our Local Risks and Challenges | 2.1 Deliver any outstanding Surface Water Management Plans (SWMP), and identify further studies needed. 2.2 Bid for funding to install groundwater monitoring equipment to improve our understanding of groundwater flooding in targeted areas in Lancashire. 2.3 Bid for funding to map all ordinary watercourses in Lancashire, and feed this mapping and any modelling into national maps to improve all risk management authority understanding of local ordinary watercourse networks 2.3 Bid for funding to improve understanding of opportunities for natural flood management and strategic surface water management across Lancashire through sustainable drainage retrofit. 2.4 Continue to populate the Flood Risk Asset Register and Record and utilise this data in managing local flood risks. 2.5 Spatially map all historic and new known flooding incidents across Lancashire since 2013 and categorise accordingly e.g. internal / external, property / businessetc. 2.6 Support development of an 'all source' flooding map for the North West, to place all sources of flood risk on an equal footing. This could be achieved through Drainage and Wastewater Management Plan (DWMP) 2.7 Consider how Council processes can be improved to make it easier to gather information from residents and businesses which are affected / have been flooded from local sources (i.e. from ordinary watercourses, from surface water, from groundwater). 2.8 Benchmark LLFA datasets to ensure all available data is utilised in understand risks | | | |

Supporting Sustainable Flood Resilient Development

- 3.1 Support and provide input to Local Planning Authorities during plan making to ensure evidence base documents, policies and guidance are suitable and take account of best practice, climate change, biodiversity net gain and amenity aspirations.
- 3.2 Work with Local Planning Authorities to encourage adoption of the SuDS Pro-forma through their Local Planning Validation Checklist for 'Major' development.
- 3.3 Be represented on the North West RFCC's Planning Sub-Group to ensure Lancashire is contributing to and learning from best practice across the region and nationally in relation to planning, development and SuDS.
- 3.4 Establish a process which ensures 'as built' SuDS assets are validated and captured in Flood Risk Asset Registers.
- 3.5 Support the development of a natural capital accounting / biodiversity net gain approach for Lancashire, ensuring flood and coastal matters can be valued.
- 3.6 Explore the feasibility of developing a Lancashire-wide 'SuDS Suitability' guide, based on mapping of ground conditions and integrated with other agendas such as the Lancashire Ecological Network and blue-green infrastructure network.
- 3.7 Encourage all flood risk management authorities in Lancashire to become members of the Association of SuDS Authorities (ASA).
- 3.8 Where appropriate, recommend to Local Planning Authorities that developers provide a contribution (S106 / CIL monies) to FCERM schemes that provide benefits to better protecting the development / community from flood risks prior to the grant of planning permission.
- 3.9 Produce 'LLFA Standing Advice for Minor Planning Applications' to enable Local Planning Authorities to assess minor planning applications in relation to local flood risks without direct LLFA consultation in most circumstances.

Supporting Sustainable Flood Resilient Development

- 4.1 Improve the 'The Lancashire Partnership' webpage on The Flood Hub, including by setting out who our flood family is.
- 4.2 Update Local Authority 'flooding' webpages and ensure they link to The Flood Hub to support community awareness, engagement and resilience.
- 4.3 Continue to support maintenance and development of The Flood Hub, including the launch of a new material.
- 4.4 Ensure Flood Action Groups (FLAGs) in Lancashire who consent to their 'get in touch' details being shared on The Flood Hub are published on the map and on the Partnership webpage.
- 4.5 Work better together to deliver more effective, targeted and partner focused asset maintenance regime for those assets owned by flood risk management authorities.
- 4.6 Continue to attend and work proactively with Catchment Partnerships to identify local opportunities to work together to co-fund and co-deliver natural flood management and other schemes within the community and private landownership.
- 4.7 Develop a Communication and Engagement Plan showing clear lines of communication and reporting, within and amongst flood risk management authorities, wider partners and the people of Lancashire. This will include proactive communications and responsive communication to, for example, flood/weather alerts. This should also include a progress for how good practice is captured from across Lancashire, including from Catchment Partnership and wider partners, and shared appropriately with our flood family and the people of Lancashire
- 4.8 Ensure Lancashire is represented at every North West Regional Flood and Coastal Committee's (RFCC) and its sub-groups as formed, to ensure we are working effectively with regional partners, sharing best practice and influencing any decisions or recommendations made to the RFCC and sub-regional FCERM Partnerships.
- 4.9 Ensure all flood risk management authorities are proactively engaged with the Lancashire Resilience Forum (LRF) to continually improve our multi-agency and operational responses to flooding incidents.

4.10 Include separate Highway Authority and infrastructure provider representation on the Lancashire FCERM Partnership, at relevant levels, as appropriate, to ensure highway and other infrastructure flood risks are also captured. 4.11 Promote the educational resources provided on The Flood Hub and United Utilities SuDS for Schools programme via Local Authority Schools Portal / Educational Leads 5.1 Deliver schemes within the Investment Programme 2021 – 2027 to time and cost, including meeting partnership funding and efficiency requirements of grant funding. 5.2 Proactively monitor the delivery of the programme at every level of the Lancashire FCERM Partnership and hold delivery leads accountable, and ensure this is consistent with best practice established from across the region and/or other RFCCareas. and Communities 5.3 Share the programme with partners at all levels and with Catchment Partnerships to identify any collaboration opportunities. 5.4 Continue to identify opportunities / need for investment in flood risk management infrastructure and ensure these are captured in the Investment Programme 2021 – 2027 at the earliest opportunity to secure an allocation, where viable. 5.5 Develop a 'funding catalogue' of all potential sources of funding from public, private, voluntary and other sectors. Explore opportunities to collate this for the region, working with other Project Advisors to achieve this 5.6 Establish a process for the Partnership which facilitates quick allocation, approval and delivery of 'Quick Win' funding allocated annually to the Partnership. This includes governance and a re-allocation of funding if not spent as agreed. 5.7 Influence national thinking on flood insurance and grants for those affected by flooding to encourage a consistent approach from government rather than on a storm 5.8 Where opportunities arise and where appropriate to do so, make government aware of funding challenges experienced in Lancashire, relating to funding duties of flood risk management authorities and investment in areas at risk of local flooding. 5.9 Ensure The Flood Hub is updated with flood risk schemes in progress and completed on a periodic basis

Contributing Towards a Sustainable, Climate Resilient Lancashire

viable.

Maximising Investment

Opportunities to

Better Protect

our Businesses

- 6.1 Work with climate change action groups set up following Local Authority declaration of a climate emergency to ensure actions to address flood risk and coastal erosion are incorporated within climate change action plans.
- 6.2 Ensure a climate change allowance is incorporated into all proposed new sustainable drainage systems on developments consistent with national and/or local planning requirements and published guidance.
- 6.3 Investigate the feasibility of retrofitting SuDS in schools and other local authority owned buildings across Lancashire to improve their resilience and provide an educational resource. 6.4 Explore the feasibility of delivering a series of 'water resilient parks' in council owned parks across Lancashire to retrofit SuDS and natural flood management measures to contribute towards surface water storage where evidence shows this would be beneficial and financially
- 6.5 In contributing towards a climate resilient highway network and economy, consider how Highway Authorities in Lancashire could adopt SuDS components under the Highways Act 1980. Work with United Utilities to share learning following introduction of the Design and Construction Guide (DCG) for Sewers.
- 6.6 Support Local Planning Authorities in undertaking a climate change review of Planning Policy and the Use and Management of Water in Lancashire to identify actions they can take to better manage flood risks presented by development and urban creep
- 6.7 Work with The Flood Hub and partner flood risk management authorities to promote property flood resilience measures and land flood resilience measures, and signpost to reputable suppliers if this is possible.

2.2 Current and future flood risk

2.2.1 Background

Lancashire has experienced historical incidents of flooding in the past and has also suffered the consequences of flooding several times in recent years. Some of the more recent events include February, August and September 2011 and June, September and December 2012. Prior to these, flooding has been recorded across the county, with clusters of notable incidents in Lancaster/Morecambe, Blackpool, Preston and Bacup/Rawtenstall in Rossendale.

The flooding problems were mainly caused by surface water overland flows, green field run-off and ordinary watercourse culvert surcharges with some flooding problems caused by rivers overtopping at various locations throughout the area. The flooding has resulted in impacts on homes, businesses, agricultural land as well as roads, railways and public services.

2.2.2 Current flood risk

A Preliminary Flood Risk Assessment (PFRA) was completed in 2011. For the purposes of the PFRA, Defra have defined "significant" future flood risk as affecting 30,000 or more people or 150 critical services (e.g. schools, hospitals, nursing homes, power and water services). No such flood risk meets this threshold of significance, and thus no significant flood risk areas have been identified in Lancashire, Blackpool and Blackburn with Darwen. In assessing past floods, any flood which affected 20 or more people, or one or more critical service was identified. Following an initial data gathering exercise, around 25 such flood events were identified. This excludes any past floods which have since been resolved and are therefore unlikely to re-occur.

An indicative breakdown of the numbers of properties at risk by local authority area is given in Table 2.2 below.

Table 2.2 Number of properties at risk within each local authority area

| Local Authority | No. residential properties | No. non-residential properties |
|-----------------------|----------------------------|--------------------------------|
| Lancaster | 4609 | 1682 |
| Wyre | 2181 | 929 |
| Ribble Valley | 3383 | 1814 |
| Preston | 3217 | 897 |
| Fylde | 1099 | 625 |
| Pendle | 4011 | 1267 |
| West Lancashire | 4800 | 1377 |
| Burnley | 4058 | 934 |
| Hyndburn | 3885 | 889 |
| South Ribble | 3935 | 927 |
| Chorley | 3765 | 1122 |
| Rossendale | 7346 | 1852 |
| Blackpool | 3202 | 556 |
| Blackburn with Darwen | 2600 | 1400 |

As a result of identified flood risk from surface water runoff, Lancashire County Council has commissioned several catchment and local Surface Water Management Plans (SWMPs).

SWMPs will look at the district boundary areas (as shown in Figure 2.3) at a local scale. These plans are based on a model which shows where floods are likely to occur in high risk areas. SWMPs are the Defra-recommended way of managing local flood risk and they present a method of how these studies should be progressed. The initial strategic part of the SWMP investigations have already been carried out, involving data gathering, analysis of flow paths and preliminary site visits to over 300 locations. Consequently, a high-level knowledge of the key risk areas in Lancashire was obtained.

An important part of the Strategy will be the development of a Flood Risk Management Plan which sets out how LCC will manage local flood risks at specific locations. It also details how local flood risk will be managed over the short medium and long term, and how schemes and studies will be prioritised across Lancashire. The knowledge gained from the SWMPs is currently being used to formulate the detailed Flood Risk Management Plan for Lancashire, and an associated action plan will be developed, for which flood management measures would be considered. This process is currently on-going.

LCC have also successfully applied for funding from Defra/Environment Agency to carry out more detailed investigations in key risk areas where the initial phases of the SWMP process has identified a particularly high risk of flooding.

2.2.3 Future flood risk

The PFRA notes that climate change can affect local flood risk in several ways. Impacts will depend on local conditions and vulnerability. Wetter winters and more rain falling in wet spells may increase river flooding, especially in steep, rapidly responding catchments. More intense rainfall causes more surface runoff, increasing localised flooding and erosion. In turn, this may increase pressure on drains, sewers and water quality. While summers may become overall drier (with increased risk of drought), storm intensity could increase. Drainage systems in the river basin district have been modified to manage water levels, and could help in adapting locally to some impacts of future climate on flooding, but may also need to be managed differently.

Rising sea or river levels may also increase local flood risk inland or away from major rivers because of interactions with drains, sewers and smaller watercourses. The PFRA recognises a need for local studies to understand climate impacts in detail, including effects from other factors like land use. Sustainable development and drainage will help adapt to climate change and manage the risk of damaging floods in future (Lancashire Area Preliminary Assessment Report, 2011).

Another potential change in future flood risk is future development. Proposed development must avoid the creation of new surface and groundwater flooding issues (or increased flood risk from water-bearing structures, where relevant). It should also mitigate pre-existing flood risk wherever possible so as not to place new users of development at significant risk of flooding. Where flood risk remains, levels of flood risk must be managed in accordance with relevant planning policy. As the Strategy and SEA develop, they must take proposed allocations into account on a site-specific basis in order to assist in preparing for potential flood risk.

2.3 Detailed Environmental Baseline Information

The draft LFRMS includes a number of objectives which, will lead to the establishment of Action Plans. In turn these Action Plans will include the development of specific measures.

The local district boundaries have been ranked in order of potential flood risk to residential properties, (based on the properties at risk data shown in Table 2.2). For these areas, the key environmental information and constraints have been identified based on GIS mapping data, as set out in Appendix A and as shown in Figures 2. 2 and 2.3. Table 2.3 below summarises the outcomes of this exercise.

Table 2.3 Summary of environmental baseline for each of the District Boundary Areas

| Priority based on No. of Properties at risk | Area Name / Location | Main Environmental Issues | | | |
|---|--|---|--|--|--|
| | | 3 SSSIs (1 Geological SSSI); | | | |
| | | 1 SPA; | | | |
| 1 | Rossendale | 1 SAC | | | |
| | | 2 Scheduled Monuments; | | | |
| | | 9 Conservation Areas. | | | |
| | | 6 SSSIs (2 Geological SSSIs); 3 SPAs; 1 Ramsar; 1 SAC; 1 NNR; 12 Scheduled Monuments; 28 Conservation Areas 31 SSSIs (1 Geological SSSI); | | | |
| | | 3 SPAs; | | | |
| | | 1 Ramsar; | | | |
| 2 | West Lancashire | 1 SAC; | | | |
| | | 1 NNR; | | | |
| | | 12 Scheduled Monuments; | | | |
| | | 12 Scheduled Monuments; 28 Conservation Areas 31 SSSIs (1 Geological SSSI); | | | |
| | | | | | |
| | | 3 SPAs; | | | |
| | | 2 Ramsar sites; | | | |
| 3 | Lancaster | 3 SACs; | | | |
| 3 | | 2 AONB; | | | |
| | | 1 NNR; | | | |
| | | 37 Scheduled Monuments; | | | |
| | | 37 Conservation Areas. | | | |
| 4 | | | | | |
| | | 1 SSSI; | | | |
| | | 1 SPA; | | | |
| | Burnley 24 Scheduled Monuments; 10 Conservation Areas. | · · | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| Priority based on No. of Properties at risk | Area Name / Location | Main Environmental Issues |
|---|-------------------------|---|
| 5 | Pendle | 2 SSSIs; 1 SPA; 11 Scheduled Monuments; 26 Conservation Areas. |
| 6 | South Ribble | 3 SSSIs; 1 SPA; 1 Ramsar; 3 Scheduled Monuments; 8 Conservation Areas. |
| 7 | Hyndburn | 1 SSSI; 1 Scheduled Monument; 10 Conservation Areas. |
| 8 | Chorley | 3 SSSIs; 10 Scheduled Monuments; 9 Conservation Areas. |
| 9 | Ribble Valley | 15 SSSIs (3 Geological SSSIs); 1 SPA; 29 Scheduled Monuments; 22 Conservation Areas. |
| 10 | Preston | 1 SSSI; 3 Scheduled Monuments; 11 Conservation Areas. |
| 11 | Blackpool | 2 SSSI; 1 SPA; 2 Ramsar sites; 2 Conservation Areas. |
| 12 | Wyre | 5 SSSIs (1 Geological SSSI); 2 SPAs; 1 Ramsar; 1 SAC 1 AONB, 6 Scheduled Monuments; 6 Conservation Areas. |
| 13 | Fylde | 6 SSSIs; 2 SPAs; 1 Ramsar 1 SAC; 1 NNR; 10 Conservation Areas. |

Another potential change in future flood risk is future development. Proposed development must avoid the creation of new surface and groundwater flooding issues (or increased flood risk from water-bearing structures, where relevant). It should also mitigate pre-existing flood risk wherever possible so as not to place new users of development at significant risk of flooding. Where flood risk remains, levels of flood risk must be managed in accordance with relevant planning policy. As the Strategy and SEA develop, they must take proposed allocations into account on a site-specific basis in order to assist in preparing for potential flood risk.

2.4 Spatial scope of the SEA

The study area of the SEA (i.e. its spatial scope) is focused within Lancashire County Council boundary. The spatial scope of the SEA is based on the Flood Risk Areas identified in the LFRMS.

The environmental constraints and features considered for the scope are therefore focused on these areas. Figure 2.4 provides a map showing the focus areas of the SEA study area. Due to the nature and size of some of the constraints, a number of designated sites cross district boundaries for example the Ribble and Alt Estuaries, and therefore some constraints can impact on a number of local district boundaries.

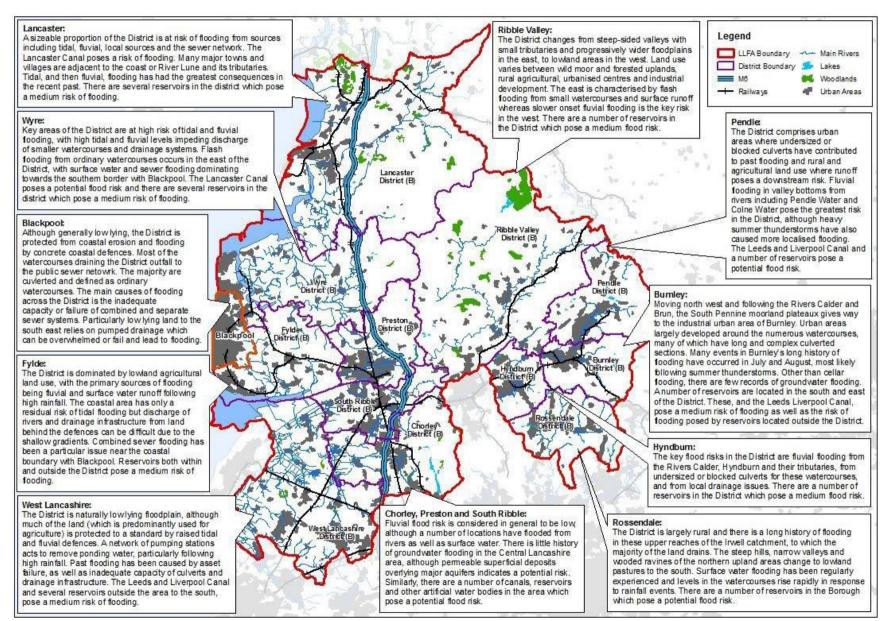


Figure 2.4: SEA study area

2.5 Temporal scope of the SEA

The assessment has considered the short, medium, and long -term effects. Both construction / implementation and operational effects have been considered within each period. The likely significant effects of each significant policy option or proposed action have been assessed over the periods of:

- Short term = 1 to 12 months
- Medium term = 1 to 3 years
- Long term = greater than 3 years

The temporal scope of the SEA was established based on the scale advised in the Strategy. These timescales were set based on predicted delivery of measures. It is not possible to deliver all of the measures immediately due to limited funds and availability of resources within the LLFAs and also within the partner organisations.

This differs from the temporal scales assumed in the scoping report, as the temporal scales to be considered for the Strategy were still being determined at that time.

2.6 Technical scope of the SEA – topics and SEA criteria

The technical scope of the SEA was established, consulted upon and agreed with the statutory consultees in November 2013. This focused the SEA on the environmental issues arising from flood risk management that are likely to be significant or are uncertain and should be included in the assessment. As a result of the scoping exercise, the following topics or elements of topics were scoped out of the SEA:

- **Biodiversity** current and future levels of potential harm to wildlife from water pollution and spread of invasive species;
- Local Community Land use conflict with properties, community facilities, businesses or transport and temporary disruption due to construction;
- Recreation Land use conflict with recreational features, including green infrastructure and temporary disruption due to construction;
- Geology and Soils Spread of soil contamination;
- Air quality and Noise construction air emissions and construction noise; and Material Assets – Land use or design conflict with key infrastructure.

Table 2.4 below describes the SEA topics which were scoped into the assessment.

Table 2.4: Definition of environmental topics and their relevance to the LFRMS

| Topic | Definition (in relation to this report) | Specific elements scoped in |
|-------------------------------|--|--|
| Biodiversity | All individual species (e.g. plants, animals) and habitats, and the interactions amongst them, particularly in terms of eco- systems. Ecosystems are linked communities of organisms together with non-living components of their environment (such as air, water and soil) | Flood risk to designated sites, other habitats and associated species Changes to habitats and direct species mortality. |
| Local Community | People, communities and businesses who could be affected by flooding or the policy and actions implemented by the LFRMS. Ability of individuals to access community facilities. | Flood risk to residential and commercial properties. Flood risk to communities and deprived areas |
| Recreation | Recreation centres, open countryside, village greens, parks, open spaces, bridleways, public footpaths. Ability of individuals to access recreational and leisure facilities. | Flood risk to recreational facilities or features. Access to recreational routes/facilities |
| Geology and Soils | The variety of rocks, minerals and landforms, and the quantity and distribution of soils of various natural or societal function and quality | Flood risk to geological features. Land use conflicts with soils. Land use conflict with geological features. |
| Water Env- ironment | The physical presence and extent of water bodies, and the amount and movement of water in them. Hydromorphology – the shape of a river and the way in which it erodes, transports and deposits sediment in rivers. Measured levels of chemical, biological and nutrient quality indicators (e.g. nitrates, phosphates) in water bodies | Compliance with the River Basin Management Plan (RBMP). Risk of water pollution Long-term ability to achieve 'good status' or 'good potential' |
| Climatic Factors | Climate emissions: The greenhouse gases which are emitted as a result of (in general) the use of natural resources Climate adaptation: The measures taken in order to help society and nature adapt to future changes in our climate, thus lessening the impact of climate change | The CO2 emissions associated with construction have been considered in this SEA. |
| Landscape and Townscape | The local character of an area as formed by its visible features, including the natural, built and historic environment. We will consider impacts on nearby sensitive receptors at the strategy level. | Flood risk to landscape and townscape. Landscape and townscape character. |
| Historic Env- ironment | The surviving remains of past human activity and how people identify and value inherited assets as a reflection and expression of evolving knowledge, beliefs and traditions. | Land use or design conflict with designated or non-designated historic features. Access to historic features Flood risk to historic assets |
| Material Assets | Key assets, including the transport network, and the public utilities of power, gas, communications, water supply, wastewater treatment and drainage. | Flood risk to key infrastructure. |

Table 2.5 sets out the environmental criteria for assessment which was established and agreed at the scoping stage.

Table 2.5 SEA criteria

| SEA Topic | Assess | ment Criteria | | |
|----------------------------|--------|---|--|--|
| | B1 | Will it protect and, where possible, enhance designated nature conservation sites and associated species, including habitat connectivity where applicable? | | |
| Biodiversity | B2 | Will it protect and, where possible, create or enhance notable, non-designated (e.g. BAP) habitats and associated species, including habitat connectivity where applicable? | | |
| | LC1 | Will it reduce the number of people residing in homes and commercial properties at risk of flooding? | | |
| Local Community | LC2 | Will it reduce flood risk to communities in deprived areas? | | |
| | LC3 | Will it reduce disruption in access to facilities and services, such as that caused by floods? | | |
| Recreation | RC1 | Will it protect and, where possible, enhance open spaces which have designations, or improve them in terms of flood risk? | | |
| | RC2 | Will it protect and, where possible, create or enhance recreational facilities, or reduce their levels of flood risk? | | |
| Geology and Soils | GS1 | Will it protect and, where possible, create or enhance sites valued for geodiversity? | | |
| 37 | GS2 | Will it protect 'best and most versatile' soil? | | |
| | W1 | Will it prevent the achievement of 'good status' or 'good potential' of a water body? | | |
| Water Environment | W2 | Does it either counteract or contribute to the delivery of the River Basin Management Plan? | | |
| | W3 | Will it protect and, where possible, improve water quality? | | |
| Climatic Factors | CF1 | Will it increase greenhouse gas emissions? | | |
| Landscape and Townscape | LT1 | Will it protect and, where possible, enhance (including through significant and relevant flood risk reduction) landscapes and townscapes? | | |
| Historic | H1 | Will it protect and, where possible, enhance (including through flood risk reduction) the integrity and setting of designated historic assets? | | |
| Environment | H2 | Will it protect and, where possible, improve access to, or educational opportunity offered by, designated historic features? | | |
| Material assets | M1 | Will it reduce flood risk to essential infrastructure? | | |

The degrees of significance for an effect have been considered. Table 2.6 below lists the five significance categories that have been used to determine effects of the LFRMS, and provides a broad description of some examples of how the categories could be used hypothetically. This is only a guideline, a range of factors have been taken into account, including any multiple benefits or adverse effects to be added together, or which are complementary.

Table 2.6 SEA significance categories and examples of application

| Symbol | Significance Category | Example of How Applied |
|--------|--------------------------|--|
| ** | Major Beneficial | A highly beneficial change to receptors or indicators, such as improving management of a feature or its condition (making it notably better for its intended purpose), but also where a new feature is created, or rescued from likely loss, that has only very localised value. |
| | | Delivers a River Basin Management Plan (RBMP) measure. |
| + | Minor Beneficial | A beneficial change to receptors or indicators that is worthy of being considered "significant", but not to a high degree. Assists in meeting RBMP objectives. |
| 0 | Neutral / Negligible | Norelationship between the proposal (s) being assessed and relevant receptors or indicators, or a change to receptors or indicators that is not worthy of being considered "significant", such as due to a real or assumed threshold not being passed. |
| - | Minor Adverse | A negative change to receptors or indicators that is worthy of being considered "significant", but not to a high degree. |
| | Major adverse | A highly negative change to receptors or indicators, such as harm to its condition (making it notably worse at performing its intended purpose), but also where a new feature is destroyedor renderedunusable, that has only very localised value. |

3. Key Links between the LFRMS and Other Policy, Plans, Programmes and Strategies

3.1 Requirement and scope

The LFRMS and the SEA have been influenced by many different plans and programmes. This is recognised by the SEA Regulations, which require a review of relevant plans and programmes to be completed in the preparation of documents:

 An outline of the contents and main objectives of the plan and programme, and of its relationships with other relevant plans and programmes ... and...

The environmental protection objectives, established at international, Community or Member State 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.

(HMSO, 2004, Schedule 2 - Part 1 and 5)

Relevant international, national, regional and local policy guidance, plans and strategies have been reviewed to:

- Ensure the LFRMS and the SEA are in line with the requirements of legislation and national policy;
- Maximise synergies between the LFRMS and the SEA and other relevant plans and policies, and identify inconsistencies or constraints to be dealt with;
- Identify sustainability objectives, and key targets and indicators, that should be reflected in the SEA; and
- Provide baseline data.

3.2 Document review for Lancashire and Blackpool

Key international, national, regional and local documents were reviewed as part of the SEA scoping stage undertaking in 2014. The full review can be found in Appendix C.

The review process has provided a valuable source of information and a framework for developing different components of the LFRMS and the SEA. In particular:

- At a high level, key legislation and national policies provided the planning context for the LFRMS; and
- Regional and local documents provided a valuable source of baseline information, and identified local priorities and objectives as well as conditions that the LFRMS and SEA should adhere to.

The National Planning Policy Framework (NPPF) is the relevant national policy for delivering sustainable development. The NPPF is supported by a document entitled, Technical Guidance to the National Planning Policy Framework. This document provides additional guidance on development in areas at risk of flooding.

3.3 Future review

As new plans, policies, programmes, or alterations to such documents become available, further review will be required to ensure the process is up-to-date. Where both new documents (and their subsequent review by the SEA) may significantly change the scope of the SEA, and additional SEA assessment is to be conducted (e.g. of future amendments to the LFRMS), the SEA will be updated and re - consulted upon in accordance with the legislation.

4. Assessment of Generic FRM Measures

4.1 Introduction

As no site-specific information is currently available, the following long list of generic Flood Risk Management measures have been identified. During the process of following the objectives identified in the strategy, a number of the generic flood management measures that have been identified may be considered further as part of the local flood risk management action plans. These generic measures are hypothetical Flood Risk Management options and include the following (which may or may not be applicable to flood risk areas in Lancashire):

- Inspection and maintenance: the Strategy includes for proposed increases in inspection and both proactive and reactive maintenance of open watercourses and culverts in order to attempt to prevent deterioration and restrictions to water flow through them (e.g. at trash grilles);
- 'Naturalisation' of watercourses: measures which aim to restore any of the natural features of a watercourse which has been modified by past intervention, such as a culvert or artificial channel. For example, 'de-culverting' (or 'daylighting'2) is one possible measure, which can involve restoring the earth embankments of a watercourse and allowing more natural flow and interaction between water and land to occur. It can also restore openness of a watercourse to the air where it has been passing underground . During high rainfall, this can slow the flow of water towards areas at risk of flooding (holding more water within the watercourse), or allow less vulnerable areas next to these watercourses to store water (such as grassland areas);
- Watercourse capacity increases: measures which either alter or remove constraints to a watercourse (e.g. walls, bridges, culverted sections) or create a new watercourse (i.e. bypass channel) to allow more water to remain within the watercourse network, and thus reduce the amount of water leaving a watercourse. Measures can include:
 - channel / drain widening and replacement;
 - eliminating 'pinch points' removing or modifying any structures which restrict the flow of water from one side of the structure to the other;
 - bypass channels constructing new channels which divert excess water flow from vulnerable areas, or improve the flow around restricted areas;
- Flood storage: new flood storage areas along ordinary watercourses, upstream of areas vulnerable to flooding;
- New / raised defences: raising, replacing or constructing flood walls or earth embankments as a line of defence of land and properties from flood waters;
- Flood proofing and resilience: provide users of properties at risk of flooding with flood risk management asset measures at individual properties, such as the use of door guards or portable flood barriers; and
- Land management: The way that land is used influences the rate at which water can run off into watercourses. For example, ur pagareas large 20

2 In relatively few circumstances, there may be a subtle distinction between de-culverting and daylighting, whereby daylighting may not always involve the removal of the entire culvert, but rather only the structure overtop of the watercourse (e.g. concrete blocks). This might occur in urban areas where it is impossible or impractical to remove embankment structures due to existing development.

impermeable surfaces, such as concrete and tarmac, leading to greater surface water run-off (such as rainwater) into watercourses than there would be on unmade ground. Similarly, discharge from agricultural drains and ditches can also increase the volume of the receiving watercourse. These effects can increase local flood risk. Land management options traditionally considered include Sustainable Drainage Systems (SuDS) and ditch blocking.

The assessment of generic (i.e. not location-specific) potential flood risk management (FRM) measures considers their 'likely significant effects'. A high -level assessment has been undertaken because the measures may or may not be chosen for any of the Flood Risk Areas as the Strategy develops. The SEA has assessed the generic FRM measures in accordance with the method set out below.4.2 Method of assessment

4.2 Method of assessment

GIS was used in order to identify the known environmental constraints and features within the Lancashire County area and have been identified as potentially being affected by FRM measures. The features may suffer negative impacts or they could potentially benefit from flood risk management.

Once the baseline features were identified, high-level consideration of the potential effects was made and recorded. This was then compared against the SEA significance categories and examples of application which were agreed at the scoping stage, as presented in Table 2.4, in Section 2.6.

4.3 Limitations of the SEA and key assumptions

The assessment of generic measures is at a very high level, given the lack of specific flood risk locations for implementation of measures. Its main limitation, therefore, is the need to rely on a number of assumptions. The key assumptions of the SEA during the assessment of generic measures are as follows:

- Measures are implemented in isolation combinations of measures have not been given particular consideration, and the implication of combining measures may lead to synergistic effects (greater than the sum of the individual effects);
- It is assumed that inspection and maintenance may include dredging ofwatercourses;
- The baseline for watercourses across the county is generalised (see the assessment), and thus any measure may affect any aspect of this baseline;
- Any flood risk management measures implemented to address an FRA would provide flood risk benefit to all features within the FRA;
- Surface water flooding may pick up pollutants from residential or commercial areas, and thus cause harm to soils, biodiversity or human health; and

Flood risk to community services / facilities, recreation or infrastructure is sufficient to cause temporary closures or render it temporarily unusable, or cause damage to the infrastructure requiring repair.

4.4 Assessment of generic flood risk management measures

The SEA has identified a range of generic risks, pre -existing mitigation which is expected (for example because it is required in existing legislation or is standard good practice), and additional mitigation measures, which can be used to info rm the identification of actions for particular District areas and settlements with flood risk.

Table 4.1 on the following pages provides a summary of the assessment. The full assessment can be found in Appendix C. The following general statements about the assessment can be noted:

- Where potential adverse effects are identified, but the residual effect is assessed as neutral / negligible ("0"), LCC is expected to be able to minimise significant effects and reduce them to negligible; and
- Where residual adverse effects remain, LCC is expected to be able to minimise significant effects, but the potential for minor adverse effects remains possible. This requires monitoring, such that any adverse effects which are later identified can be further considered and mitigated.

From the baseline data discussed in the Scoping Report, major nationally important environmentally designated sites within the Districts have been identified and used to inform the assessment of generic measures. Also identified are a number of other potentially relevant baseline features that would be appropriate at a more localised scale, such as Public Rights of Way and Tree Preservation Orders. These were not included in the baseline information in the Scoping Report which only considered the strategic and regional scale.

| | Potential Adverse Effect(s) (w ithout m itigation) Residual Effect w ith Mitigation (See Appendix C for list of m itigation) | | | | | | | | | | | | | | | | |
|----------------------------|---|--------------------------------------|-----------------|----------------------|---------------|-----------------------|-----------------|---|-------------------|-------------------------|-----------------|----------------------|---------------|-----------------------|-----------------|--------|---|
| SEA Topic | Inspection and Maintenanc | Watercourse Capacity Increases | New / Raised | Naturalisation of | Flood Storage | Flood Proofing and | Land Management | | Inspection and | Watercourse Capacity | New / Raised | Naturalisation of | Flood Storage | Flood Proofing and | Land Management | Key Po | tential Opportunities (See dix C for full list) |
| Biodiversity | | | | - | - | 0 | 0 | | _ | - | - | - | - | 0 | 0 | ++ | Increased protection from damage by extreme flooding |
| Local Community | - | - | - | - | - | - | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ++ | Protection from harm by extreme flooding |
| Recreation | - | - | - | - | | - | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ++ | Reduction in flood risk to recreational areas / facilities |
| Geology and Soils | | | - | | | 0 | - | | 0 | 0 | 0 | 0 | - | 0 | - | ++ | Reduction in flood risk to geological sites or contaminated land |
| Water Environment | | | | 0 | - | 0 | - | L | 0 | 0 | 0 | 0 | - | 0 | 0 | ++ | Reduction in flood risk and enables natural hydro-geomorphological processes. |
| Climatic Factors | - | - | - | - | - | 0 | 0 | | 0 | - | - | - | - | 0 | 0 | ++ | Reduced flood risk can avoid greenhouse gas emissions required for post-flooding cleanup and recovery. |
| Landscape and Townscape | - | - | | - | - | - | I | L | 0 | 0 | - | - | - | 0 | 0 | ++ | Reduction in the harm done by extreme flooding can help prevent deterioration in townscape or landscape features. |
| Historic Environment | | | | - | | - | - | | - | - | - | - | - | 0 | 0 | ++ | Protection of integrity and setting from damage by extreme flooding |
| Material Assets | - | - | 0 | - | - | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ++ | Reduction in flood risk to any business use / land, associated infrastructure, or other important infrastructure (helping to reduce damage / maintenance) |

 Table 4.1: Summary of the Assessment of Generic FRM Measures

4.5 Conclusions and recommendations of the SEA

Given the baseline for the county, the main concerns for implementing FRM measures are:

- All measures: modification of watercourses and associated ecological impact via changes to riverbanks and/or the riverbed and in -watercourse flora;
- All measures: potential impact on buried archaeology;
- All measures: Water Framework Directive (WFD) compliance, and the need to ensure works do not cause deterioration of a WFD water body on a 'non temporary' basis;
- All measures (including dredging under inspection and maintenance): potential spread of sediment / soil contamination;
- 'Naturalisation', flood storage: potential health and safety risks, recognising the potential hazards of culverts;
- Flood storage: potential landtake within designated Sites;
- Temporary construction impacts on people and ecology.

Some of the key sensitivities in the borough include fish migration and spawning, potential impact on water vole populations, the various waterside Sites of Special Scientific Interest (SSSIs), Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Biological Heritage Sites (BHSs). The county's industrial history is also relevant to the potential for contaminants buried under watercourse sediment.

There are a number of pre-existing requirements and other forms of mitigation which are likely to be implemented regardless of this SEA's input. These may avoid certain significant adverse effects from the long list of potential FRM measures. They are shown in detail in Appendix C.

Of the mitigation recommended by the SEA, as also detailed in Appendix C, the key mitigation can be summarised as:

- Appropriate ecological assessments and action planning for each measure, including ecological input into design where relevant;
- Consulting with the Council's ecologist and (where appropriate) Lancashire Wildlife Trust in the design of any flood storage within or adjacent to Local Wildlife Sites;
- Consulting with the LCC conservation section and the Specialist Advisor (archaeology) for LCC on updates to the Strategy's action plan, particularly where locations for any dredging or watercourse modification are proposed;
- Environmental action plans for ecology and archaeology, to ensure staff and contractors 'on the ground' are aware of what to look for and how to respond if relevant features are discovered:

- Appropriate consideration of health and safety risks in any design or watercourse modification, with possible provision of safety equipment and signage required;
- Project-level assessment of potential temporary construction impacts, where these may be of a significant magnitude or duration; and
- Project-level assessment of the effects on downstream watercourses, with 'pairing up' of flood storage measures, as may be appropriate.

5. Future Assessment of Flood Risk Management at Specific Locations

5.1 Introduction

For the local district boundaries considered in Section 2.2, more localised studies are currently being undertaken, as associated with the development of SWMPs. This would identify more specific flood risk areas. For such flood risk areas, the objectives identified in Table 2.1 would need to be considered and potential appropriate actions/measures considered and then identified in the Strategy. These actions/measures would need to be assessed for their potential effects on the environment, which may be informed by the assessment of the generic flood risk measures conducted within this SEA.

| Objective Theme | Actions/measures | Timescales | |
|--------------------------------------|---|-------------|--|
| Roles and Responsibilities | Further develop the Action Plan | Short Term | |
| | Create a Local Flood Risk Management Plan | | |
| Understanding Risks | Embed climate change into local flood risk management | Short Term | |
| | Develop SWMPs | Medium Term | |
| Communication and | Develop a flood awareness programme | Short Term | |
| Involvement | Scope approaches in small communities | Medium Term | |
| | Raise awareness of climate change, adaptation and sustainability guidance | | |
| | Seek expert involvement to deliver sustainability | | |
| Sustainable Flood Risk Management | Promote good surface water management principles for development | Short Term | |
| | Establish policy for LLFA consultation on planning applications | | |
| | Develop a Lancashire-specific SuDS guide | | |
| | Seek pilot study opportunities | Medium Term | |

5.2 Method of assessment

When these actions/measures develop, an assessment of the potential effects to the environmental features would be carried out in line with the methodology discussed in Section 2.5. As part of this, the generic flood management measures identified in Section 4.1 may be considered for the required flood management. At this stage, the assumed baseline conditions should be reviewed and updated for the specific flood risk locations.

As part of the review of baseline information, GIS data should be used in order to identify the known environmental and socio-economic features. For Biodiversity aspects, consultation should be undertaken with the Council's ecologist to confirm which habitats may in fact benefit from flood risk reduction, or conversely if any may be harmed by loss of water input.

6. Cumulative Effects of the Strategy

6.1 Introduction and approach

Cumulative effects are the effects of different actions acting together on a common receptor, whether it be through strategies, plans, programmes or projects. Sometimes people distinguish 'in combination' effects as a separate type of cumulative effect, which are the effects of different actions acting together on a common receptor via different pathways.

There are also at least three different types of cumulative or 'in combination' effect, which are:

- Additive: the simple sum of all the effects (e.g. reducing flood risk in two different, disconnected residential areas);
- Neutralising: where effects counteract each other to reduce the overall effect (e.g. requiring construction within an area of habitat, but a separate green corridor project proposes to replace habitat and improve connectivity in that area); and
- Synergistic: where effects interact to produce a total effect greater than the sum of the
 individual effects. Negative synergistic effects often happen as habitats and resources get
 close to capacity: for instance, a wildlife habitat can become progressively fragmented
 with limited effects on a particular species until the last fragmentation makes the areas
 too small to support the species at all.

As per Section 2.5, effects have been considered over the short term (0 - 12 months), medium term (1 - 3 years) and long term (more than 3 years).

6.2 Effects of the Strategy acting alone

The full assessment criteria of the SEA can be found in Table 2.4 of Section 2.6.

Table 6.1 below repeats these, and outlines the assessment of the Strategy as a whole.

This assessment is subject to some key assumptions, associated with the assessment of generic flood management measures, which are in line with the LFRMS objectives (in particular SFRM 1) on the sustainable approach to FRM:

- The majority of the flood storage schemes achieve net benefits to nature conservation (e.g. habitat creation);
- Watercourse capacity increases will be limited to mainly urban / 'built up' areas;
- Outside of urban / 'built up' areas , watercourse capacity increases will either be to 'naturalise' or make more natural, a watercourse. They will otherwise be of very limited extent;
- Inspection and maintenance may apply limited dredging of open watercourses, and any
 which is applied will be subject to ecological assessment and management; and
- There will be limited use of new / raised defences in terms of extent of watercourse affected.

| SEA Topic | Assess | sment with F | Recommended SEA | Mitigation | Description | |
|-----------------|--------|----------------------------|---|---|--|--|
| | B1 | designated associated | ect and, where poss nature conservatio species, including h y where applicable | There is potential for negative effects during the construction of certain measures which may come forward in the short term, | | |
| | Sho | ort Term | Medium Term | Long Term | however with mitigation and enhancement, there is greater potential for medium-term and | |
| rsity | | - | + | + | long-term biodiversity gains in association with flood storage or | |
| Biodiversity | B2 | enhance no habitats an | ect and, where poss otable, non-designa d associated specie nnectivity where app | ted (e.g. BAP) s, including | possible naturalisation, as well as land management. | |
| | Sho | ort Term | Medium Term | Long Term | | |
| | | - | + | + | | |
| | LC1 | residing ir | uce the number on homes and contact at risk of flooding? | | This is a key aim of the LFRMS. | |
| | Sho | ort Term | Medium Term | Long Term | | |
| | | + | + | ++ | | |
| Local Community | LC2 | Will it redu deprived a | ce flood risk to com reas? | nmunities in | It is likely that a number of measures will be identified which benefit District areas in deprived areas, such as relevant areas of Blackpool and Burnley would be addressing Districts in | |
| Ŋ | Sho | ort Term Medium Term | | Long Term | economically deprived areas (relative to the national average). However, it should be noted that | |
| | | + + + | | level of deprivation has not influenced the District arearanking. | | |
| | LC3 | | ce disruption in acces, such as that caus | | In the long term, it is felt likely that severity of flood risk (given climate change) may worsen its impact on the road network | |

Table 6.1: Effects of the LFRMS – Cumulative Effects Assessment

| SEA Topic | Assess | sment with F | Recommended SEA | Description | | |
|-------------------|------------|--------------|--|---------------|--|--|
| | Sho | ort Term | Medium Term | Long Term | without the LFRMS. As such, the LFRMS could greatly reduce | |
| | | + | + | ++ | the disruption caused by flooding. | |
| | RC1 | open spac | ect and, where poses es which have desi nem in terms of floo | gnations, or | There is potential for negative effects during the construction and implementation of certain measures which may come forward in the short term, | |
| _ | Sho | ort Term | Medium Term | Long Term | however with mitigation and enhancement, there is greater | |
| Recreation | | - | + | + | potential for medium-term and long-term benefits to recreation | |
| Recr | RC2 | enhance re | ect and, where poss creational facilities, of flood risk? | | from reduced flood risk. | |
| | Sho | ort Term | Medium Term | Long Term | | |
| | | - | + | + | | |
| | GS1 | - | ect and, where possi tes valued for geodi | | May be flood risk benefits to the various RIGS/SSSI (for geology) within Lancashire. | |
| | Sho | ort Term | Medium Term | Long Term | | |
| nd Soils | | 0 | + | + | | |
| Geology and Soils | GS2 | Will it p | rotect 'best and mo soil? | st versatile' | There is potential for flood storage in all grades of ALC . The effect is unknown, and depending on the | |
| ' | Sho | ort Term | Medium Term | Long Term | nature of FRM measures, may be neutral or even beneficial. | |
| | | 0 | - | - | However, the risk of adverse effects must be noted. | |
| ± | | | prevent the achievement of 'good or 'good potential' of a water body? | | WFD assessment of relevant FRM measures will be required to ensure no deterioration on a non- | |
| onmer | Short Term | | Medium Term | Long Term | temporary basis. FRM measures can assist in achieving the | |
| Water Environment | | 0 + + | | + | objectives of various RBMPs, including flood storage and | |
| Water | W2 | | either counteract or ery of the River Basi Plan? | | naturalisation measures which achieve a more natural land inundation regime and / or a more natural | |

| SEA Topic | Asses: Mitiga | | Recommended SE | Description | | |
|----------------------|---|----------------------|---|--|--|--|
| | Sho | ort Term | Medium Term | Long Term | flow regime and ecological functionality. | |
| | | 0 | + | + | | |
| | W3 | Will it _l | protect and, where improve water qua | | Measures are considered unlikely to affect water quality significantly, as it tends to be | |
| | Sho | ort Term | Medium Term | Long Term | more strongly influenced by other factors. | |
| | | 0 | 0 | + | Use of SuDs could improve water in the long term | |
| Climatic Factors | CF1 | Will i | t increase greenho emissions? | At first, the emissions associated with construction and implementation are likely to be greater than the emissions saved through reduced flood risk (i.e. evacuations, diversions and flood recovery). By the long term (with climate change), the cumulative saved emissions may even out the 'spent' emissions. | | |
| Clin | Sho | ort Term | t Term Medium Term Long Term | | | |
| | | - | - | 0 | | |
| ape Townscape | LT1 | (includi | otect and, where po ng through significal risk reduction) land townscapes? | nt and relevant dscapes and | There is potential for negative effects during the construction and implementation of certain measures which may come forward in the short term, however with mitigation and | |
| Landsca and 1 | Sho | ort Term | Medium Term | Long Term | enhancement, there is greater potential for medium-term and | |
| | | - | 0 | 0 | long-term benefits to recreation from reduced flood risk. | |
| Historic Environment | H1 Will it protect and, where possible, enhance (including through flood risk reduction) the integrity and setting of designated historic assets? | | | | There are risks to buried archaeology during all time periods in which construction or dredging measures may occur (which may include the long term). However, by the long term, it is a proceed that the flood risk | |
| toric El | Sho | ort Term | Medium Term | Long Term | it is expected that the flood risk reduction to historic assets will either make up for, or even | |
| His | | - | - | 0 | outweigh, any potential detriment. | |

| SEA Topic | Assess | sment with F | Recommended SEA | Description | |
|-----------------|--------|--|--|--|---|
| | H2 | access to, | otect and, where po or educational opp designated historic | There may be some benefit to access and education as a result of flood risk reduction or specific FRM schemes. | |
| | Sho | ort Term | Medium Term | Long Term | |
| | | 0 | 0 | 0 | |
| ssets | M1 | Will it reduce flood risk to essential infrastructure? | | | Benefit may be seen to material assets as flood risk is reduced in the Districts. |
| Material assets | Sh | ort Term | Medium Term | Long Term | |
| Ma | + | | ++ | ++ | |

6.3 Effects of the Strategy and other plans / projects

The LFRMS will have to consider the implications on other plans and projects. These are outlined in Table 6.2, below, based on an update of the review undertaken during the scoping stage.

| Title, Author, Publication Date | Influence of PPP on / Contribution to / Conflict with LFRMS | Influence of the LFRMS on / Contribution to / the Conflict with PPP |
|---|--|--|
| Water (General) | | |
| The drought plans for the North West Region, 2012 Environment Agency Water Resource Management Plans United Utilities Drought Plan (draft) Dee Valley Water | These plans identify methods for dealing with droughts of different types and changing severity. They also include a system of monitoring and reporting to identify and track the onset, progress and recovery from drought. They relate to the supply of water resources and identifying deficit issues, and therefore link directly into the flood risk management strategy. | LFRMS measures may influence how droughts can be managed. It is important to note that although they both store water, water supply reservoirs and washlands are quite different. The effectiveness of a washland as a flood risk management asset can be reduced by trying to maximise its benefit to water supply (i.e. by prolonging inundation). However, there are secondary benefits of washlands to water supply which can be considered. |
| North West Region catchment abstraction management strategies (CAMS): - Derwent, West Cumbriaand Duddon (April 2007) - Douglas (April 2003) - Eden and Esk (October 2007) - Kent (July 2007) - Leven and Crake (April 2003) - Lower Mersey and Alt (March 2008) - Lune (March 2004) - Ribble (including Crossens catchment) (June 2007) - Wyre (November 2006) | The CAMS details how the Environment Agency plans to manage water resources in the LCC area. | Measures generated for the LFRMS have the potential to have some impact on how and where water is abstracted, however this may very well not be an issue once the measures are developed further. |
| North West River Basin Management Plan (RBMP) 2009 Environment Agency | The RBMP implements the Water Framework Directive for the North West River Basin District, and so influences the development of the LFRMS. It reviews the current health of the water environment and sets out a plan for improvements. | LFRMS policy options and actions should align with the RBMP where possible and appropriate, and take into account the key actions for the Witham catchment. |

| Title, Author, Publication Date | Influence of PPP on / Contribution to / Conflict with LFRMS | Influence of the LFRMS on / Contribution to / the Conflict with PPP |
|---|---|--|
| The North West England and North Wales Shoreline Management Plan 2 (SMP2) (2011) - Southport Pierto Rossall Point - Rossall Point to Hodbarrow Point - Hodbarrow Point to StBees Head Environment Agency | Sets out the risks associated with coastal processes in these areas and helps reduce these risks to people and the developed, historic and natural environments. | Measures generated for the LFRMS should consider the risks detailed in the SMPs and be consistent with the recommendations set out. |
| Water: Waste Water | | |
| Waste Water National Policy Statement, 2012 Defra | Clearly sets out the need for wastewater projects and includes a robust set of policies for the Infrastructure Planning Commission (IPC) and successor bodies to use when considering applications for nationally significant projects. | Measures generated for the LFRMS should consider their effect on wastewater and also the location of any emerging wastewater projects in the study area. The potential cumulative effects of measures with proposed development should be considered. |
| Water: Flooding | | |
| Floods Directive 2007/60/EC European Union | The Directive establishes a framework for assessing and managing flood risk aimed at reducing the adverse consequences for human health, the environment, cultural heritage and economic activity. This will compliment the LFRMS through the assessment and management of flood risk. | The LFRMS will compliment the requirements of the Floods Directive. |
| Flood and Water Management Act 2010 UK Government | The Act looks to make provision about water, including provision regarding the management of risks in connection with flooding and coastal erosion. This will therefore have a significant influence on how the strategy will deal with flood management in the study area. It states that the Environment Agency must develop, maintain, apply and monitor a strategy for flood and coastal erosion risk management in England. | The LFRMS will assist in ensuring that LCC deliver the requirements of the Act. |
| Regional Flood and Coastal Communities (England and Wales) Regulations 2011 | These Regulations make provision for the procedure that must be followed when dividing England and Wales into regions under section 22(1)(a) of the Flood and Water | N/A |

| Title, Author, Publication Date | Influence of PPP on / Contribution to / Conflict with LFRMS | Influence of the LFRMS on / Contribution to / the Conflict with PPP |
|---|--|---|
| UK Government | Management Act 2010 (as above). | |
| Flood Risk Regulations 2009 UK Government | The Floods Directive is transposed into English Law by the Flood Risk Regulations. The Regulations require the development of preliminary assessment maps and reports, flood hazard maps and flood risk maps, with updates required every six years. It will be necessary to refer to these maps throughout the development of the LFRMS. | The resultant maps and reports arising from these Regulations should be considered throughout the development of the LFRMS. |
| Spatial Land Use Planning / Built Develop | ment | |
| National Planning Policy Framework (NPPF) UK Government | The NPPF is the new national planning policy addressing the Government's expectations mainly for Local Plans, but also for minerals and waste planning. It replaces former Planning Policy Statements (PPS) and Planning Policy Guidance (PPG), with only a few remaining in effect until further notice. The NPPF preserves the Sequential Test and the Exception Test of former PPS25 on flood risk. It will influence local planning, which may lead to changes to evolving local planning policy as outlined below. In particular, the NPPF includes core planning principles which include enhancing the natural environment, recognising the intrinsic character and beauty of the countryside, securing high-quality design and conserving heritage assets so that they can be enjoyed for their contribution to the quality of life of this and future generations. The NPPF requires the planning system to perform the role of 'improving biodiversity', including protection of what exists and creation of ecological networks to provide a net gain for biodiversity wherever possible. The NPPF continues to place an emphasis on the conservation of heritage assets, and any justifiable harm to heritage assets must be proven as per previous planning policy to deliver public benefits that outweigh that harm, or because the asset is demonstrably non-viable and it is better to free-up the site than keep the asset. LCC have a policy for the redevelopment of 22,200 additional homes and the newly established Enterprise | The LFRMS will support sustainable development, aim to minimise or resolve conflicts with plans, and maximise synergies. |

| Title, Author, Publication Date | Influence of PPP on / Contribution to / Conflict with LFRMS | Influence of the LFRMS on / Contribution to / the Conflict with PPP |
|--|--|--|
| | Zone covering the BAE Systems sites at Samlesbury and Warton, this would need to be considered for the LFRMS, in terms of potential flood risk areas and measures. | |
| Communities | | |
| Ambition Lancashire - Sustainable Community Strategy, 2008 Lancashire County Council | The aim of this strategy is to promote vibrant communities where people enjoy life, good health, become one of the healthiest and most sustainable economies in Europe, enable good connections between people, services, communities and places and provide rich diverse environments, heritage and cultures that residents and visitors enjoy. The strategy influences the LFRMS by helping to protect and enhance communities. | The LFRMS should consider how it can enhance communities close to proposed flood risk management measures. |
| Agriculture and Forestry | | |
| Food 2030 (Government's sustainable food strategy), 2010 Defra | The long-term sustainability of our food system is the central concern for Food 2030. Of relevance is the aim to ensure a resilient, profitable and competitive food system and to increase food production sustainably. This helps to support farmers in helping them reach their environmental responsibilities. This can include more sustainable land management initiatives which may be an option for, and make a positive contribution to, the LFRMS. | Our LFRMS measures may lead to measures which involve temporary or permanent loss of agricultural land, however they may also increase flood risk protection of such land in other places. We will seek to minimise negative impacts to agricultural practice in exchange for meeting our wider objectives. Certain measures may be able to achieve positive impacts to agricultural land or practice. |
| Rural Development Programme for England, 2007 Defra | The programme aims to improve competitiveness in the agriculture and forestry sector; safeguard and enhance the rural environment; foster competitive and sustainable rural businesses and thriving rural communities. As above, this can include more sustainable land management initiatives which may be an option for, and make a positive contribution to, the LFRMS. | |
| Waste (incl. Hazardous Waste) | | |
| Waste Infrastructure Delivery Programme, 2009 Defra | Established to support local authorities to accelerate investment in the large-scale infrastructure required to treat residual waste, without compromising efforts to minimise waste and increase recycling levels. The strategy may need to consider whether different forms of | Measures for flood risk management should consider the location of any proposed waste management facilities in the study area. |

| Title, Author, Publication Date | Influence of PPP on / Contribution to / Conflict with LFRMS | Influence of the LFRMS on / Contribution to / the Conflict with PPP |
|---|---|---|
| | waste management give rise to significant flood risk issues. | |
| The Joint Lancashire Minerals and Waste Development Framework (MWDF), 2007 Lancashire County Council | The Joint Lancashire Minerals and Waste Development Framework (MWDF) contains mineral and waste specific policies for use in determining planning applications for waste or quarry developments in Lancashire, including those areas administered by the Unitary Authorities of Blackburn with Darwen Borough Council and Blackpool Borough Council (the Joint Plan area). | Measures for flood risk management should consider the location of any proposed waste management facilities in the study area. The potential cumulative effects of measures with proposed development should be considered. |
| Transport | | |
| Local Transport Plan for Lancashire (2012) Lancashire County Council | The Local Transport Plan for Lancashire presents their transport priorities for the next ten years. It sets out Lancashire's commitment to support the economy, to tackle deep-seated inequalities in people's life chances and to revitalise communities and provide safe high- quality neighbourhoods. New transport infrastructure projects may require flood risk management, which may link in with the LFRMS. They may also conflict with proposals of the LFRMS (e.g. proposing to use the same land). | As stated left, the LFRMS may consider measures which have synergies with transport projects. It may also need to consider policy or other 'soft' measures which help to guide development towards sustainable flood risk management. The potential cumulative effects of measures with proposed development should be considered. |
| Minerals | | |
| The Joint Lancashire Minerals and Waste Development Framework (MWDF), 2007 Lancashire County Council | The Joint Lancashire Minerals and Waste Development Framework (MWDF) contains mineral and waste specific policies for use in determining planning applications for waste or quarry developments in Lancashire, including those areas administered by the Unitary Authorities of Blackburn with Darwen Borough Council and Blackpool Borough Council (the Joint Plan area). | The LFRMS may wish to seek synergies with the minerals industry in developing measures, and this could lead to aims to influence minerals planning. The potential cumulative effects of measures with proposed development should be considered. |
| Navigation / Recreation | | |
| The Countryside and Rights of Way Act 2000 (the 'CROW Act 2000') UK Government | This Act introduced the so-called 'right to roam' which has been embodied in a land designation known as Open Access Land or Open Country. Many of these areas were already designated as Registered Common Land, however this additional provision emphasises their | The development of the LFRMS will take account of Open Access Land and the local PRoW network as potential constraints to flood risk management measures, seeking to preserve the integrity of such |

| Title, Author, Publication Date | Influence of PPP on / Contribution to / Conflict with LFRMS | Influence of the LFRMS on / Contribution to / the Conflict with PPP |
|---|--|---|
| | importance as a recreational feature. They are areas which may be subject to flood risk, and should be taken into consideration. They also present a potential constraint to the construction of flood risk management measures. The Act also strengthens the management of the Public Right of Way (PRoW) network, and has led to certain new paths being created. | features. The LFRMS should seek to enhance recreational connectivity in the study area, including PRoWs and links into Open Access Land, where applicable to measures being considered and then inevitably pursued. |
| Biodiversity | | |
| The Conservation of Habitats and Species Regulations 2010 (S.I. 2010 No. 490) (as amended) UK Government | Consolidates previous amended versions of The Conservation (Natural Habitats, &c.) Regulations 1994 and implements Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive). The Regulations address internationally designated sites, of which there are a large number in the study area. The Regulations also provide for the protection of 'European protected species', and the adaptation of planning and other controls for their protection. These Regulations must be abided by during the development and implementation of the LFRMS. | The development of the LFRMS will take account of the conservation of protected species, and involve regular review of the potential for indirect effects (e.g. downstream) on internationally protected sites. |
| Wildlife and Countryside Act 1981 (as amended) The Countryside and Rights of Way Act 2000 (the 'CROW Act 2000') UK Government | The Wildlife and Countryside Act 1981 consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive) in Great Britain. The Act makes it an offence to intentionally kill, injure or take particular species that are protected under Schedules within the Act. It also provides for the notification and protection and management of Sites of Special Scientific Interest (SSSI). This Act must be abided by during the development and implementation of the LFRMS. The CROW Act 2000 made some changes regarding the Wildlife and Countryside Act. Of most significance, it | The LFRMS measures will need to respect the SSSIs in the study area and support the achievement of favourable condition status of SSSIs. The development of the LFRMS will take account of the conservation of protected species. |

| Title, Author, Publication Date | Influence of PPP on / Contribution to / Conflict with LFRMS | Influence of the LFRMS on / Contribution to / the Conflict with PPP |
|--|--|---|
| | increased penalties for infringement of the Act, introduced "wildlife inspectors" who have a range of powers under the Act, and extended offences of disturbing certain birds and animals to include reckless as well as intentional acts. | |
| The Natural Environment and Rural Communities (NERC) Act 2006 UK Government | This Act introduces lists of habitats and species which are of principal importance for the conservation of biodiversity in England. The lists (known as the Section 41, or S41, lists) include 56 habitats and 943 species. As we develop the LFRMS, we have an obligation to have regard to the conservation of these habitats and species of principalimportance. | LFRMS measures may be able to reduce the harm caused by flooding to S41 habitats and species. However, they may include 'hard engineered' structures which can have adverse effects on habitat and species. These and other measures may also involve habitat creation which benefits species. Measures may link in with the longer-term management of habitat, such as certain 'soft' measures relating to land management. We will seek net biodiversity gains as we develop our measures for the LFRMS. |
| UK Biodiversity Action Plan UK Government Lancashire Biodiversity Action Plan Lancashire Biodiversity Partnership | The Lancashire Biodiversity Action Plan (BAP) is made up of many individual species and habitat plans. Each plan gives information on the status and threats to the species or habitat. The most important section of the plan details the conservation action required and the organisations responsible. Local BAPs sets out individual action plans for particular species and habitats that reflect both local and national priorities for conservation in order to maintain and enhance the biodiversity of Lancashire. The species and habitats included in the LBAP have been afforded priority status in the UK Action Plan or are important in a Lancashire context. | LFRMS measures may include 'hard engineered' structures which can have adverse effects on habitat and species. However, these and other measures may also involve habitat creation which benefits species. Measures may link in with the longer-term management of habitat, such as certain 'soft' measures relating to land management. We will seek synergies with the LBAP as we develop our measures for the LFRMS, including seeking net biodiversity gains. |
| Lancashire Green Infrastructure Strategy, 2009 | Green Infrastructure (GI) strategies plan for green links and spaces which interconnect and support communities and wildlife. Green Infrastructure should be able to contribute positively to flood risk management, but recreational features may also serve as a constraint to LFRMS measures which are considered (such as if they exist where we wish to allow morenatural flooding or construct | The LFRMS may consider measures which have direct synergies with GI provision, or which can link in with other initiatives to extend the GI network. Any negative effects on recreational features should be avoided, or if not possible, minimised and (where appropriate) compensated for. The potential cumulative effects of measures with proposed development should be considered, such as |

| Title, Author, Publication Date | Influence of PPP on / Contribution to / Conflict with LFRMS | Influence of the LFRMS on / Contribution to / the Conflict with PPP |
|--|---|--|
| | something). | harmful levels of recreational pressure on nature conservation sites. |
| Natural Environment White Paper, 2011 'The Natural Choice: securing the value of nature' UK Government | The White Paper is a statement outlining the Government's vision for the natural environment. Changing and increasing pressures on our environment continue to cause degradation (which in turn has social and economic impacts) and managing these pressures is becoming more challenging. The White Paper provides new measures to tackle these challenges efficiently and effectively. It states the value of green infrastructure and healthy ecosystems at providing natural flood protection. | The LFRMS should consider measures which restore more natural ecological processes to the study area and create green infrastructure. It should consider the value that changing land use and management measures can provide, including urban green space and tree planting (if appropriate). |

7. Monitoring and Next Steps

7.1 Recommended SEA monitoring measures

The SEA Regulations require that significant environmental effects resulting from the implementation of plans and programmes are monitored to identify at an early stage any unforeseen effects. Proposed monitoring is based on indicators. The monitoring proposals for the Strategy are presented below in Table 7.1.

It is suggested that progress against these indicators is reported in tandem with review of the Strategy. As a number of the actions/measures associated with the Strategy will occur during the next 1-3 years, this review would need to be undertaken on a yearly basis. As part of this, the environmental assessment of flood management measures at specific locations would be undertaken.

Table 7.1: Proposed SEA Monitoring for the LFRMS

| SEA Guiding Questions / indicator) | | | Monitoring Recommendations Criteria (Italic = repeated |
|------------------------------------|--|--|--|
| . | B1 | Will it protect and, where possible, enhance designated nature conservation sites and associated species, including habitat connectivity where applicable? | A number of LFRMS measures proposed in designated conservation sites (SSSIs, SPAs, BHS)s which lead to loss of vegetation / land clearance Net loss / gain in designated nature conservation sites habitat area through LFRMS measures |
| Biodiversity | B2 | Will it protect and, where possible, create or enhance notable, non- designated (e.g. BAP) habitats and associated species, including habitat connectivity where applicable? | Extent and frequency of dredging % of LFRMS actions accompanied by Env. Action Plans, which include ecological issues No. flood events which reduce the extent of populations of priority species noted in the Lancashire BAP (e.g Water Vole, Otter, European Eel, Toad, West European Hedgehog, Barn Owl, Grass Snake, Bats, White-clawed Crayfish, Salmon, Trout and Lamprey) along ordinary watercourses |
| Local Community | LC1 | Will it reduce the number of people residing in homes and commercial properties at risk of flooding? | No. properties 'at risk' and not protected by recent flood risk management measures No. surface water flooding events and no. properties affected No. flooding events from ordinary watercourses and no. properties affected No. flooding events from reservoirs and no. properties affected |
| | LC2 | Will it reduce flood risk to communities in deprived areas? | No. properties 'at risk' within 30% most deprived areas and not protected by recent flood risk management |
| | LC3 Will it reduce disruption in access to facilities and services, such as that | | No. local district councils still requiring additional flood risk management, including |

| SEA Guiding Questions / indicator) | | | Monitoring Recommendations Criteria (Italic = repeated |
|------------------------------------|---|---|--|
| | | caused by floods? | those that contain A Roads still requiring additional flood risk management |
| c | RC1 | Will it protect and, where possible, enhance open spaces which have designations, or improve them in terms of flood risk? | No. LFRMS measures proposed in recreational areas / green space Net loss / gain in recreational and amenity area |
| Recreation | RC2 | Will it protect and, where possible, create or enhance recreational facilities, or reduce their levels of flood risk? | through LFRMS measures No. flood events which reduce the use of recreational facilities near to ordinary watercourses |
| oils | GS1 | Will it protect and, where possible, create or enhance sites valued for geodiversity? | Reported flood risk problems or benefits to RIGS or LGS |
| Geology and Soils | GS2 | Will it protect 'best and most versatile' soil? | Areas of ALC Grade 1, Grade 2 or Sub- Grade 3a soil lost to agricultural production as a result of LFRMS measures Area of agricultural soil benefiting from LFRMS measures (e.g. inundation likely to improve soil quality) |
| nent | W1 | Will it prevent the achievement of 'good status' or 'good potential' of a water body? | No. LFRMS measures which are flood defences / additional modification of water bodies No. and extent of flood storage schemes |
| ater Environr | Does it either counteract or contribute to the delivery of the River Basin Management | associated with habitat creation / restoration of natural floodplain No. and extent of watercourse 'naturalisation' measures Notices / complaints of poor function of storage | |
| \$ | Will it protect and, where possible, improve water quality? | | or watercourse capacity increases — low / high flows % of LFRMS actions accompanied by Env. Action Plans, which include water quality issues |
| Climatic Factors | CF1 | Will it increase greenhouse gas emissions? | Estimates of carbon emissions per LFRMS measure and total emissions – carbon calculator |
| Landscape and Townscape | LT1 | Will it protect and, where possible, enhance (including through significant and relevant flood risk reduction) landscapes and townscapes? | No. LFRMS measures proposed in designated nature conservation sites which lead to loss of vegetation / land clearance Net loss / gain in designated nature conservation sites habitat area through LFRMS measures |

| SEA Guiding Questions / indicator) | | | Monitoring Recommendations Criteria (Italic = repeated |
|------------------------------------|---|---|---|
| nment | H1 | Will it protect and, where possible, enhance (including through flood risk reduction) | Adverse effects of LFRMS measures on Scheduled Monuments, Listed Buildings or Conservation Areas |
| Enviro | the integrity and setting of designated historic assets? | | % of LFRMS actions accompanied by Env. Action Plans, which include archaeology issues |
| Historic Environment | H2 Will it protect and, where possible, improve access to, or educational opportunity offered by, designated historic features? | | None. |
| assets | M1 | Will it reduce flood risk to essential infrastructure? | No. properties 'at risk' and not protected by recent flood risk management measures |
| Material | M1 Will it reduce flood risk to essential infrastructure? | | No. local district councils still requiring additional flood risk management, including those that contain A Roads still requiring additional flood risk management |

7.2 Consultation and next steps

This SEA Environmental Report will be consulted upon with the statutory consultees and the public (along with other stakeholder organisations) alongside the LFRMS. Consultation is an important part of developing the LFRMS and carrying out the assessment. Following this, all responses received will be collated and incorporated as appropriate into our decision-making for finalising the Strategy. The consultation on the Strategy is running concurrently, and stakeholders or the public can provide feedback on the Strategy as well as the Environmental Report.

After adoption of the Strategy, an SEA Statement must be produced in order to document how the SEA and consultation on the SEA has influenced its development. It will also set out the final monitoring commitments.

References

Flood Risk Regulations 2009 – Preliminary Flood Risk Assessment: Lancashire Area Preliminary Assessment Report, May 2011.

HMSO, 2004. Environmental Assessment of Plans and Programmes Regulations

Pitt, 2008. The Pitt Review - Learning Lessons from the 2007 floods. Sir Michael Pitt, Cabinet Office, 22 Whitehall, London, SW1A 2WH.

Figures

Figure 2.2 - Designated Nature Conservation Sites

Figure 2.3 - Designated Heritage Assets

Appendix A - Detailed Baseline Information for the Flood Risk Areas

Introduction

Environmental baseline data has been gathered for each of the Districts. The initial ranking from the Preliminary Flood Risk Assessment (PFRA) has been based firstly on the number of residential properties, and secondarily on the number of non - residential properties, potentially at risk of surface water flooding.

It is important to note that the prioritisation of investigations, identifying schemes and addressing flood risk will not be purely based on the ranking of District areas. This is firstly because there may be simple and effective measures for addressing Districts lower down the ranking which can be funded and implemented quickly. Secondly, in certain areas, a flood risk management measure may be able to address flood risk in multiple Districts, and thus benefit more properties for less financial cost than in other, perhaps higher -ranking District areas.

Methodology

A GIS-based tool was used in order to identify the known environmental features currently within each local district boundary. As such, these features have been identified as potentially being harmed by surface water flooding, and thus potentially benefiting from flood risk management. This information is shown in Figures 2.2 and 2.3 and detailed below.

| Area Ref.: | 1 | Area Nam e: | Lancaster | |
|---------------------------|---------|--|---|--|
| Topic | | Features | | |
| Biodiversity | | 31 SSSIs; 3 SACs; 1 NNR; | 3 SPAs; 2 Ramsar sites | |
| | | Properties at risk of flooding: 4609 residential; 1682 non-residential | | |
| Recreation | | 2 National Cycle Routes | | |
| Geology and Soils | | 1 geologically important SSSI | Major aquifer covering a large area, upon which the majority of properties lie. | |
| Water Enviro | nment | Groundwater body: Lune and Wyre carboniferous aquifers | | |
| Landscape ar Townscape | ıd | 2 AONB | Landscape character areas – Coasts and Estuaries; Silverdale; Bowland and Pendle, Rural Valleys; Amounderness and Bowland Fringes. | |
| Historic Envi | ronment | ment 37 Scheduled Monuments,37 Conservation Areas | | |
| Material Assets | | M6 Motorway | | |

| Area Ref.: 2 | Area Nam e: | Wyre | |
|----------------------------|--|---|--|
| Topic | Features | | |
| Biodiversity | 5 SSSIs; 1 Ramsar; 2 SPAs | s; 1 SAC | |
| Human Health | 49,575 residential properties, 15,630 non-residential properties | | |
| Recreation | 2 National Cycle Routes | | |
| Geology and Soils | 1 Geologicaly important SSSI Much of the area covers low lying land and has a presence of shallow sand and gravel aquifers. | | |
| Water Environment | Groundwater bodies: Fylde Permo-Triassic Sandstone aquifer; | | |
| | West Lancashire quaternary sand and gravel aquifer. | | |
| Landscape and Townscape | 1 AONB | Landscape character areas – Coasts and Estuaries; Bowland and Pendle; Amounderness and Bowland Fringes. | |
| Historic Environment | 6 Scheduled Monuments, 7 Conservation Areas | | |

| Area Ref.: | 4 | Area Nam e: | West Lancashire | |
|--|--------|---|---|--|
| Topic | | Features | | |
| Geology and Soils | | 2 Geologicaly important SSSIs | Rufford aquifer covers a large area which is covered by a thin layer of clay. | |
| Water Enviro | nment | Groundwater bodies: West Lancashire quaternary sand and gravel aquifer; | | |
| Water Enviro | | Rufford Permo-Triassic sandstone aquifer | | |
| Landscape and TownscapeLandscape Character Areas – Coasts and Estuaries; The Lancas and Leyland Hundred. | | s – Coasts and Estuaries; The Lancashire Plan | | |
| Historic Envir | onment | 12 Scheduled Monuments, 28 Conservation Areas | | |
| Material Assets | | M58 Motorway | | |

| Area Ref.: | 5 | Area Nam e: | Blackpool |
|---|---|--|--------------------------------------|
| Topic | | Features | |
| Biodiversity | | 2 SSSI; 2 Ramsar sites; 1 | SPA |
| Human Healt | h | 68,593 residential propertie | s, 12,246 non-residential properties |
| Recreation | | 2 National Cycle Routes | |
| Geology and Soils Much of the area covers low lying land and sand and gravel aquifers. | | | |
| Water Enviror | ment | nt Groundwater body: West Lancashire quaternary sand and gravel aquifer. | |
| Landscape at Townscape | nd | Landscape Character Areas – Amounderness and Coasts and Estuaries. | |
| Historic Envir | Historic Environment 2 Conservation Areas | | |
| Material Assets M55 | | M55 Motorway | |

| Area Ref.: | 6 | Area Nam e: | Fylde |
|--------------|---|---|-------|
| Topic | | Features | |
| Biodiversity | | 6 SSSIs; 2 SPAs; 1 SAC; 1 NNR; 1 Ramsar | |

| Area Ref.: | 6 | Area Nam e: Fylde | |
|---------------------------|--------|---|--|
| Topic | | Features | |
| Human Health | | 36,875 residential properties, 13,017 non-residential properties | |
| Recreation | | 2 National Cycle Routes | |
| Geology and Soils | | Much of the area covers low lying land and has a presence of shallow sand and gravel aquifers. | |
| Water Environment | | Groundwater bodies: Fylde Permo-Triassic Sandstone aquifer; West Lancashire quaternary sand and gravel aquifer. | |
| Landscape an Townscape | d | Landscape Character Areas – Amounderness and Coasts and Estuaries. | |
| Historic Envir | onment | 10 Conservation Areas | |
| Material Assets | | | |

| Area Ref.: 7 | Area Nam e: | Preston |
|----------------------------|--|--|
| Area Ref.: 7 | | |
| Торіс | Features | |
| Biodiversity | 1 SSSI | |
| Human Health | 60,247 residential properties, 12,568 non- residential properties | Properties at risk of flooding: 3217 residential; 897 non-residential |
| Recreation | 1 Strategic Recreational Area | |
| Geology and Soils | Areas of permeable bedrock at or near the land surface and some underlying aquifers, (both major and minor in terms of water resources). | |
| Water Environment | Groundwater body: Permo-Triassic Sandstone aquifer | |
| Landscape and Townscape | Landscape Character Areas – Amounderness; Rural Valleys and Bowland Fringes. | |
| Historic Environment | 3 Scheduled Monuments, 11 Conservation Areas | |
| Material Assets | M6 Motorway; M55 Motorway; M65 Motorway | |

| Area Ref.: | 8 | Area Nam e: | Chorley | |
|-------------------------|-------|--|---|--|
| Topic | | Features | | |
| Biodiversity | | 3 SSS/s | | |
| Human Health | | 46,344 residential properties, 12,495 non residential properties | | |
| Recreation 1 | | 1 National Cycle Route | | |
| Geology and Soils | | Rufford aquifer covers a large area which is covered by a thin layer of clay. | | |
| water Environment | | | roundwater bodies: Rufford Permo-Triassic sandstone aquifer; ouglas Darwen and Calder carboniferous aquifers | |
| Landscape and Townscape | d | Landscape Character Areas – East Lancashire Valleys; The Lancashire Plan; Leyland Hundred and South and West Pennines. | | |
| Historic Enviro | nment | 10 Scheduled Monuments, 9 Conservation Areas | | |
| Material Assets | | M61 Motorway; M65 Motorway | | |

| Area Ref.: | 9 | Area Nam e: | South Ribble | |
|---------------------------|---------|--|---|--|
| Alea Kel | 9 | | | |
| Topic | | Features | | |
| Biodiversity | | 3 SSSIs; 1 SPA; 1 Ramsar | | |
| Human Health | | 47,573 residential properties, 10,165 non- residential properties | Properties at risk of flooding: 3935 residential; 927 non-residential | |
| Recreation | | | | |
| Geology and Soils | | Rufford aquifer covers a large area which is covered by a thin layer of clay. | | |
| Water Environment | | Groundwater bodies: Rufford Permo-Triassic sandstone aquifer; Douglas Darwen and Calder carboniferous aquifers | | |
| Landscape ar Townscape | nd | Landscape Character Areas – Rural Valleys; The Lancashire Plan and Leyland Hundred. | | |
| Historic Envir | ronment | 3 Scheduled Monuments,8 Conservation Areas | | |
| Material Assets | | N/A | | |

| Area Ref.: | 10 | Area Nam e: | Hyndburn | |
|---|-------------------------|--|----------|--|
| Topic | | Features | | |
| Biodiversity | | 1 SSSI | | |
| Human Health 36,599 residential properties, 6,049 non- residential properties Properties at risk of floor 889 non-residential | | Properties at risk of flooding: 3885 residential; 889 non-residential | | |
| Recreation | | | | |
| Geology and Soils | | Areas of permeable bedrock at or near the land surface and some underlying aquifers, (both major and minor in terms of water resources). | | |
| Water Enviror | ment | Groundwater body: Douglas Darwen and Calder carboniferous aquifers | | |
| Landscape an Townscape | ıd | Landscape Character Areas – Rural Valleys and East Lancashire Valleys. | | |
| Historic Envir | onment | 1 Scheduled Monument; 10 Conservation Areas | | |
| Material Asse | ial Assets M65 Motorway | | | |

| Area Ref.: | 11 | Area Nam e: | Pendle | |
|--|----|--|-----------------------|--|
| Торіс | | Features | | |
| Biodiversity | | 2 SSSIs; 1 SPA | | |
| Human Health | | 39,802 residential properties, 8,310 non-residential properties | | |
| Recreation 1 Strait Area | | 1 Strategic Recreational Area | National Cycle Routes | |
| Geology and Soils | | Areas of permeable bedrock at or near the land surface and some underlying aquifers, (both major and minor in terms of water resources). | | |
| Water Environment Groundwater body: Douglas Darwen and Calder carboniferou | | as Darwen and Calder carboniferous aquifers | | |
| Landscape an Townscape | | | | |
| Historic Environment 11 Scheduled Monuments; 26 Conservation Areas | | ; 26 Conservation Areas | | |
| Material Assets M65 Motorway | | | | |

| Area Ref.: 12 | 12 | Area Nam e: | Burnley |
|---------------|----|-------------|---------|
| Alea Nel | 12 | | |

| Торіс | Features | | |
|-------------------------|--|--|--|
| Biodiversity | 1 SSSI; 1 SPA | | |
| Human Health | 40,073 residential properties, 6,623 non-residential properties at risk of flooding: 4058 residential; 934 non-residential | | |
| Recreation | 2 National Cycle Routes | | |
| Geology and Soils | Areas of permeable bedrock at or near the land surface and some underlying aquifers, (both major and minor in terms of water resources). | | |
| Water Environment | Groundwater body: Douglas Darwen and Calder carboniferous aquifers | | |
| Landscape and Townscape | Landscape Character Areas – East Lancashire Valleys and South and West Pennines. | | |
| Historic Environment | 24 Scheduled Monuments;10 Conservation Areas | | |
| Material Assets | M65 Motorway | | |

| Area Ref.: | 13 | Area Nam e: Rossendale | | | |
|---|---|--|---|--|--|
| Topic | | Features | - eatures | | |
| Biodiversity | | 3 SSSIs, 1 SPA, 1 SAC | | | |
| Human Health | | 30,902 residential properties, 6,760 non-residential properties | | | |
| Recreation 1 Strategic Recrea | | 1 Strategic Recreational Area | 1 National Cycle Route | | |
| Geology and Soils | | 1 Geologicaly important SSSI | A large proportion of the area's geology and soils are relatively impermeable | | |
| Water Environment Groundwater body: Northern Manchester Carboniferous aquif | | n Manchester Carboniferous aquifers | | | |
| Landscape an Townscape | ıd | Landscape Character Areas – East Lancashire Valleys and South and West Pennines. | | | |
| Historic Envir | Historic Environment 2 Scheduled Monuments; 9 Conservation Areas, | | Conservation Areas, | | |
| Material Assets | | | | | |

Appendix B - Review of Relevant Policy, Plans, Programmes and Strategies

| Document | Objectives and Requirements Relevant to the LFRMS | Implications for the LFRMS and the SEA | | | |
|---|---|--|--|--|--|
| INTERNATIONAL AND NATIONA | NL | | | | |
| General Priorities for Planning and Development | | | | | |
| Aarhus Convention (1998), and amendment (2005) Strategic Plan for the Convention (2008) Riga Declaration (2008) Environmental Information Regulations (2004) | The UK Environmental Information Regulations transpose the European Aarhus Convention, which establishes a number of rights of the public (citizens and their associations) with regard to the environment. Public authorities (at national, regional or local level) are to contribute to allowing these rights to become effective. The Convention provides for: • The right of everyone to receive environmental information that is held by public authorities. This can include information on the state of the environment, but also on policies or measures taken, or on the state of human health and safety where this can be affected by the state of the environment. Public authorities are obliged, under the Convention, to actively disseminate environmental information in their possession; • The right to participate from an early stage in environmental decision-making. Arrangements are to be made by public authorities to enable citizens and environmental organisations to comment on, for example, proposals for projects affecting the environment, or plans and programmes relating to the environment; and • The right to challenge, in a court of law, public decisions that have been made without respecting the two aforementioned rights or environmental law in general. The Convention creates obligations in three fields or 'pillars': Public access to environmental information; Public participation in decision-making on matters related to the environment: provision; and Access to justice (i.e. administrative or judicial review proceedings) in environmental matters. • The Strategic Plan and Riga Convention highlight current challenges and reinforce the need to address them. It | Public consultation and access to information supporting the decision-making process must be introduced in the procedures for the drawing up of the LFRMS in respect of matters covered by the legislation and Directives mentioned. The SEA Directive requires that public consultation is carried out on the draft LFRMS and its accompanying SEA. The quality and level of participation need to be appropriate to enable the public and stakeholders to actively take part in development of the LFRMS. The SEA reports should therefore maximise transparency and readability to reach the full range of stakeholders. | | | |
| Equality Disability Discrimination Amendment Act (2005) Race Relations Amendment Act (2000) | Includes that public authorities take responsibility for both the quality and the level of public participation. These pieces of legislation require public authorities to take a pro-active approach to eliminating discrimination in aspects of their work. Specifically, they must promote equality of opportunity, good relations between people of different racial groups, and positive attitudes towards disabled persons, while eliminating unlawful discrimination. The named legislation is underpinned by a range of equality- and diversity-related legislation, including the Human Rights Act, Race Relations Act and amendment, Disability Discrimination Act, Gender Recognition Act, Civil Partnerships Act, Employment Equality (Religion or Belief) Regulations and Employment Equality (Sexual Orientation) Regulations. | The LFRMS will be guided by an Equalities Impact Assessment, which will inform the SEA and assessments under the topic of 'population'. Issues relating to age, disability, gender, race, religion/belief and sexual orientation will be accounted for and addressed, where required. | | | |
| Health Healthy lives, healthy people (White Paper) DoH, (2010) Tackling Health Inequalities: A Programme for Action – DoH, (2003) Tackling Health Inequalities: Status Report on the Programme for Action (2007) | Sets out the Government's intention to improve health and well-being and tackle inequalities. It highlights the need to put local communities at the heart of public health to develop their own ways of impro ving public health. The Programme for Action sets out plans to tackle health inequalities over the next three years. It establishes the foundations required to achieve the challenging national target for 2010 to reduce the gap in infant mortality across social groups, and raise life expectancy in the most disadvantaged areas faster than elsewhere. The status report focuses on the steps being taken to narrow the health gap and shows signs of progress against the health inequalities target and the set of national cross government indicators. | The LFRMS will be guided by assessment of health effects under the SEA. | | | |
| Sustainability The Johannesburg Declaration of | These documents affirm the principles of commitment to sustainable development. This includes the nations undertake to strengthen and improve governance at all levels, for the effective implementation of Agenda 21. The principal aim of | The LFRMS should support the sustainability aims of Agenda 21 at the local level, and will need to reflect the | | | |

| Document | Objectives and Requirements Relevant to the LFRMS | Implications for the LFRMS and the SEA |
|---|---|--|
| Sustainable Development (2002) | the EU Sustainable Development Strategy is to ensure environmental protection (including natural resources and quality of the environment, pollution, sustainable consumption and protection), social equity (healthy, just society) and cohesion | principles of sustainable development. The SEA will, under various topics, consider potential |
| Renewed EU Sustainable | and economic prosperity. | impacts related to the themes identified. This will include |
| Development Strategy (2006) | and economic prospenty. | the LFRMS's influence on the historic environment, |
| Bovolopinion Gualogy (2000) | The European Spatial Development Perspective (ESDP) established common objectives and concepts for sustainable | including impacts upon townscape, historic structures |
| European Spatial Development | development in the European Union. The ESDP aims to ensure that the three fundamental goals of European policy | and features. |
| Perspective (1999) | are achieved equally in all the regions of the EU: | |
| Consider the Future The | Economic and social cohesion; | The SEA will also address impacts on the climate via |
| Securing the Future: The Government's Sustainable | Conservation and management of natural resources and the cultural heritage; and More balanced competitiveness of the European territory. | greenhouse gases (including CO ₂) emissions. The contribution of the LFRMS to the form and function of the |
| Development Strategy, Defra | infore balanced competitiveness of the European territory. | rural and urban areas of the borough should be viewed |
| (2005) | Fundamental to this is that European cultural landscapes, cities and towns, as well as a variety of natural and historic | positively and the plan's objectives should reflect this. |
| ` ' | monuments are part of the European Heritage. Its fostering should be an important part of modern architecture, urban | |
| | and landscape planning in all regions of the EU. A big challenge for spatial development policy is to contribute to | The LFRMS should reflect as far as is appropriate the |
| | sustainable development whilst reducing emissions into the global ecological system. | first three objectives of the UK Sustainable Development |
| | The UK Sustainable Development Strategy has the new objectives of: | Strategy. All five objectives of the strategy are reflected in the general approach to the environmental |
| | Living within environmental limits; | assessment. |
| | Ensuring a strong healthy and just society; | addedinant |
| | Achieving a sustainable economy; | |
| | Promoting good governance; and | |
| | Using sound science responsibly. | |
| | It considers the greatest threat to be our current and projected levels of greenhouse gas emissions. The objectives | |
| | It considers the greatest threat to be our current and projected levels of greenhouse gas emissions. The objectives above are driven by environmental improvement, equality and inclusiveness, 'polluter pays' principle and incentives for | |
| ס | natural resource efficiency, promoting participation and applying strong scientific evidence with accounting for | |
| ω | uncertainty, public attitudes and public values. | |
| - | Environment, Communities and Planning for Local Economies | |
| The Sixth Environment Action | The latest Environment Action Programme gives a strategic direction to the Commission's environmental policy over the | These action programmes have the potential to benefit |
| Programme of the European | next decade, as the Community prepares to expand its boundaries. The new programme identifies Climate Change as | the LFRMS by reducing the adverse impacts of climate |
| ommunity 2002-2012 | one of the environmental areas to be tackled for improvements. | change, which can heighten flood risk. |
| Mid-term review of the Sixth | Recognises that land use planning and management decisions in the Member States can have a major influence on the | The SEA should consider the effects of the LFRMS on all |
| Community Environment Action | environment, leading to fragmentation of the countryside and pressures in urban areas and the coast. The objectives | nature conservation, including designated sites and other |
| Programme (2007) | that are of relevance to the LRMS include stabilisation of greenhouse gases and halting biodiversity loss. In addition, | natural habitats (e.g. impacts from the construction of |
| | under the EAP framework, a thematic strategy on soil protection has also been developed. | flood risk management assets). |
| | | The OFA III was a second of the force of the first |
| | | The SEA will recommend mitigation for any negative |
| | | nature conservation impacts, considering first avoidance of impacts, and then minimisation and compensation |
| | | where they cannot be avoided. Mitigation should be |
| | | proactive through site selection, alternatives and timing. |
| | | |
| | | Under the SEA, opportunities to benefit nature |
| | | conservation and biodiversity will be sought. |
| | | The development of the LFRMS will take account of the |
| | | conservation of protected species, and involve regular |
| | | review of the potential for indirect effects (e.g. |
| | | downstream) on internationally protected sites. |
| | | , |
| Climate Change | These documents aim to mitigate the impacts of climate change, and to achieve stabilisation of greenhouse gas | The impact of likely climate change on all types of |
| | concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate | The impact of likely climate change on all types of infrastructure (e.g. future drainage requirements) should |
| Climate Change United Nations Framework Convention on Climate Change, | | The impact of likely climate change on all types of |

| Document | Objectives and Requirements Relevant to the LFRMS | Implications for the LFRMS and the SEA |
|---|---|---|
| Kyoto Protocol (1997) Climate Change Act (2008) Climate Change: the UK Programme (2006) The UK Low Carbon Transition Plan: National strategy for climate and energy (2009) | Under the Kyoto Protocol, 38 Countries (plus the EU) have committed to individual, legally binding targets to limit or reduce their greenhouse gas emissions. These add up to a total cut in greenhouse gas emissions of at least 5% from 1990 levels in the commitment period 2008-2012. The UK has committed to an 8% reduction (base year = 1990). The Climate Change Act aims to achieve the 5% Kyoto target, setting out a legally binding framework for the UK to c ut carbon emissions. It also paves the way for the UK to adapt to climate change. The Act requires that a Climate Change Risk Assessment (CCRA) be carried out for the UK every 5 years, and that a 5 - yearly adaptation programme be put in place to address the most significant climate change issues. Public bodies including Local Authorities and other statutory bodies such as water and utilities companies are required to report on how they have assessed the risk of climate change to their work and how these risks will be managed. The Act aims to embed climate change adaptation into core planning processes. The Climate Change Programme emphasises the contribution that LPAs can make to reducing transport -related emissions of greenhouse gases, intending to cut the UK's greenhouse gases by 23% below 1990 levels by 2010. The national strategy sets out ambitious targets to reduce harmful carbon emissions over the next 50 years, with major increases in renewable energy and energy efficiency. | emissions. |
| | The UK Low Carbon Transition Plan sets out how the UK will meet a 34% cut in emissions on 1990 levels (or an 18% cut on 2008 levels) by 2020 to deliver the UK's legally binding target to cut emissions by at least 80% by 2050. It will do this through a set of five-year "carbon budgets" to 2022 to keep the UK on track. | |
| Conservation and Biodiversity Convention on Biodiversity (1992) Convention on Biodiversity (1992) Convention of the Conservation of Wild Birds (199/147/EC (2009) (1992) Convention of the Conservation (1992) Convention of the Conservation (1992) Convention of Wild Fauna (1992) Amended Wildlife and (1992) Amended Wildlife and (1981) The Conservation of Habitats and (1981) The Conservation of Habitats and (1981) Where the Conservation (2010) UK Post-2010 Biodiversity (1992) Working with the Grain of (1992) Working with the Grain of (1992) Working with the Grain of (1992) Nature': A Biodiversity Strategy (1992) | The convention requires development of strategies plans and programmes for conservation and sustainable use of biological diversity. This legislation aims to protect biodiversity - the variety of life - through the conservation of natural habitats and wild plants and animals. They create a network of 'Natura 2000' sites which include Special Areas of Conservation (SA / IIACs) and Special Protection Areas (SPAs), which, on land, are already Sites of Special Scientific Interest (SSSIs), and also aims to protect all SSSIs. The Habitats Regulations are the UK legislation transposing The Birds Directive and Habitats Directive into UK law. The Habitats Regulations also include for the protection of priority habitats and species, and SSSIs as above. | The SEA should consider the effects of the LFRMS on all nature conservation, including designated sites and other natural habitats. Habitats Regulations Assessment (HRA) screening will be conducted in order to ensure that European sites are not affected. The SEA will recommend mitigation for any negative nature conservation impacts, considering first avoidance of impacts, and then minimisation and compensation where they cannot be avoided. Mitigation should be proactive through site selection, alternatives and timing. Under the SEA, opportunities to benefit nature conservation and biodiversity will be sought. The LFRMS and SEA should consider biodiversity impacts. The SEA should take a holistic view of ecosystems rather than focusing on 'islands' of protected species. The strategy should be consistent with the objectives of national conservation strategies and their local implementation mechanisms - e.g. the UK, Lancashire Biodiversity Action Plan. |
| Water The Water Framework Directive 2000/60/EC - 'The WFD' | The Water Framework Directive expands the scope of water protection to all waters, surface waters and groundwater, and aims to achieve 'good' status or potential for all waters by 2015, or under certain provisions, 2021 or 2025. The Water Act is national legislation which transposes the Water Framework Directive, and the River Basin Management Plan (RBMP) for the Humber River Basin District implements this at a regional level – see regional documents below. | The SEA should address the protection and improvement of water resources – for more specific implications; refer to the relevant RBMPs under 'Regional' below. |

| Document | Objectives and Requirements Relevant to the LFRMS | Implications for the LFRMS and the SEA |
|---|---|--|
| | The objectives of the directive are: | The LFRMS should address climate change and water. It |
| Floods Directive 2007/60/EC, | Reduce pollution, prevent deterioration and improve health of aquatic ecosystems; | should not lead to a worsening – and where possible |
| European Union | Promote the sustainable use of water; and | should lead to an improvement – in conditions in the |
| | Help reduce the effects of floods and drought. | water environment. |
| Flood and Water Management | | |
| Act 2010, UK Government | The UK Water Strategy takes the principles of Making Space for Water to ensure a fully integrated approach to flood | The SEA will address the potential for the LFRMS to |
| | risk and water management to 2030. A key intention is to arrive at an improved and protected water envir onment and to | improve surface runoff quality. |
| Flood Risk Regulations 2009, | deliver more sustainable management of surface water. This strategic document has various aims, including pollution | |
| UK Government | limits and improvements in water quality standards. The strategy is the current thinking on how to implement key parts | LFRMS policy options and actions should align with the |
| \M-4 A -+ (2002) | of the Water Framework Directive. Objectives of the Strategy are: | RBMP, where possible and appropriate, and take into account the key actions for the North West River Basin |
| Water Act (2003) | Create a more integrated, long-term approach to river basin planning and management. Work closely with partners and provide increased opportunity for stakeholder involvement. | District. |
| Making Space for Water: Taking | Aim to achieve environmental, social and economic benefits concurrently. | District. |
| Forward a Government Strategy | 7 iii to danio to divisiinidha, coola and coolionid polionid concurrency. | Measures generated for the LFRMS should consider |
| for Flood and Coastal Erosion | The Water Resources Strategy includes various actions to plan for sustainable, reliable water supplies for people and | their effect on wastewater and also the location of any |
| Risk Management in England. | businesses, whilst also protecting the environment. Some of the key actions relevant to spatial planning are: | emerging wastewater projects in the study area. |
| First Government Response, | Strengthen the link between energy, waste and wastewater in all sectors of abstraction; | |
| DEFRA (2005) | Require sustainable drainage schemes to be incorporated into new developments in England; | The LFRMS will compliment the requirements of the |
| | Restore wetlands to help rare and threatened habitats and species and to preserve wetland archaeology, subject to | Floods Directive. |
| UK Water Strategy – Future | water availability; | TI 15040 ''II ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' |
| Water (2008) | support housing and associated development where it can be proved that the environment can cope with the | The LFRMS will assist in ensuring that LCC and BBC |
| Water for people and the | additional demands placed on it; and encourage efficient use of water in homes and buildings; | deliver the requirements of the Flood and Water Management Act. |
| environment: Water Resources | encourage entitlent use of water in normes and buildings, | Wanagement Act. |
| Strategy for England and Wales | | |
| 6 009) | | |
| $\boldsymbol{\omega}$ | | |
| irecting The Flow – A new | | |
| © pproach to integrated water | | |
| resources management EC, | | |
| Nosources management EC, | | |
| A Framework for River Basin | | |
| Planning in England and Wales - | | |
| Summary: Water for Life and | | |
| Livelihoods, EA (2006) | | |
| Liveline de, Liv (2000) | | |
| Waste Water National Policy | | |
| Statement DEFRA (2012) | | |
| Defra | | |
| | | |
| Soil | The EU Soil Strategy is a precursor to the development of a Soil Framework Directive to protect and ensure the | The LFRMS should consider the need to conserve soil |
| FILThomatic Strategy for Call | sustainable use of soil. It aims to prevent further soil degradation and restoring degraded soils in line with its current | resources and improve the quality of soils. The SEA |
| EU Thematic Strategy for Soil Protection | and intended use. | should consider the likely significant effects of the |
| FIOLECTION | The England Soil Strategy sets out a vision to improve the management of soil and tackle soil degradation within 20 | LFRMS on soil resources and quality, and aim to minimise negative effects. |
| Safeguarding Our Soils - A | years as part of maintaining sustainable food supplies and developing resilience to c-limate change. The focus is on four | i minimise negative enects. |
| Strategy for England (2009) | main themes: the sustainable use of agricultural soils; the role of soils in mitigating and adapting to climate change; | |
| | protecting soil functions during construction and development; and preventing pollution and dealing with historic | |
| | contamination. | |
| | | |
| | It sets out the practical steps to prevent further degradation of soils. It places increased value on soils in urban areas | |
| | during development and requires that construction practices maintain vital soil functions, prevent soil pollution and that | |
| | historical soils contamination issues are addressed. | |
| | | |

| Document | Objectives and Requirements Relevant to the LFRMS | Implications for the LFRMS and the SEA |
|--|--|--|
| Agriculture and Forestry Food 2030 (Government's sustainable food strategy), Defra (2010) Rural Development Programme for England, Defra (2007) | The long-term sustainability of our food system is the central concern for Food 2030. Of relevance is the aim to ensure a resilient, profitable and competitive food system and to increase food production sustainably. This helps to support farmers in helping them reach their environmental responsibilities. This can include more sustainable land management initiatives which may be an option for, and make a positive contribution to, the LFRMS. The programme aims to improve competitiveness in the agriculture and forestry sector; safeguard and enhance the rural environment; foster competitive and sustainable rural businesses and thriving rural communities. As above, this can include more sustainable land management initiatives which may be an option for, and make a positive contribution to, the LFRMS. | The LFRMS may lead to measures which involve temporary or permanent loss of agricultural land; however, they may also increase flood risk protection of such land in other places. The LFRMS will seek to minimise negative impacts to agricultural practice in exchange for meeting wider objectives. Certain measures may be able to achieve positive impacts to agricultural land or practice. |
| Cultural Heritage The Convention for the Protection of the Architectural Heritage of Europe (Granada Convention) The European Convention on the Protection of Archaeological Heritage (Valetta Convention) Ancient Monuments and Archaeological Areas Act (1979) Planning (Listed Buildings and Conservation Areas) Act (1990) | The Conventions and this key historic environment legislation (amongst other less key legislation) sets out a framework for the protection of assets of national value, as well as archaeological assets generally. It includes for the protection of Scheduled Monuments, Conservation Areas, Registered Parks and Gardens and Listed Buildings. The legislation directs that planning applications which may have potential effect upon their integrity or their historic setting must be referred to the statutory body for the historic environment, English Heritage. | The LFRMS should seek to protect historic environmental features. The SEA should consider and address the potential significant effects of the LFRMS upon the historic environment, offering the highest protection to nationally designated or significant features. The LFRMS could influence the historic environment in several ways, including impacts upon townscape, historic structures and other historic features. The potential contribution of the LFRMS to the historic environment should be taken into account, and the SEA should seek to identify opportunities for improvement. |
| Noise Privironmental Noise Directive – 02/49/EC (2002) Noe Environmental Noise Ongland) (Amendment) Ongland) (Amendment) | The EU Noise Directive is implemented in the UK by the Environmental Noise Regulations. Amongst their provisions, they require the production of noise mapping to determine exposure to environmental noise, and the adoption of noise action plans which should respond to the identification of noise issues and effects, managing and r educing them where necessary. | The implementation of any measures proposed by the LFRMS should be undertaken using best practice construction and/or mitigation methods, where relevant. |
| Air Quality Air Quality Framework Directive 2008/50/EC (2008) Air Quality Strategy for the UK (2007) | This Directive involves the merging of most of existing legislation into a single directive (except for the fourth daughter directive) with no change to existing air quality objectives. The Directive seeks to define and e stablish objectives for ambient air quality to avoid, reduce or prevent harmful effects on human health and the environment as a whole The strategy sets out the framework for planning for addressing air quality issues and establishes the standards and objectives to be achieved. These include those for particulates (PM10 and PM2.5), nitrogen dioxide / nitrogen oxides, ozone, sulphur dioxide, polycyclic aromatic hydrocarbons, benzene, 1,3- butadiene, carbon monoxide and lead. | The implementation of any measures proposed by the LFRMS should be undertaken using best practice construction and/or mitigation methods, where relevant. |
| Waste Waste Framework Directive (2008/98/EC) and daughter directives e.g. Landfill Directive (1999/31/EC) Waste Strategy for England | Waste production should be minimised through the promotion of clean technology and reusable or recyclable products. Where the possible secondary raw materials should be recovered from waste by recycling, reuse and reclamation or any other process, as well as used to produce energy. Waste should be managed with minimal environmental impact. This directive sets the basic concepts and definitions related to waste management and lays down waste management principles such as the "polluter pays principle" or the "waste hierarchy". The Waste Strategy describes a vision for managing waste and resources better and sets out changes needed to deliver more sustainable development. | Proposals resulting from the LFRMS should seek to promote minimal use of new materials, reuse of materials, and use of recycled materials, where possible. The SEA can help to identify any potential effects on waste resulting from new development. |
| (2007) Landscape and Rural Issues European Landscape Convention (Florence Convention) | The European Landscape Convention defines landscape as: "An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors." (Council of Europe 2000). As summarised by Natural England (2013), "it highlights the importance of developing landscape policies dedicated to the protection, management and creation of landscapes, and establishing procedures for the general public and other | The LFRMS and SEA should be informed by A Landscape Strategy for Lancashire - Landscape Character Assessment and consider access to recreation, human health and well-being, population, and townscape. The development of the LFRMS will take account of the |

| | stakeholders to participate in policy creation and implementation." Application of the existing National Character Area map of England and of local authority-level Landscape Character Assessment to inform policy-making are substantial components of implementing this Convention. | local PRoW network as a potential constraint to flood risk management measures, seeking to preserve the integrity of such features. |
|--|--|---|
| Countryside and Rights of Way Act 2000 (CRoW) | The Act addresses the designations of Areas of Outstanding Natural Beauty (AONBs), Sites of Special Scientific Interest (SSSIs), Open Country and Common Land. It also adds provisions to the consideration and management of the Public Right of Way (PRoW) network. | The LFRMS should seek to enhance recreational connectivity in the study area, including PRoWs, where this is applicable to the measures being considered. |
| Transport | The strategy recognises the need for a transport network that can meet the challenges of a growing economy and the | The LFRMS should take the themes of the documents |
| The Future of Transport: A | increasing demand for travel but can also achieve the Government's environmental objectives. | into account and aim to protect current transport infrastructure and future transport investment from the |
| Network for 2030' (White Paper), DfT (2004) | It is a long-term strategy for a modern, efficient and sustainable transport system backed up by sustained high levels of investment over the next 15 years. The strategy builds on the progress that has already been made since the implementation of the 10 Year Plan for transport. It is based around three central themes: | negative impacts of flood risk. The SEA should consider the need to protect important |
| | Sustained investment; | infrastructure under 'material assets', and accessibility |
| | Improvements in transport management; and | issues under other community-based topics. |
| | Planning ahead. | |
| Delivering a Sustainable | | |
| Transport System (the UK transport strategy) (2008) | The UK transport strategy set out the transport shared priorities, which are: | |
| | supporting economic growth; | |
| Britain's Transport Infrastructure | reducing carbon emissions; | |
| Motorways and Major Trunk Roads (2009) | promoting equality of opportunity; | |
| (2000) | contributing to better safety, security and health; and | |
| Ū | improving quality of life and a healthy natural environment. | |
| nergy | The white paper sets out the international and domestic energy in the shape of 4 strategic goals: | The LFRMS and SEA should consider ways in which |
| Energy White Paper, Meeting the | Aiming to cut CO₂ emissions by 60% by about 2050, with real progress by2020; | CO ₂ emissions could be minimised during the |
| Energy White Paper, Meeting the hergy Challenge DTI (2007) | Maintaining the reliability of energy supplies; | improvement of flood risk management in the area. |
| O C C C C C C C C C C C C C C C C C C C | Promoting competitive markets in the UK and beyond; and | |
| | Ensuring every home is heated adequately and affordably. | |
| Energy Act, DECC 2010 | The Act includes provisions on: | |
| | Introducing a new Carbon capture and storage incentive; | |
| | Tackling fuel poverty by lowering the energy bills of the most vulnerable consumers; | |
| | Clarifying Ofgem's Remit; and Tackling market power exploitation. | |
| National Planning Policy and Ke | | |
| National Planning Policy | On the 27th March 2012 national planning guidance in the form of topic based PPGs and PPSs was superseded by the | The LFRMS should be linked to the emerging Local Plan |
| Framework (NPPF), DCLG 2012 | NPPF. The NPPF is a based on a presumption in favour of sustainable development. The NPPF states that all plans | in terms of guiding development to the most appropriate |
| | should be based upon and reflect the presumption in favour of sustainable development, with clear policies that will guide how the presumption should be applied locally. | locations and maximising the environmental, social and economic benefits. The SEA will assist in informing the |
| | guide now the presumption should be applied locally. | implementation of the Local Plan, and recommending |
| | The following principles outlined in the NPPF, taken as a whole, constitute the Government's view of what sustainable development in England means in practice for the planning system: | appropriate mitigation for potential new development. |
| | Building a strong and competitive economy | The LFRMS should consider the impacts of flood risk on Lancashire's rural communities. The SEA and EgIA can |
| | Ensuring the vitality of town centres | assess how effective the LFRMS is being with raising the |
| | Supporting a prosperous rural economy | quality of life and environment in rural areas and put |
| | Promoting sustainable transport | forward recommendations where appropriate. |
| | Supporting high-quality communications infrastructure | The LFRMS and SEA should seek to address flood risk which harms community facilities or the accessibility of |

Document

Objectives and Requirements Relevant to the LFRMS

Delivering a wide choice of high-quality homes

- Requiring good design
- Promoting healthy communities
- · Protecting Green Belt land
- Meeting the challenge of climate change, flooding and coastal change
- Conserving and enhancing the natural environment
- · Conserving and enhancing the historic environment
- Facilitating the sustainable use of minerals

Each of the NPPF's sustainability principles shown above is accompanied by a description within the NPPF report. The key points from this description are outlined below. These are shown under the SEA issues to which they are most relevant.

Population and Equality, Accessibility and Community Facilities

 ensure that established shops, facilities and services are able to develop and modernise in a way that is sustainable:

Health and Well-being

- facilitate social interaction and create healthy, inclusive communities;
- provide access to high-quality open spaces and opportunities for sport and recreation;
- protect and enhance public rights of way and access and seek opportunities to pr ovide better facilities for users;
- allow local communities to identify special protection green areas of particular importance to them and designate these as Local Greenspace;
- ensure that noise does not give rise to significant adverse impacts on health and quality of life as a result of new development.

Economy and Employment

- encourage sustainable economic growth;
- identify priority areas for economic regeneration, infrastructure provision and environmental enhancement;
- support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach
 to sustainable new development.

Biodiversity

- contribute to the Government's commitment to halt the overall decline in biodiversity;
- establish coherent ecological networks that are more resilient to current and future pressures;
- contribute to and enhance the natural and local environment:
- recognise the wider benefits of ecosystem services;
- minimise impacts on biodiversity and providing net gains where possible; and
- create, protect, enhance and manage networks of biodiversity and green infrastructure.

Air Quality, Water Resources and Soil and Geology

- prevent both new and existing development from contributing to, being put at unacceptable risk from or being adversely affected by unacceptable levels of air, water and soil pollution or land instability;
- compliance with and contribution towards EU limit values or national objectives for pollutants;
- account for the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas:
- ensure new developments in Air Quality Management Areas are consistent with the local air quality action plan;
- protect and enhance valued geological conservation interests and soils;
- remediate and mitigate despoiled, degraded, derelict, contaminated and unstable land, where appropriate;

Implications for the LFRMS and the SEA

community facilities by walking, cycling and public transport.

The LFRMS should consider flood risk to economic development and access to employment.

The LFRMS and SEA should seek to protect and safeguard disused railways and other, more sustainable transport infrastructure.

The LFRMS should support the general intentions of the NPPF with respect to reducing emissions of greenhouse gases from new development and associated transport.

The LFRMS needs to primarily avoid, and secondly minimise, adverse impacts on the natural environment, and wherever possible, consider ways in which greenspaces and habitat improvements can be made alongside flood risk management. The SEA should consider the potential for significant impacts on the conservation and also enhancement of the natural environment.

The LFRMS and SEA should consider the potential impacts of pollution both when combined with flood risk and flood waters, and in terms of construction projects.

The LFRMS should not lead to a worsening – and where possible should lead to an improvement – in conditions in the water environment. The SEA will address the potential for the LFRMS to improve surface runoff quality.

The SEA can consider how the LFRMS prioritises flood risk management within communities, delivering the greatest environmental, social and economic benefits.

The LFRMS and SEA should seek to prevent the sterilisation of mineral resources.

The historic environment can be affected by changing land uses in a number of ways, including inappropriate development, vibration/noise impacts, and visual intrusion. The LFRMS should consider the likelihood of such impacts, including the impact of new development on the existing streetscape. The SEA should identify any significant effects on the historic environment, avoid and/or minimise these and seek opportunities to redress existing problems.

All development has the potential to harm the integrity and setting/context of buried archaeology. The LFRMS and SEA should take account of preserving archaeological heritage as far as feasible, given the limitations of SEA-level archaeological data. Data gaps and precautions should be identified.

| Document | Objectives and Requirements Relevant to the LFRMS | Implications for the LFRMS and the SEA |
|---|--|--|
| | and distinguish between the hierarchy of international, national and locally designated geological sites. Flood Risk Direct development away from areas at highest risk, but where development is necessary, make it safe without increasing flood risk elsewhere; | |
| | develop policies to manage flood risk from all sources. Waste and Mineral Resources Ensure make best use of minerals to secure their long-term conservation; account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials; define Minerals Safeguarding Areas and adopt appropriate policies; and set out policies to encourage the prior extraction of minerals, where practicable and environmentally feasible, if it is necessary for non-mineral development to take place. | |
| TO | Landscape and Townscape achieve high-quality and inclusive design for all development; respond to local character and history, and reflect the identity of local surroundings and materials, while not preventing or discouraging appropriate innovation; ensure development is visually attractive through good architecture and appropriate landscaping; ensure that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts; conserve and enhance the natural and historic environment, including landscape; | |
| Page 263 | Environment conserve the historic environment, including heritage assets most at risk through neglect, decay or other threats; recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance; recognise opportunities to draw on the contribution made by the historic environment to the character of a place; sustain and enhance heritage assets and put them to viable uses consistent with their conservation, where | |
| | practical; identify land where development would be inappropriate because of its historic significance; identify a clear strategy for enhancing the natural, built and historic environment. and subject non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments to the policies for designated heritage. | |
| | The NPPF also states that 'where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.' | |
| Technical Guidance to the National Planning Policy Framework, DCLG 2012 | The Technical Guidance to the NPPF provides additional guidance to ensure the effective implementation of the planning policy set out in the NPPF on development in areas at risk of flooding. This guidance reta ins key elements of Planning Policy Statement 25, which is considered necessary and helpful in relation to this policy area. The retention of this guidance is an interim measure pending a wider review of guidance to support planning policy. | The LFRMS should direct development away from areas of flood risk. The SEA can consider how the LFRMS can reduce the threat of flooding to communities, delivering the greatest environmental, social and economic benefits. |
| | The guidance suggests that local planning authorities should steer new development to areas with the lowest probability of flooding (i.e. flood zone 1). Where there are no reasonably available sites in Flood Zone 1, local planning authorities should take into account the flood risk vulnerability of land uses and consider reasonably available sites in Flood Zone 2, applying the Exception Test if required. Only where there are no reasonably available sites in Flood Zones 1 or 2 should the suitability of sites in Flood Zone 3 be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required. | |

| Document | Objectives and Requirements Relevant to the LFRMS | Implications for the LFRMS and the SEA |
|---|---|--|
| PPS10: Planning for Sustainable Waste Management, DCLG (2005) | PPS10 is still in effect until the new National Waste Strategy and an annex to the NPPF to replace PPS10 are prepared and adopted. | The LFRMS should consider the impact new infrastructure may have on surface water flood risk. |
| | PPS10 principally aims to drive waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option, but one which must be adequately catered for. It requires that planning authorities consider the capacity of existing and potential transportation infrastructure to support the sustainable movement of waste and products arising from resource recovery and to use where practicable, other transport modes than roads. | |
| Good Practice Guidance Strategic Housing Land Availability Assessment, DCLG (2007) | One of the key priorities for the Government is to ensure that land availability is not a constraint on the delivery of more homes. The guidance requires local authorities to: identify specific, deliverable sites for the first 5 years of a plan that are ready for development; identify specific, developable sites for years 6 -10; indicate broad locations for future growth; and not include an allowance for windfall sites in the first 10 years of the plan. | The LFRMS should consider the impact new housing development may have on surface water flood risk. |
| REGIONAL (Lancashire) | | |
| River Basin Management Plan (RBMP) North West River Basin District (2009) | Sets out actions to address issues facing the water environment in the North West River Basin District. The plan describes the river basin district, and the pressures that the water environment faces. It shows what this means for the current state of the water environment, and what actions will be taken to address the pressures. It sets out what improvements are possible by 2015 and how the actions will make a difference to the local environment – the catchments, the estuaries and coasts, and the groundwater. The RBMP suggests that by implementing the RBMP the Environment Agency will work with partners to improve water | The LFRMS needs to take into account any effects that new flood risk management assets may have on the surrounding water environment and aim to ensure that no adverse effects on water quality will occur. The SEA will assess the potential effects of the LFRMS on Lancashire's waterways and suggest mitigation or enhancements where appropriate. |
| | bodies through promoting habitat creation schemes for both flood risk and biodiversity purposes which will result in environmental improvements. | The SEA should consider how flood risk management can lead to environmental improvements. |
| Page | | LFRMS policy options and actions should align with the RBMP where possible and appropriate, and take into account the key actions for the North West River Basin |
| Character Biodiversity Action Lancashire Biodiversity | The Lancashire Biodiversity Action Plan (BAP) is made up of many individual species and habitat plans. Each plan gives information on the status and threats to the species or habitat. The most important section of the plan details the conservation action required and the organisations responsible. | District. LFRMS measures may include 'hard engineered' structures which can have adverse effects on habitat and species. However, these and other measures may also involve habitat creation which benefits species. |
| Partnership | Local BAPs sets out individual action plans for particular species and habitats that reflect both local and national priorities for conservation in order to maintain and enhance the biodiversity of Lancashire. The species and habitats included in the LBAP have been afforded priority status in the UK Action Plan or are important in a Lancashire context. | Measures may link in with the longer-term management of habitat, such as certain 'soft' measures relating to land management. |
| | | We will seek synergies with the LBAP as we develop our measures for the LFRMS, including seeking net biodiversity gains. |
| Lancashire Green Infrastructure Strategy, 2009 | Green Infrastructure (GI) strategies plan for green links and spaces which interconnect and support communities and wildlife. | The LFRMS may consider measures which have direct synergies with GI provision, or which can link in with other initiatives to extend the GI network. Any negative |
| | Green Infrastructure should be able to contribute positively to flood risk management, but recreational features may also serve as a constraint to LFRMS measures which are considered (such as if they exist where we wish to allow more natural flooding or construct something). | effects on recreational features should be avoided, or if not possible, minimised and (where appropriate) compensated for. The potential cumulative effects of measures with proposed development should be considered, such as harmful levels of recreational pressure on nature conservation sites. |
| The Joint Lancashire Minerals and Waste Development Framework (MWDF), 2007 | The Joint Lancashire Minerals and Waste Development Framework (MWDF) contains mineral and waste specific policies for use in determining planning applications for waste or quarry developments in Lancashire, including those areas administered by the Unitary Authorities of Blackburn with Darwen Borough Council and Blackpool Borough Council (the Joint Plan area). | The LFRMS may wish to seek synergies with the minerals industry in developing measures, and this could lead to aims to influence minerals planning. The potential cumulative effects of measures with |

| Document | Objectives and Requirements Relevant to the LFRMS | Implications for the LFRMS and the SEA |
|--|---|---|
| Lancashire County Council | | proposed development should be considered. |
| Local Transport Plan for Lancashire (2012) Lancashire County Council | communities and provide safe high-quality neighbourhoods. New transport infrastructure projects may require floo d risk | As stated left, the LFRMS may consider measures which have synergies with transport projects. It may also need to consider policy or other 'soft' measures which help to guide development towards sustainable flood risk management. |
| | | The potential cumulative effects of measures with proposed development should be considered. |

Appendix C - Assessment of Generic FRM Measures

| Potentially Relevant Baseline Features within Lancashire & Blackpool Biodiversity | Poter | ntial Significant Adverse Effect(s) | | Existing Mitigation / uirements | Recommended Mitigation | Potential Opportunities / Benefits | | |
|--|-------|---|---|---|--|------------------------------------|---|--|
| | | | Π | | 1. Ecological assessment | | | |
| | | | | egislative protection - Natural | Invasive species survey prior to works | - | | |
| | | | England intervention is possible to help protect SSSI condition. | | 3. Training for inspectors | ++ | Increased protection from damage be extreme flooding | |
| Sites of Special Scientific Interest | | | | | 4. Environmental Action / Management | | extreme moduling | |
| (SSSI) | | Hydrological changes - e.g. Improving flow of water | | | Plan for works informed by the assessment | | | |
| | | downstream could lead indirectly to erosion of riverbanks or deposition of sediment in or near | Res | idual effect with mitigation: | | | | |
| Special Areas of Conservation (SAC) | _ | designated sites, which in turn can harm habitat. May also accelerate the spread of invasive species, if | | | | | | |
| Special Protection Areas (SPA) | | present. | 0 Can minimise effects and reduce to negligible. | | | + | Invasive species removal and reduc | |
| . , | | | | | to negligible. | | | |
| Ramsar sites - wetlands of international importance | | | | | | | | |
| National Nature Reserve (NNR) | | | | | | | | |
| Local Wildlife Sites and candidate sites | | | | | As above: Ecological assessment, | | Increased protection from damage | |
| Local Nature Reserves and | | As above for SSSIs (hydrological changes and | Non | e relevant. | invasive species survey and | | extreme flooding | |
| candidate reserves | | spread of invasive species), however some of these | | | environmental action plan. | | | |
| Ancient Woodlands | | sites are more strongly associated with aquatic habitats and species, so potential 'worst case' | | | | ++ | | |
| BAP Priority Habitats | | magnitude of harm is greater. | Res | idual effect with mitigation: | | | Invasive species removal and redu | |
| Council Woodlands | | | - | Can minimise significant effects, b possible - <i>requires monitoring</i> . | out minor adverse effects remain | | · | |
| Trees with Tree Preservation Orders | | | | | As above: Ecological assessment and environmental action plan. | | | |
| Fisheries (fish spawning areas) | | Direct removal of habitat - dredging and removal of | | e relevant. | Also - see potential enhancement measures. | | Creation of purpose-built debris 'bui up' areas (e.g. anchored debris) aw | |
| Aquatic habitats within ordinary watercourses | _ | | | idual effect with mitigation: | measures. | + | from flow restrictions where these m be beneficial to wildlife. (Natural deb | |
| Vegetation and terrestrial habitat | | | | Can minimise significant effects h | hut minor adverse effects remain | | removed can possibly be shifted to defined areas.) | |
| suitable for protected species | | | Can minimise significant effects, b possible - requires monitoring. | | but minor adverse effects remain | | dominod drodo./ | |
| | | | | | Obtain ecologist consent prior to removal of any substantial vegetation | | | |
| Protected and other species | | In addition to the above: Increased predation risk following removal of vegetation | | egislative protection - a Natural land license is required to disturb ected species | As above, environmental action plan ensure recognise conditions / features which warrant contacting an ecologist | + | Opportunity to remove surface vegetation that is causing eutrophication during maintenance | |
| Fisheries | | | | | See potential enhancement measures | | | |
| Aquatic species which rely upon | | | Res | idual effect with mitigation: | | | Invasive species removal and redu | |
| these resources | | Increased turbidity in the water column leading to a reduction in the ability of underwater plants to photosynthesise | - | Can minimise significant effects, b possible - requires monitoring . | out minor adverse effects remain | + | As above, creation of purpose-buil debris 'build-up' areas, and potenti translocation of species. | |

| Inspection and Maintenan Potentially Relevant Baseline | | | | | | | | |
|---|------|---|--|--|--|------|--|--|
| Features within Lancashire & Blackpool | Pote | ntial Significant Adverse Effect(s) | | -Existing Mitigation / quirements | Recommended Mitigation | Pote | ntial Opportunities / Benefits | |
| Local residents | | | | | Where this is used as a strategy for numerous sections of the same catchment area, use modelling to predict downstream impact. | | | |
| Local workers / | - | | managed by LFRMS. before remov flood events | | 2. Assess history of restrictions to flow before removing, and consider historic flood events and the potential positive impact restriction may have had. | ++ | Reduced flood risk would improve safety and mental health of local communities and visitors | |
| Commuters | | Downstream cumulative effects - removing too many | | | Investigate downstream actions which may be required (e.g. partner with flood storage) | | | |
| Other visitors | | restrictions to flow having an adverse impact on flood risk further downstream. | | | war need eterage) | | Reduced flood risk can improve the | |
| (See also 'Community Services / Facilities') | | nsk luttier downstream. | Res | Residual effect with mitigation: | | | reliability of access to recreation, community services and facilities | |
| (See also 'Recreation') | | | 0 | 0 Can minimise significant effects and reduce to negligible. | | | community services and facilities | |
| Town and local centres | | | | • | | | | |
| Other retail areas | 1 | | | | | | | |
| Community facilities (e.g. | | | ۸۵. | ahovo | As above | ++ | Protection from harm by extreme | |
| education, places of worship, health facilities, post offices) | _ | | AS (| above. | As above. | ** | flooding | |
| Public Rights of Way | 1 | | | | | | | |
| Cycle routes | | | Res | sidual effect with mitigation: | | | | |
| Road and rail network | = | | 0 | Can minimise significant effects a | nd reduce to negliaible. | + | Improved reliability of access. | |
| Recreation | | | | The state of the s | 3.5 | | | |
| Watercourses (angling / fishing, kayaking / canoeing, etc.) | | As for 'Local Community' | | | | | | |
| Doorstep Green Village Greens Country Parks Allotments Green space | - | (See also 'Biodiversity', as relates to recreation combined with nature.) | | for 'Local Community' and diversity' | As for 'Local Community' and 'Biodiversity' | | Reduction in flood risk to recreation areas / facilities | |
| Public Rights of Way | 1 | As for 'Local Community' | Res | sidual effect with mitigation: | | | Dredging could make a watercourse | |
| Cycle routes | | . a. | | | | | more navigable to kayak / canoe (e | |
| Road and rail network | - | If dredging, temporary loss of access to watercourse (e.g. to anglers or kayak / canoe). | 0 | Can minimise significant effects and reduce to negligible. | | + | Alongside habitat creation, can creatinformation points to help residents others to value nature and the outdoors. | |
| Geology and Soils | | | | | | | | |
| Local Geological Site | | | As | for 'Local Community' | As for 'Local Community' | | | |
| Regionally Important Geological Sites (RIGS) and candidate sites | - | As for 'Local Community', noting that flooding of contaminated land can spread pollutants and harm soil quality elsewhere. | Res | sidual effect with mitigation: | | ++ | Reduction in flood risk to geologica sites or contaminated land | |
| Contaminated land (various types) | | SUI QUAIILY EISEWHEIE. | 0 Can minimise significant effects and reduce to negligible. | | | | | |
| Agricultural Land | 0 | Consideration given to reduction in soil fertility / quality due to loss of periodic inundation, but likely negligible a) from ordinary watercourses and b) from a limited set of measures. | N/A | | N/A | | | |

| Inspection and Maintenar | ice | | | | | | | |
|--|------|---|--|--|--|------------------------|--|--|
| Potentially Relevant Baseline Features within Lancashire & Blackpool | Pote | ential Significant Adverse Effect(s) | | Existing Mitigation / uirements | Recommended Mitigation | Pote | ntial Opportunities / Benefits | |
| Soil quality (unknown) | | Dredging can raise, disturb and spread contaminants if watercourse has historic pollution - this can spread to land at high-flow conditions | | e relevant. | Prior to any dredging activity, carry out testing of watercourse sediment for potential pollutants. If found, must liaise with the Environment Agency and either avoid dredging those areas, or create an appropriate dredging strategy. | + | Potential reduction in soil erosion from | |
| | | | Res | Residual effect with mitigation: | | | | |
| | | | 0 | Can minimise significant effects a | nd reduce to negligible. | | | |
| Water Environment | | • | | j | 0 0 | | | |
| WFD water bodies and ordinary | | | Ι | | | | I | |
| watercourses or linked directly to them | | Non-compliance with legal requirements of the WFD / | Legi | slation requires no cause of | Avoid / minimise removal of woody debris outside of urban areas. | | | |
| Ordinary watercourses | | deterioration in water quality. This may include physical modification and removal of woody debris outside of urban areas. deterioration of a WFD water body on a 'non-temporary' basis. deterioration of a WFD water body on a 'non-temporary' basis. 2. If dredging of ordinary watercourses involved, create a 'Dredging Strategy' for the specified area and conduct WFD assessment of the strategy. Residual effect with mitigation: | | deterioration of a WFD water body on a 'non-temporary' basis. | for the specified area and conduct | 0 | Potential to help implement or contribute towards the measures and objectives defined in the RBMPs - see 'Biodiversity'. | |
| | | | | | | | | |
| Flood Risk Areas | | Changes in hydrology and disturbance of sediment | 0 The LFRMS must ensure compliant | | nce with the WFD. | | | |
| 1 lood 1 tisk 7 trous | | can result in siltation of watercourses and movement of contaminants within them | | above. | As above and as for 'Geology and Soils' | | | |
| | | of contaminants within them | Res | idual effect with mitigation: | | | Potential benefits to flow, hydrology a | |
| Main rivers | | Changes in the flow and hydrology of ordinary watercourses can cumulatively affect main rivers downstream. | 0 | 0 The LFRMS must ensure compliance with the WFD. | | | pollution by inspecting and maintaining artificial structures such as grilles. | |
| Climatic Factors | | | | | | | | |
| Buildings and infrastructure | - | Minor increase in emissions of greenhouse gases as part of inspection and maintenance activities. | Non | e identified | None identified | ++ | Reduced flood risk can avoid greenhouse gas emissions required post-flooding clean-up and recovery. | |
| Landscape and Townscape | | | | | | | | |
| Built environment - residential and non-residential properties | | | | or 'Biodiversity' and 'Water | As for 'Biodiversity' and 'Water Environment' | | | |
| Recreational features | | | LIIV | ionnent | Environment | | Reduction in the harm done by extrer | |
| Area of High Landscape Value | - | Negative effects on vegetation (see 'Biodiversity') or water bodies (see 'Water Environment') | Residual effect with mitigation: | | | ++ | flooding can help prevent deterioration in townscape or landscape features. | |
| Historic environment features (see below) | | | 0 | The mitigation identified is likely to | avoid a significant townscape / | | | |
| Other open countryside | | | | landscape effect. | | | | |
| Historic Environment | | | | | | | | |
| Scheduled Monuments | | Downstream cumulative effects - removing too many | | or 'Local Community' | As for 'Local Community' | | Protection of integrity and setting fror | |
| Listed Buildings | _ | restrictions to flow having an adverse impact on flood | | | | | damage by extreme flooding | |
| Conservation Areas | | risk further downstream. | Can minimise significant effects and reduce to negligible. | | | g- sy simenic necessig | | |
| | | | _ | slation should lead to the eduling of any nationally important | Environmental Action Plan (see above) | | | |
| | | | | slation requires the reporting of s of 'treasure' | Any finds should be recorded immediately, with as precise a location as possible, and reported to the HER database | | | |
| | | | | | | | | |

| Potentially Relevant Baseline Features within Lancashire & Blackpool | Pote | ntial Significant Adverse Effect(s) | Pre-Existing Mitigation / Requirements | Recommended Mitigation | Pote | ntial Opportunities / Benefits | |
|---|------|---|--|--|------|--|--|
| Potential buried / undiscovered archaeological remains | | If dredging, can lead to loss of, or harm to, buried archaeology within watercourse. | | 3. Any buried archaeologyencountered should result in cessation of activity and appropriate archaeological investigation, consultation with English Heritage, followed by review of the activity | + | Potential research / educational benefits if discovered. | |
| | | | Residual effect with mitigation: | | | | |
| | | | limited, as if nationally significant mitigation identified above), detai minimum end result (up to preser | nt archaeology would be expected to be a rchaeology were discovered (via the led investigation would be expected as a rvation <i>in situ</i> and Scheduling). Effects archaeology may include loss or partial by record. | | | |
| Material Assets | | | | | | | |
| Business / commercial properties, including retail Agricultural Land A Roads, B Roads and minor roads | - | Downstream cumulative effects - removing too many restrictions to flow having an adverse impact on flood risk further downstream. | | As for 'Local Community' | ++ | Reduction in flood risk to any business use / land, associated infrastructure, o other important infrastructure (helping | |
| Railways | | | Residual effect with mitigation: | 1 | | to reduce damage / maintenance) | |
| Other infrastructure | | | Can minimise significant effects and reduce to negligible. | | | | |

| Potentially Relevant Baseline Features within Lancashire & Blackpool | Pote | ential Significant Adverse Effect(s) | Pre-Existing Mitigation / Requirements | Recommended Mitigation | Pote | ential Opportunities / Benefits |
|--|------|--|---|--|--|--|
| Biodiversity | | | | | | |
| | | If constructed upstream of sites, potential temporary risks of construction-time effects, e.g. sedimentation or chemical spillage. | Legislative requirement to take all reasonable steps to prevent spread of invasive species. | Project-level EIA should be conducted for areas upstream of SSSIs (even if non- statutory). Include invasive species survey. | ++ | Increased protection from damage by |
| Sites of Special Scientific Interest (SSSI) | | l v | Construction good practice for working in watercourses – e.g. Environment Agency's | Environmental Action / Management Plan for works informed by the assessment | | extreme flooding |
| | _ | | guide on sediment control. | 3. Environmental incident reporting system | | |
| | | | Residual effect with mitigation: | | | |
| Special Areas of Conservation (SAC) | | Also, risk of spread of invasive species during construction. | | | | |
| Special Protection Areas (SPA) | | | | + | Invasive species removal and reduction | |
| Ramsar sites - wetlands of nternational importance | | | Can avoid effects, or if not, minimise effects | and reduce to negligible. | | |
| National Nature Reserve (NNR) | | | | | | |
| Local Wildlife Sites and candidate sites | | | Local Plan policy on protection of biodiversity. | | | |
| Local Nature Reserves and candidate reserves | | | | | | |
| Ancient Woodlands | | | | As above: Ecological assessment, invasive | | |
| BAP Priority Habitats | | In addition to above: | 2. Also, all points as above for CCCIs | species survey and environmental action plan. | | In addition to above: |
| Council Woodlands | 4 | | Also, all points as above for SSSIs. | | | Naturalised watercourses offer greate |
| Trees with Tree Preservation Orders | _ | Potential 'trade-offs' could lead to land-take of sites / features and reduction in | | | ++ | habitat diversity, leading to improved biodiversity and resilience. Invasive |
| Fisheries (fish spawning areas) | | associated species within sites / features. | | | | species removal and reduction |
| Aquatic habitats within ordinary watercourses | | | Residual effect with mitigation: | | | |
| Vegetation and terrestrial habitat suitable for protected species | | | Can minimise significant effects, but minor a monitoring. | dverse effects remain possible - requires | | |
| Protected and other species | | | Legislative protection - a Natural England licence is required to disturb protected species | Obtain ecologist consent prior to earthworks, in-river working or removal of any substantial vegetation | | |
| Fisheries | | Potential harm to species during construction phase from construction | Construction good practice for working in watercourses – e.g. Environment Agency's | As above, environmental action plan - ensure recognise conditions / features which warrant contacting an ecologist | | As above. |
| | | activities, in-river working (disturbance of silt), and associated construction access. | guide on sediment control. | 3. See potential enhancement measures | | 7.5 above. |
| Aquatic species which rely upon | | | Residual effect with mitigation: | <u> </u> | | |
| these resources | | | Can minimise significant effects, but minor a monitoring. | adverse effects remain possible - requires | | |

| 'Naturalisation' of watercou | irses | | | | |
|---|---|--|--|---|--|
| Local residents Local workers / commuters | Potential to introduce new risks associated with open water, such as drowning, as a result of de-culverting. Children would be at greater risk. | 1. Assess risks associated with de-culver options, taking into account proximity of higher risk locations, for example residen areas, playgrounds, schools and other locations where vulnerable groups may b present. Health and safety legislation. 2. Include all necessary safety equipmen such as life buoys and guard rails in high risk locations. | | Reduced flood risk would improve safety and mental health of local communities and visitors | |
| Other visitors | However, depending upon the culvert, there | | Include information on waterside safety in higher risk locations. | | |
| (See also 'Community Services / Facilities') | may also be a net benefit, as there can be greater risks with culverts due to their confined space. | Residual effect with mitigation: | | Removal of safety risks associated with culverts, trash screens, steep-sided channels. | |
| (See also 'Recreation') | | Can minimise significant effects, but mino monitoring. | Can minimise significant effects, but minor adverse effects remain possible - requires monitoring. | | |
| Town and local centres Other retail areas | Naturalisation of watercourses potentially results in loss of developable land, | | Use of SuDS in new developments | Protection from harm by extreme | |
| Community facilities (e.g. education, places of worship, health facilities, post offices) Public Rights of Way | particularly in urban areas. A secondary effect of this may be for community services and facilities to spread beyond current town centre limits, with potential increases in | | Incorporate regular management and inspection to remove litter. | flooding | |
| Cycle routes | impermeable areas or new impacts upon | Residual effect with mitigation: | • | Creation of more attractive commercial | |
| Road and rail network | flood plains. | 0 Can minimise significant effects and reduc | ce to negligible. | and community environment. | |
| Recreation | | | | | |
| Watercourses (angling / fishing, kayaking / canoeing, etc.) Doorstep Green | Some potential for landtake / loss of recreational land use or path diversion at construction, as well as visual / noise disturbance. | | | | |
| Village Greens | | As for 'Local Community' and 'Biodiversity' | As for 'Local Community' and 'Biodiversity' | Reduction in flood risk to recreational areas / facilities | |
| Country Parks Allotments Green space Public Rights of Way | (See also 'Local Community' and 'Biodiversity' as relates to recreation combined with nature.) | | | | |
| Cycle routes | | Residual effect with mitigation: | | | |
| Road and rail network | | 0 Can minimise significant effects and reduc | ce to negligible. | Creation of new recreational opportunities. | |
| Geology and Soils | | | | | |
| Contaminated land (various types) | Potential to open up pollution pathways if sources of contamination are present. | Environmental protection and pollution control legislation. | | | |
| | | Residual effect with mitigation: | harm. | | |
| Soil quality (unknown) | | Can minimise significant effects and reduce | ce to negligible. | | |
| Local Geological Site | | , | | | |
| Regionally Important Geological Sites (RIGS) and candidate sites | No potentially significant adverse effects upon geological sites identified. | N/A | N/A | Reduction in flood risk to geological | |

| | | es | | | | | | | |
|---|----------|--|--|--|--|----|---|--|--|
| Agricultural Land | | Consideration given to reduction in soil fertility / quality due to loss of periodic inundation, but likely negligible from ordinary watercourses. | N/A | | N/A | | erosion from flooding | | |
| Water Environment | | | | | | | | | |
| WFD water bodies and ordinary watercourses or linked directly to them | | No significant adverse effects identified as this option is in compliance with the WFD. | | | | | | | |
| Ordinary watercourses | 0 | | N/A | | N/A | ++ | Reduction in flood risk and enables natural hydro-geomorphological | | |
| Flood Risk Areas | ľ | Assumes this option would not be pursued | IN/A | | IN/A | | processes. | | |
| Ordinary watercourses WFD water bodies | | within urban or industrial areas where this | | | | | | | |
| Main rivers | | would cause flooding of property. | | | | | | | |
| Climatic Factors | <u> </u> | | | | | | | | |
| | | | | esign, it is typical to maximise achievement materials balance to minimise transport and | Use of sustainably sourced biofuels for construction plant. | | | | |
| Buildings and infrastructure | _ | Minor increase in emissions of greenhouse | waste generation. | | Identify potential local sources for any net spoil generated at construction. | ++ | Reduced flood risk as naturalised watercourses will be more adaptive to | | |
| ı | | gases as part of construction activities. | Res | idual effect with mitigation: | | | changes in rainfall patterns than artific channels. | | |
| | | | - | Can minimise significant effects, but minor a monitoring. | adverse effects remain possible - requires | | | | |
| Landscape and Townscape | 1 | | 1 | | | | | | |
| Built environment - residential and non-residential properties | | | Λc f | or 'Community Services / Facilities'. | As for 'Community Services / Facilities'. | ++ | Reduction in the harm done by extrer flooding can help prevent deterioratio | | |
| Recreational features Area of High Landscape Value | | As for 'Community Services / Facilities'. | A5 1 | or Community Services / Facilities . | As for Community Services / Lacinties . | | in townscape or landscape features. | | |
| Historic environment features (see below) | _ | As for Community Services / Facilities . | Res | Residual effect with mitigation: | | | Contributes to 'greening' of townscap | | |
| Other open countryside | | | The mitigation identified is likely to avoid a significant townscape / landscape effect. | | | | | | |
| Historic Environment | <u> </u> | | | | | | | | |
| Scheduled Monuments | | Can include measures which involve landtake, and which can then lead to effects on historic setting (unlikely to affect integrity). | | al plan policies for historic environment. | Undertake cultural heritage assessment at project level to assess potential impacts upon historic assets. | | Protection of integrity and setting fron | | |
| Listed Buildings | _ | Opening up of watercourses may affect historic built environment if constructed, | | | 2. Environmental Action Plan (see above) | ++ | damage by extreme flooding | | |
| Conservation Areas | | including loss of the historic structure of the | Res | idual effect with mitigation: | | | | | |
| l | | culvert itself. | | Can minimise significant effects and reduce | | | | | |
| | | | 1 00 | islation should lead to the Scheduling of any | 4 5 | | | | |
| | | | | onally important monuments discovered. | Environmental Action Plan (see above) | | | | |
| | | | | onally important monuments discovered. | Environmental Action Plan (see above) 2. Any finds should be recorded immediately, with as precise a location as possible, and reported to the HER database | | | | |
| Potential buried / undiscovered archaeological remains | _ | Construction or any intrusion into the ground can lead to loss of, or harm to, buried archaeology. | nati | islation requires the reporting of finds of | Any finds should be recorded immediately, with as precise a location as | + | Potential research / educational beneif discovered. | | |

| 'Naturalisation' of watercou | 'Naturalisation' of watercourses | | | | | | | | | |
|--|----------------------------------|---|------|--|---|----|---|--|--|--|
| | | | - | Any effects to nationally significant archaeol nationally significant archaeology were discretailed investigation would be expected as situ and Scheduling). Effects to regionally oloss or partial loss, but achieving preservation | | | | | | |
| Material Assets | | | | | | | | | | |
| Business / commercial properties, including retail | | | | | | | | | | |
| Agricultural Land | | | As 1 | or 'Community Services / Facilities'. | As for 'Community Services / Facilities'. | | | | | |
| A Roads, B Roads and minor | _ | As for 'Community Services / Facilities'. | | | | ++ | As for 'Community Services / Facilities'. | | | |
| roads | | | | | | | | | | |
| Railways | | | Res | idual effect with mitigation: | | | | | | |
| Other infrastructure | | | 0 | Can minimise significant effects and reduce | to negligible. | | | | | |

| candidate sites Carriad question of the stress of the part of the spread of invasive species. Protected species legislation. | Floo | od storage | | | | | | | |
|--|--------|----------------------------|------|---|---|--|--|------|---|
| Size of Special Scientific Interest (SSS) Sepoid Protection Areas (SPA) Sepoid Interest (SSS) Leaf Interest (SSS) Leaf Interest (SSS) Sepoid Protection Areas (SPA) Sepoid Interest (SSS) Leaf In | Featu | ires within Lancashire & | Pote | ential Significant Adverse Effect(s) | | | Recommended Mitigation | Pote | ential Opportunities / Benefits |
| Size of Special Scientific Interest (SSS) Special Protection Areas (CPC) Another interesting areas (CPC) Local Walture Reserves and control and areas and areas areas and areas areas (CPC) Local Walture Reserves and conditions are areas (CPC) Local Walture Reserves and conditions areas (CPC) Local Protection Areas (CPC) Storage area may provide create an addition and areas (CPC) Storage area may provide create an additional pathway for protection from the areas (CPC) Local Plant policies for bodiversity or to individual to the areas (CPC) Council Woodlands DAP Profity Habilatis Council Woodlan | | • | | | | | | | |
| Special Areas of Conservation (SAC) Special Protection Areas (SPA) Ramasar sites - wetlands or imperational imperations imperated sets are related for imperational imperations imperated on support of the system related for imperational imperations imperated with minigation: Local Wildlife Sites and conditions sites Local Wildlife Sites and conditions and conditions sites and conditions sites and conditions and conditions sites and | | Interest (SSSI) | N/A | | upstream of SSSIs (even if non-statutory). Include invasive species survey. 2. Environmental Action / Management Plan for works informed by the assessment | | | | |
| Special Areas of Conservation Can minimise effects and reduce to negligible. Special Protection Areas (SPA) | | | | be outside of designated sites and only used in periods of extreme rainfall. Therefore no | Res | idual effect with mitigation: | | | Increased protection from damage |
| Ramser sites - wedlands of niterabilish professive (NRR) Local Wildlife Sites and candidate sites Local Wildlife Sites and candidate sites Local Nature Reserves and candidate sites Local Nature Reserves and candidate reserves Local Nature Reserves and candidate reserves Ancient Woodlands BAP Priority Habitats Council Woodlands Trees with Tree Preservation Orders Notable and other species (increased noise and vibration) Siturbance during construction (e.g. moreased noise and vibration) Aguate habitats within ordinary valence reserved and wildlife Green corridor Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity Legislative requirements and associated good construction practice. Invasive species Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity Loss / reduction of nabitat varies of invasive species during construction to nearty areas or downstream Losal invasive species Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity Loss / reduction of nabitat varies and advanced works are and enhancement and sociation and advanced works are appointed. The professional programment and sociation and advanced works are appointed to require a variety to the assessment and enhancement waterhooders. Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity Loss / reduction of habitat leading to loss of correctivity mitingation: Loss / reduction of habitat leading to loss of corre | | | 0 | | | | | ++ | |
| Romains rises - westlands of minimises rises - westlands and wildlife with mitigation: Design to maintain connectivity. | Specia | al Protection Areas (SPA) | | | | | | | |
| Local Wildlife Sites and candidate sites Land required for flood storage areas may encroach upon wildlife sites, woodlands and other terrestrial habitats with consequent adverse effects on terrestrial spacies. Local Nature Reserves and candidate reserves Ancient Woodlands BAP Priority Habitats Council Woodlands BAP Priority Habitats Council Woodlands Disturbance during construction (e.g., increased noise and vibration) On-line flood storage options may harm flash spawning habitat or other aquatic habitat or alter hydrology which harms habitat and wildlife Coren corridor Creen corridor Loss / reduction of habitat leading to loss of connectivity Spread of invasive species during construction to nearby areas or downstream Invasive species Local Plan policies for biodiversity of the assessment and wich rise preservation of the spread of invasive species. Council Woodlands Trees with Tree Preservation Orders On-line flood storage options may harm flash spawning habitat or other aquatic habitat or alter hydrology which harms habitat and wildlife Creen corridor Creen corridor Creen corridor Creen corridor Loss / reduction of habitat leading to loss of connectivity Spread of invasive species during construction to nearby areas or downstream Creen corridor | | | | | | Can minimise effects and reduce to negligible. | | | |
| Local Watter Reserves and candidate sites and required for flood storage areas may encroach upon wildlife sites, weodlands and other terrestrial habitats with consequent adverse effects on terrestrial species. 2. Local Plan policies for biodiversity 2. Environmental Action / Management Plan for works informed by the assessment 3. Environmental Action / Management Plan for works informed by the assessment 3. Environmental incident reporting system of the spread of invasive species. 3. Environmental incident reporting system of temporary or permanent waterbodies. 4. Avoid inundation of terrestrial sites that support greater biodiversity or priority habitats. 5. Disturbance during construction (e.g. increased noise and vibration) 6. Disturbance during construction (e.g. increased noise and vibration) 7. Can minimise significant effects, but minor adverse effects remain possible - requires adaptation patients within ordinary watercourses 8. Aquatic habitats within ordinary watercourses 8. Aquatic habitats within ordinary watercourses 9. Protected species legislation. 9. Protected species legislation. 1. Protected species legislation. 1. Protected species legislation. 1. Protected species legislation. 2. Environmental Action / Management Plan for works informed by the assessment at a reasonable steps to prevent spread of invasive species. 1. Avoid inundation of terrestrial sites that support greater biodiversity or priority habitats. 4. Avoid inundation of terrestrial sites that support greater biodiversity or priority habitats. 4. Avoid inundation of terrestrial sites that support greater biodiversity or priority habitats. 4. Avoid inundation of terrestrial sites that support greater biodiversity or priority habitats. 4. Avoid inundation of terrestrial sites that support interestrial sites that support interestrial habitats within inordinary watercourses. 4. Avoid inundation of terrestrial sites that support interestrial habitats within inordinary watercourses. 4. As above: Ecological assess | Nation | nal Nature Reserve (NNR) | | | | | | | |
| Consideration Consideratio | | | | encroach upon wildlife sites, woodlands and | 1. P | rotected species legislation. | in vicinity of protected species and designated sites (even if non-statutory). Include invasive species | | Increased protection from damage by extreme flooding |
| Ancent Woodlands BAP Priority Habitats BAP Priority Habitats Council Woodlands Council Woodlands Council Woodlands Disturbance during construction (e.g. increased noise and vibration) Council Woodlands Disturbance during construction (e.g. increased noise and vibration) Council Woodlands Trees with Tree Preservation Orders Notable and other species (finh spawning areas) Aquatic habitats within ordinary watercourses Notable and other species (aquatic) On-line flood storage options may harm fish spawning habitat or other aquatic habitat or alter hydrology which harms habitat and wildlife Council Woodlands To a minimise effects, but minor adverse effects remain possible - requires monitoring. As above: Ecological assessment and environmental action plan. Salmon and Freshwater Fisheries Act 1975 (as amended). Water framework Directive. Water framework Directive. Water framework Directive. Connectivity Design to maintain connectivity. Residual effect with mitigation: Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: Can minimise effects and reduce to negligible. Design to minimise effects and reduce to negligible. Can minimise ef | | | | adverse effects on terrestrial species. | 2. Lo | ocal Plan policies for biodiversity | · · | ++ | |
| BAP Priority Habitats Council Woodlands Trees with Tree Preservation Orders Notable and other species (non-aquatic) Fisheries (fish spawning areas) Aquatic habitats within ordinary watercourses On-line flood storage options may harm fish spawning habitat or other aquatic habitat or alter hydrology which harms habitat and wildlife Green corridor Green corridor Care minimise effects and reduce to negligible. Loss / reduction of habitat leading to loss of connectivity Invasive species Spread of invasive species during construction (e.g. increased noise and vibration) Advalie habitats within ordinary watercourses Action and path or other aquatic habitat or alter hydrology which harms habitat and wildlife Can minimise significant effects, but minor adverse effects remain possible - requires monitoring. Protected species legislation. Salmon and Freshwater Fisheries Act 1975 (as amended). Water framework Directive. Residual effect with mitigation: 0 Can minimise effects and reduce to negligible. Care minimise effects and reduce to negli | Ancie | nt Woodlands | | Storage area may provide create an | 3. Le | egislative requirement to take all | 3. Environmental incident reporting system | | some locations through introduction |
| Disturbance during construction (e.g., increased noise and vibration) Disturbance during du | BAP F | Priority Habitats | - | additional pathway / extend the pathway for re | | onable steps to prevent spread of | | | |
| Notable and other species (non-aquatic) Fisheries (fish spawning areas) Aquatic habitats within ordinary watercourses On-line flood storage options may harm fish spawning habitat or other aquatic habitat or adulate hydrology which harms habitat and wildlife Orean corridor Green corridor Can minimise significant effects, but minor adverse effects remain possible - requires monitoring. As above: Ecological assessment and environmental action plan. Salmon and Freshwater Fisheries Act 1975 (as amended). Water framework Directive. Water framework Directive. Residual effect with mitigation: O Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: O Can minimise effects and reduce to negligible. Survey for invasive species. Implement programme of invasive weed eractication in advance of works if paptorpriate. Spread of invasive species during construction to nearby areas or downstream Treatment / removal of invasive species. Implement post-construction weed control if appropriate. | Trees | with Tree Preservation | | | Residual effect with mitigation: | | | ++ | Habitat creation and enhancement. |
| Aquatic habitats within ordinary watercourses On-line flood storage options may harm fish spawning habitat or other aquatic habitat and wildlife Notable and other species (aquatic) Order corridor Order | | • • • | | increased noise and vibration) | - | monitoring . | | | Planting of native vegetation near to watercourse. |
| Aquatic habitats within ordinary watercourses On-line flood storage options may harm fish spawning habitat or other aquatic habitat or alter hydrology which harms habitat and wildlife Notable and other species (aquatic) Green corridor Creen corridor Creen corridor Spread of invasive species Invasive species Invasive species Construction to nearby areas or downstream On-line flood storage options may harm fish spawning habitat or other aquatic habitat or alter hydrology which harms habitat and wildlife Salmon and Freshwater Fisheries Act 1975 (as amended). Water framework Directive. Residual effect with mitigation: O can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: O can minimise effects and reduce to negligible. Survey for invasive species. Implement programme of invasive weed eradication in advance of works if possible; prepare CEMP and adopt stringent measures to prevent spread of invasive species. Implement post-construction weed control if appropriate. Treatment / removal of invasive species Implement post-construction weed control if appropriate. | Fisher | ries (fish spawning areas) | | | Prot | ected species legislation. | | | Flood storage may allow |
| Notable and other species (aquatic) Wildlife Residual effect with mitigation: | | = | | | | | · | | opportunities to maintain base-flow in watercourses throughout year and enhance fish passage as a result. |
| Residual effect with mitigation: O Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: O Can minimise effects and reduce to negligible. Design to maintain connectivity. Residual effect with mitigation: O Can minimise effects and reduce to negligible. Potential to incorporate accessib to nature and education Habitat creation and enhanceme Survey for invasive species. Implement programme of invasive weed eradication in advance of works if possible; prepare CEMP and adopt stringent measures to prevent spread of invasive species. Implement post-construction weed control if appropriate. Treatment / removal of invasive species | | | _ | | Wat | er framework Directive. | | | Fish rescue, which contributes |
| Green corridor - Loss / reduction of habitat leading to loss of connectivity - Loss / reduction of habitat leading to loss of connectivity - Residual effect with mitigation: 0 Can minimise effects and reduce to negligible. - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction practice. - Spread of invasive species during construction practice. - Treatment / removal of invasive species precies appropriate. | | · · | | Whalle | Res | idual effect with mitigation: | | | |
| Green corridor - Loss / reduction of habitat leading to loss of connectivity - Residual effect with mitigation: 0 Can minimise effects and reduce to negligible. - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction to nearby areas or downstream - Spread of invasive species during construction practice. - Spread of invasive | (aqua | nic) | | | 0 | Can minimise effects and reduce to | negligible. | | Habitat creation and enhancement |
| Connectivity Residual effect with mitigation: O Can minimise effects and reduce to negligible. Habitat creation and enhanceme Habitat creation and enhanceme | Green | o corridor | _ | S S | Des | ign to maintain connectivity. | | + | Potential to incorporate accessibility to nature and education |
| Can minimise effects and reduce to negligible. Survey for invasive species. Implement programme of invasive weed eradication in advance of works if possible; prepare CEMP and adopt stringent measures to prevent spread of invasive species. Implement post-construction weed control if appropriate. + Treatment / removal of invasive species Treatment / removal of invasive species + Treatment / removal of inv | 01001 | roomaoi | | connectivity | Res | idual effect with mitigation: | | | Habitat creation and enhancement |
| Invasive species Spread of invasive species during construction to nearby areas or downstream Legislative requirements and associated good construction practice. Legislative requirements and associated good construction practice. Spread of invasive species during construction to nearby areas or downstream Legislative requirements and associated good construction practice. Implement post-construction weed control if appropriate. Treatment / removal of invasive species | | | | | 0 | Can minimise effects and reduce to | negligible. | | |
| | Invasi | ive species | _ | | | • | of invasive weed eradication in advance of works if possible; prepare CEMP and adopt stringent measures to prevent spread of invasive species. Implement post-construction weed control if | + | |
| | | | | | Res | idual effect with mitigation: | | | |

| | | | 0 | Can minimise effects and reduce to | negligible. | | |
|--|---|---|----------------------------------|--|--|---|---|
| Local Community | | | | | | | • |
| Local residents | | Introduction of new risks associated with open water, such as drowning. Children would be at greater risk. | | | Assess risks associated with flood storage options, taking into account proximity of higher risk locations, for example residential areas, playgrounds, schools and other locations where vulnerable groups may be present. | ++ | Reduced flood risk would improve safety and mental health of local |
| Local workers / commuters | | Ç | Hea | alth and safety legislation. | Include all necessary safety equipment such as life buoys and guard rails in higher risk locations. | | communities and visitors |
| | | | | | 3. Include information on waterside safety in higher risk locations. | | |
| Other visitors | | Construction works may cause disturbance (e.g. noise, traffic, heavy equipment parked nearby, air quality), anxiety and stress to some members of the local community | | | Provide information to residents prior to construction works. Ensure access to health facilities is maintained. | | Reservoirs can be pleasant |
| (See also 'Community Services / Facilities') | | | | sidual effect with mitigation: | + | environments which improve humar wellbeing. | |
| (See also 'Recreation') | | | - | Can minimise significant effects, but minor adverse effects remain possible from construction disturbance - <i>requires monitoring</i> . | | | weinbeling. |
| Town and local centres | | | | | Project-level assessment and environmental action plan for construction. | | Protection from harm by extreme |
| Other retail areas | | | Construction site good practice. | | Advanced notice sent to residents / site neighbours, with contact details for any complaints. | ++ | flooding |
| Community facilities (e.g. education, places of worship, health facilities, post offices) Public Rights of Way | - | Potential visual / noise disturbance during construction. | | | Monitoring and responding to noise complaints. | | Improved reliability of access. |
| Cycle routes | | | Res | Residual effect with mitigation: | | | |
| Road and rail network | | | | Can minimise effects and reduce to negligible. | | | |
| Recreation | | | L ^o | Carl minimise checks and reduce to | o negligible. | | |
| Watercourses (angling / fishing, kayaking / canoeing, etc.) | | Possible landtake and loss of recreational features, such as green space and PRoWs. | Stat | tutory protection of village greens. | Use complementary flood storage methods, such as washlands which can allow recreational use of land when not in flood. Otherwise, aim to sympathetically integrate with surrounding land use. Provide replacement capacity, if needed. | | Creation of reservoirs may create new recreational opportunities (fishing, watersports). |
| Doorstep Green | | | Nati | ional policy on doorstep greens. | Avoid most used rights of way / recreational areas and maintain connectivity / access wherever possible. Minimise diversions. | ++ | |
| Village Greens | | | | | | | Creation of attractive riverside walk |
| Country Parks | | | | al Plan policy on other recreation | Also, as for 'Local Community' and 'Biodiversity'. | | |
| Allotments | | | feat | ures. | 2.5350 | | |
| Green space | | Potential visual / noise disturbance during | | | | | Deduction in flood visit to reconstitut |
| Public Rights of Way | | | | sidual effect with mitigation: | | | Reduction in flood risk to recreation areas / facilities |
| Cycle routes | | | 0 | Can minimise significant effects an | d reduce to negligible. | + | Alongside habitat creation, can create information points to help residents and others to value natur |
| | | If in-river working, temporary loss of access to watercourse (e.g. to anglers or kayak / | | | | | residents and others to value nature and the outdoors. |

V:

| Flood storage | | | | | | | | |
|---|--|--|--|---|--|--|----|---|
| Trees with Tree Pres Orders | servation | | Potential to include a significant retaining | Environment' | | 2. Seek landscape expertise when designing flood storage to work with and strengthen landscape character where possible. | ** | Reduction in the harm done by extreme flooding can help prevent deterioration in townscape or |
| Area of High Landsc | Area of High Landscape Value Historic environment features see below) | | structure (e.g. embankment or wall), which | | | 3. Consider underground storage options. | | landscape features. Reservoirs ca enhance landscape. |
| Historic environment (see below) | | | may have impacts on existing views / character | | | Where possible, avoid the need to cut down, top, lop or uproot any of trees listed under a Tree Preservation Order. | | ermance fartascape. |
| Other open countrysi | iide | | | Res | idual effect with mitigation: | avoid a significant townscape / landscape effect. | | |
| Historic Environme | vm4 | | | | The magator rachanca is likely to | avoid a significant townscape / landscape check. | | |
| Scheduled Monumer | | | | | al plan policies for historic fronment. | Undertake cultural heritage assessment at project level to assess potential impacts upon historic assets. Avoid Scheduled monuments. | ct | Protection of integrity and setting from damage by extreme flooding |
| Listed Buildings | | | | | | Environmental Action Plan (see above) | | nom damage by extreme hooding |
| | | | or other historic features. | Legislation requires the reporting of finds of 'treasure' | | Any finds should be recorded immediately, with as precise a location as possible, and reported to the HER database Design works to avoid adverse effects upon | ++ | |
| Conservation Areas | | | | | | setting. 5. Sensitive screening and construction management . | | Enhancement of setting through design. |
| | | | | Res | idual effect with mitigation: | | | |
| | | | | Can minimise significant effects, be monitoring. | | at minor adverse effects remain possible - requires | | |
| | | | Sch | islation should lead to the eduling of any nationally important numents discovered. | Environmental Action Plan (see above) | | | |
| | | | Ī | Legislation requires the reporting of finds of 'treasure' | | 2. Any finds should be recorded immediately, with as precise a location as possible, and reported to the HER database | | |
| Potential buried / undisc archaeological remains | | | | | | 3. Any buried archaeology encountered should result in cessation of activity and appropriate archaeological investigation, consultation with English Heritage, followed by review of the design and activity | + | Potential research / educational benefits if discovered. |
| | | | | Res | idual effect with mitigation: | | | |
| | | | - | nationally significant archaeology w detailed investigation would be exp | archaeology would be expected to be limited, as if vere discovered (via the mitigation identified above), ected as a <i>minimum</i> end result (up to preservation <i>ir</i> ionally or locally significant archaeology may include reservation by record. | | | |

| Material Assets | Material Assets | | | | | | | | | | |
|--|-----------------|--|--|--|----|---|--|--|--|--|--|
| Business / commercial properties, including retail | | Risks of certain wetland habitat creation alongside flood storage (see also 'potential enhancements') attracting vermin, which can affect particularly sensitive industries such as the food industry. | | As for 'Local Community' and 'Geology and Soils'. | | Reduction in flood risk to any business use / land, associated infrastructure, or other important infrastructure (helping to reduce damage / maintenance) | | | | | |
| Agricultural Land | - | Landtake could affect operation and maintenance of key infrastructure | As for 'Local Community' | Also: consider any particular commercial / industrial areas sensitive to vermin (e.g. food industry), and ensure habitat creation and design accounts for this constraint. Design to consider key infrastructure: avoid impacts upon connectivity | ++ | There may be opportunity to raise routes above flood risk along storage reservoir embankments to provide | | | | | |
| Flood storage | | | | | | | | | | | |
| A Roads, B Roads and minor roads | | | | Avoid impacts upon economically productive land if possible. | | multiple uses. | | | | | |
| Railways | | | Residual effect with mitigation: | | | | | | | | |
| Other infrastructure | | | 0 Significant effects can be fully avoid | ded. | | | | | | | |

| Watercourse capacity incre | ease | es | | | | | | |
|--|--|--|---|---|--|-----|--|--|
| Potentially Relevant Baseline Features within Lancashire & Blackpool | Pot | ential Significant Adverse Effect(s) | Pr | e-Existing Mitigation / Requirements | Recommended Mitigation | Pot | tential Opportunities / Benefits | |
| Biodiversity | 1 | | | | | | | |
| Sites of Special Scientific Interest (SSSI) | | after- | | Legislative protection - though potentially er-the-fact, Natural England intervention is ssible to help protect SSSI condition. | Ecological assessment of measures Invasive species survey prior to works Environmental Action / Management Plan for works informed by the assessment | ++ | Increased protection from damage extreme flooding | |
| | | riverbanks or deposition of sediment in or near | banks or deposition of sediment in or near Residual effect with mitigation: | | | | | |
| Special Areas of Conservation (SAC) | | designated sites, which in turn can harm habitat. May also accelerate the spread of invasive | | | | | | |
| Special Protection Areas (SPA) | | species, if present. | 0 | Can minimise effects and reduce to negligit | nle | + | Invasive species removal and reduction | |
| Ramsar sites - wetlands of international importance | | | | | | | | |
| National Nature Reserve (NNR) | | | | | | | | |
| Local Wildlife Sites and candidate sites | | | | otected species legislation. | | | In annual marks the street | |
| Local Nature Reserves and candidate reserves | | As above for SSSIs (hydrological changes and spread of invasive species), however some of | | Imon and Freshwater Fisheries Act 1975 (as nended). | As above: Ecological assessment, invasive species survey and | ++ | Increased protection from dama extreme flooding | |
| ancient Woodlands | | these sites are more strongly associated with | ۱۸/- | ater framework Directive. | environmental action plan. | | | |
| BAP Priority Habitats | | aquatic habitats and species, so potential 'worst | | | | | Removal of obstacles provides | |
| Council Woodlands | | case' magnitude of harm is greater. | Re | sidual effect with mitigation: | | ++ | opportunities to improve fish pa | |
| Trees with Tree Preservation Orders | | | - | Can minimise significant effects, but minor a requires monitoring. | adverse effects remain possible - | | and increase biodiversity of watercourses. | |
| Fisheries (fish spawning areas) | | ۸ | | above. | As above: Ecological assessment and environmental action plan. | | Invasive species removal and reduction | |
| (| | | | | Also - see potential enhancement measures | | Fish rescue, which contributes towards species records. | |
| Aquatic habitats within ordinary watercourses | _ | Direct removal of habitat may lead to loss of habitat or foraging area building up behind a flow | Re | sidual effect with mitigation: | | | Habitat creation and enhancem | |
| Protected and other species | | restriction | | Can minimise significant effects, but minor adverse effects remain possible - requires monitoring . | | | Opportunity to tie into Environm Agency strategies to improve fis passage. For example by target tributaries of main rivers where passage is being improved. | |
| Invasive species | - | Spread of invasive species during construction to nearby areas or downstream | | sidual effect with mitigation: | Survey for invasive species. Implement programme of invasive weed eradication in advance of works if possible; prepare CEMP and adopt stringent measures to prevent spread of invasive species. Implement post-construction weed control if appropriate. | + | Treatment / removal of invasive species | |
| | 0 Can minimise effects and reduce to negligible. | | | | | | | |
| | | | 0 | Can ininimise effects and reduce to negligib | ne. | | | |

| Watercourse capacity incre | ast | \$ | | | | | |
|--|-----|---|----------------------------------|---|--|--|--|
| _ocal residents | | | | | Where this is used as a strategy for numerous sections of the same catchment area, use modelling to predict downstream impact. | | |
| _ocal workers / commuters | _ | | Hea | alth and safety legislation. | Assess history of restrictions to flow before removing, and consider historic flood events and the potential positive impact restriction may have had. | ++ | Reduced flood risk would improv safety and mental health of local communities and visitors |
| Other visitors | | | | | Investigate downstream actions which may be required (e.g. partner with flood storage) | | |
| (See also 'Community Services / Facilities') | | Downstream cumulative effects - removing too many restrictions to flow having an adverse impact on flood risk further downstream. | | | Provide information to residents prior to construction works. Ensure access to health facilities is maintained. | + | |
| (See also 'Recreation') | | | Res | sidual effect with mitigation: | | | community services and facilities |
| - Coc also recreation) | | | 0 | Can minimise significant effects and reduce | e to negligible. | | |
| Town and local centres | | | | | As above. | | |
| Other retail areas Community facilities (e.g. education, places of worship, nealth facilities, post offices) | _ | | As above. | | Also, provide information to school for distribution to parents. Maintain school access. Seek opportunity to programme works outside of term | | Protection from harm by extreme flooding |
| Public Rights of Way | | | | | times. | | |
| Cycle routes | | | Res | sidual effect with mitigation: | • | | |
| Road and rail network | | | 0 | Can minimise significant effects and reduce | e to negligible. | + | Improved reliability of access. |
| Recreation | | | | | | | |
| Natercourses (angling / fishing, kayaking / canoeing, etc.) | | As for 'Local Community' | | | | | Reduction in flood risk to recrea |
| Doorstep Green | | | | | | | |
| Village Greens | | | As for " | for 'Local Community' and 'Biodiversity' | As for 'Local Community' and 'Biodiversity' | | |
| Country Parks | - | | , 13 | .s. Lesar community and blodiversity | | ++ | Alongside habitat creation, can |
| Allotments | | (See also 'Biodiversity', as relates to recreation | on | | | | information points to help resid and others to value nature and |
| Green space | | combined with nature.) | | | | | outdoors. |
| Public Rights of Way | | | | | | | |
| Cycle routes | | | Res | sidual effect with mitigation: | | | |
| Road and rail network | - | If in-river working, temporary loss of access to watercourse (e.g. to anglers or kayak / canoe). | 0 | Can minimise significant effects and reduce | e to negligible. | + | Widening or creation of by-pass channels could make a waterod more navigable to kayak / cano |
| Geology and Soils | | | | | | | • |
| ocal Geological Site | | | As | for 'Local Community' | As for 'Local Community' | | |
| Regionally Important Geological Sites (RIGS) and candidate sites | - | As for 'Local Community', noting that flooding of contaminated land can spread pollutants and | Residual effect with mitigation: | | ++ | Reduction in flood risk to geologic sites or contaminated land | |
| Contaminated land (various types, ncluding historic landfill) | | harm soil quality elsewhere. | 0 | Can minimise significant effects and reduce | e to negligible. | | |
| Agricultural Land | 0 | Consideration given to landtake or reduction in soil fertility / quality due to loss of periodic inundation, but likely negligible a) from ordinary watercourses and b) from a limited set of | N/A | | N/A | | |

| Watercourse capacity incre | ease | es es | | | | | |
|---|--|---|----------------------|--|---|----|---|
| Soil quality (unknown) | | In-channel works can raise, disturb and spread contaminants if watercourse has historic pollution - this can spread to land at high-flow conditions | | vironmental protection and pollution control islation. | Prior to any dredging activity, carry out testing of watercourse sediment for potential pollutants. If found, must liaise with the Environment Agency and either avoid working those areas, or create an appropriate mitigation strategy. | + | Potential reduction in soil erosion from flooding |
| | | | Res | sidual effect with mitigation: | | | |
| | | | 0 | Can minimise significant effects and reduce | to negligible. | | |
| Water Environment | | | | | | | |
| WFD water bodies and ordinary watercourses or linked directly to them | | Non-compliance with legal requirements of the | | | Design to work with natural processes as much as possible. Avoid further modification of waterbodies. | | Certain measures such as eliminating pinch points can assist water bodies to evolve more naturally and develop more hydro -geomorphologically diverse features. |
| Ordinary watercourses | - | | | gislation requires no cause of deterioration of VFD water body on a 'non-temporary' basis. | 2. Conduct WFD assessment of the proposals. | | Potential to help implement or |
| Flood Risk Areas | | | cons sign adve | | Investigate quality of land within construction areas to ensure no significant risk of contamination or adverse water quality from proposals. | ++ | contribute towards the measures and objectives defined in the RBMPs - see 'Biodiversity'. |
| WFD water bodies | Changes in hydrology and disturbance of Residual effect with mitigation: | | | | | | |
| Main rivers | | sediment can result in siltation of watercourses and movement of contaminants within them | 0 | The LFRMS must ensure compliance with the hydrology. | ne WFD, including effects on | | Reduction in flood risk to developed |
| | | Changes in the flow and hydrology of ordinary watercourses can cumulatively affect main rivers | As | above. | As above and as for 'Geology and Soils' | | land, and particularly industrial processes, can reduce pollution events resulting from flooding. |
| Industrial processes | - | downstream. | Res | sidual effect with mitigation: | | | G G |
| | | Potential for contaminants to enter watercourse | 0 | The LFRMS must ensure compliance with the | ne WFD. | | |
| Climatic Factors | 1 | | | | | | |
| | | | | design, it is typical to maximise achievement | Use of sustainablysourced biofuels for construction plant. | | The emissions of new FRM measures |
| The emissions required in the existing management and | _ | Minor increase in emissions of greenhouse gases as part of construction activities. Potential to hamper achievement of national air quality | | a materials balance to minimise transport and ste generation. | Identify potential local sources for any net spoil generated at construction. | + | are at least partly offset by the reduction in emissions (both direct and embodied) in the avoidance of |
| recovery from flood risk | | targets. | Res | sidual effect with mitigation: | | | harm from flooding, and the recovery |
| | | | - | Can minimise significant effects, but minor a requires monitoring. | adverse effects remain possible - | | from flood damage. |
| Landscape and Townscape | | | | | | | |
| Built environment - residential and non-residential properties | | | | | In addition to 'Biodiversity' and 'Water Environment': | | Reduction in the harm done by extreme flooding can help prevent deterioration in townscape or landscape features. |
| Recreational features | | | | | Ensure sensitive modification of structures, such as bridges so that landscape and townscape is not compromised. | | |
| Area of High Landscape Value | - | May result in loss or modification of structures of value to built environment, such as bridges. | As | | 2. Seek landscape expertise when designing flood storage to work with and strengthen landscape character where possible. | ++ | Through sensitive design river corrido |

| | Watercourse capacity increa | ase | es <u> </u> | | | | | | |
|----------|---|--------|---|--|---|--|----|--|--|
| | Trees with Tree Preservation Orders | | | | | 3. Where possible, avoid the need to cut down, top, lop or uproot any of trees listed under a Tree Preservation Order. | | | |
| | Historic environment features (see below) | | | Re | esidual effect with mitigation: | | | | |
| | Other open countryside | | | 0 | The mitigation identified is likely to avoid a seffect. | significant townscape / landscape | | | |
| | Historic Environment | | | | | | | | |
| | Scheduled Monuments | | | Lo | ocal plan policies for historic environment. | Undertake cultural heritage assessment at project level to assess potential impacts upon historic assets. | | Protection of integrity and setting from damage by extreme flooding | |
| | Listed Buildings | | | | | Environmental Action Plan (see above) | | | |
| | | Widenv | May affect historic structures such as bridges. Widening of watercourses may affect historic built Lenvironment if constructed as a result of culverted tror canalised watercourses | Legislation requires the reporting of finds of the treasure' | | Any finds should be recorded immediately, with as precise a location as possible, and reported to the HER database Design works to avoid adverse | ++ | | |
| | Conservation Areas | | | | | effects upon setting. | | Enhancement of setting through design. | |
| | | | | | | Sensitive screening and construction management . | | design. | |
| | | | | Re | esidual effect with mitigation: | | | | |
| _ | | | | - | Can minimise significant effects, but minor a requires monitoring. | · | | | |
| a | | | <u>r</u> | | gislation should lead to the Scheduling of any tionally important monuments discovered. | Environmental Action Plan (see above) | | | |
| Page 283 | Potential buried / undiscovered archaeological remains | | | Legislation requires the reporting of finds of 'treasure' | | Any finds should be recorded immediately, with as precise a location as possible, and reported to the HER database | | | |
| ω | | - | | | | 3. Any buried archaeology encountered should result in cessation of activity and appropriate archaeological investigation, consultation with English Heritage, followed by review of the design and activity | + | Potential research / educational benefits if discovered. | |
| | | | | Residual effect with mitigation: | | | | | |
| | | | | - | Any effects to nationally significant archaeo with detailed investigation a <u>minimum</u> end r Scheduling). Effects to regionally or locally loss or partial loss, but achieving preservati | esult (up to preservation <i>in situ</i> and significant archaeology may include | | | |
| | Material Assets | | | | | | | | |
| | Business / commercial properties, including retail | | | | | As for 'Local Community' | | | |
| | Agricultural Land | | Downstream cumulative effects - removing too many restrictions to flow having an adverse mpact on flood risk further downstream. | As | s for 'Local Community' | Also: consider any particular commercial / industrial areas sensitive to vermin (e.g. food industry), and ensure habitat creation and design accounts for this constraint. | | Reduction in flood risk to any business use / land, associated | |
| | A Roads, B Roads and minor roads | _ | | | | Design to consider key infrastructure: avoid impacts upon connectivity | ++ | infrastructure, or other important infrastructure (helping to reduce damage / maintenance) | |

| Watercourse capacity increases | | | | | | | | | |
|--------------------------------|----|--|--|--|--|--|--|--|--|
| Railways | | Land take could affect operation and maintenance of key infrastructure | | Avoid impacts upon economically productive land if possible. | | | | | |
| Oth or infrastructure | Re | | Residual effect with mitigation: | | | | | | |
| Other infrastructure | | | 0 Can minimise significant effects and reduce to | | | | | | |

| New / raised defences | | | | | | | | | | |
|---|------|---|--|--|---|-----|---|--|--|--|
| Potentially Relevant Baseline Features within Lancashire & Blackpool | Pote | ential Significant Adverse Effect(s) | Pre | Existing Mitigation / Requirements | Recommended Mitigation | Pot | ential Opportunities / Benefits | | | |
| Biodiversity | | | | | | | | | | |
| | | | | | Ecological assessment of measures | | | | | |
| Cites of Consid Coinstific Interest | | Hydrological changes - improving flow of | intervention is possible to help protect SSSI condition. 3. Ei Plan | | 2. Invasive species survey prior to works | ++ | Increased protection from damage by | | | |
| Sites of Special Scientific Interest (SSSI) | | | | | Environmental Action / Management Plan for works informed by the assessment | | extreme flooding | | | |
| | | water downstream could lead indirectly to erosion of riverbanks or deposition of | Res | idual effect with mitigation: | assessment | | | | | |
| Special Areas of Conservation (SAC) | - | sediment in or near designated sites, which in turn can harm habitat. May also accelerate the spread of invasive species, if present. | | | | | | | | |
| Special Protection Areas (SPA) | | | 0 | Can minimise effects and reduce to negligible. | | + | Invasive species removal and reduction | | | |
| Ramsar sites - wetlands of international importance | | | | | | | | | | |
| National Nature Reserve (NNR) | | | | | | | | | | |
| Local Wildlife Sites and candidate sites | | | Prot | ected species legislation. | | | | | | |
| ocal Nature Reserves and andidate reserves | | As above for SSSIs (hydrological changes and spread of invasive species), however | | | As above: Ecological assessment, invasive species survey and | | | | | |
| Ancient Woodlands | | some of these sites are more strongly | | | environmental action plan. | + | Increased protection from damage by | | | |
| BAP Priority Habitats | | associated with aquatic habitats and species, | Wat | er framework Directive. | | · | extreme flooding | | | |
| Council Woodlands | | so potential 'worst case' magnitude of harm is greater. | Res | idual effect with mitigation: | | | | | | |
| Trees with Tree Preservation Orders | | | - | Can minimise significant effects, but r requires monitoring. | minor adverse effects remain possible - | | | | | |
| Fisheries (fish spawning areas) | | | | h | As above: Ecological assessment and environmental action plan. | | | | | |
| Aquatic habitats within ordinary watercourses | | Loss of natural habitat through modification may lead to loss of habitat or species | | | Also - see potential enhancement measures. | + | Invasive species removal and reduction | | | |
| | | | Residual effect with mitigation: | | | | invasive species removal and reduction | | | |
| Protected and other species | | | - | Can minimise significant effects, but r requires monitoring. | ninor adverse effects remain possible - | | | | | |
| Local Community | | | | | | | | | | |
| Local residents | | | Lan | d drainage legislation. | Where this is used as a strategy for numerous sections of the same catchment area, use modelling to predict downstream impact. | ++ | Reduced flood risk would improve safety and mental health of local communities and | | | |
| Local workers / commuters | - | | Wat | er Framework Directive. | Investigate upstream and downstream actions which may be required (e.g. | | visitors | | | |
| Other visitors | | | | | partner with flood storage) | | Deduced fleed wieldere immerce the neligibility | | | |
| (See also 'Community Services / Facilities') | | raised deferioes may lead to greater | Res | Residual effect with mitigation: | | + | Reduced flood risk can improve the reliability of access to recreation, community services and facilities | | | |
| (See also 'Recreation') | | segregation from water environment or create less attractive communities. | 0 | Can minimise significant effects and r | reduce to negligible. | | and lacilities | | | |
| Town and local centres | | less attractive communities. | | | | | | | | |
| Other retail areas | | | | | | | | | | |
| Community facilities (e.g. education, places of worship, health facilities, post offices) Public Rights of Way | - | | As a | bove. | As above. | ++ | Protection from harm by extreme flooding | | | |
| Cycle routes | | | Res | idual effect with mitigation: | | | | | | |
| Road and rail network | | | 0 | Can minimise significant effects and r | reduce to negligible. | + | Improved reliability of access. | | | |

| New / raised defences | | | | | | | |
|---|---|---|---|---|-----|---|--|
| Recreation | | | | | | | |
| Watercourses (angling / fishing, kayaking / canoeing, etc.) | | As for 'Local Community' | | | | | |
| Doorstep Green | | | | | | | |
| Village Greens | | | As for 'Local Community' and 'Biodiversity' | As for 'Local Community' and 'Biodiversity' | | Reduction in flood risk to recreational areas / facilities | |
| Country Parks | _ | | blodiversity | blodiversity | | | |
| Allotments | | (See also 'Biodiversity', as relates to recreation combined with nature.) | | | ++ | | |
| Green space | | recreation combined with hattire.) | | | | | |
| Public Rights of Way | | | | | | | |
| Cycle routes | | If in-river working, temporary loss of access to | Residual effect with mitigation: | | - | Alongside habitat creation, can create information points to help residents and | |
| Road and rail network | - | watercourse (e.g. to anglers or kayak / canoe). | O Can minimise significant effects and reduce to negligible. | | | others to value nature and the outdoors. | |
| Geology and Soils | | | | | | | |
| Local Geological Site | | | As for 'Local Community' | As for 'Local Community' | | | |
| Regionally Important Geological Sites (RIGS) and candidate sites | _ | As for 'Local Community', noting that flooding of contaminated land can spread pollutants | Residual effect with mitigation: | | ++ | Reduction in flood risk to geological sites or contaminated land | |
| Contaminated land (various types) | | and harm soil quality elsewhere. | 0 Can minimise significant effects and | reduce to negligible. | | | |
| Agricultural Land | 0 | Consideration given to reduction in soil fertility / quality due to loss of periodic inundation, but likely negligible a) from ordinary watercourses and b) from a limited set of measures. | N/A | N/A | | | |
| Soil quality (unknown) | - | raise, disturb and spread contaminants if watercourse has historic pollution - this can spread to land at high-flow conditions | Environmental protection and pollution control legislation. | Prior to any construction activity, carry out testing of watercourse sediment for potential pollutants. If found, must liaise with the local authority / Environment Agency and either avoid working those areas, or create an appropriate mitigation strategy. | | Potential reduction in soil erosion from flooding | |
| | | | Residual effect with mitigation: | 1 | | | |
| | | | 0 Can minimise significant effects and | reduce to negligible. | | | |
| Water Environment | | | | | | | |
| WFD water bodies and ordinary watercourses or linked directly to them | | | | Avoid further modification of waterbodies. | | | |
| Ordinary watercourses | | Non-compliance with legal requirements of | Legislation requires no cause of deterioration of a WFD water body on a | Conduct WFD assessment of the proposals. | | | |
| Flood Risk Areas | - | the WFD / deterioration in water quality. This may include physical modification and removal of woody debris outside of urban areas. | 'non-temporary' basis. | Investigate quality of land within construction areas to ensure no significant risk of contamination or adverse water quality from proposals. | ١ | None identified. | |
| WFD water bodies | | | Residual effect with mitigation: | |] ັ | Trene identified. | |
| Main rivers | | | 0 The LFRMS must ensure compliance | e with the WFD. |] | | |
| | | sediment can result in siltation of | As above and as for 'Geology and Soils' | | | | |
| Industrial processes Climatic Factors | - | within them Changes in the flow and hydrology of ordinary watercourses can cumulatively affect main rivers downstream. | Residual effect with mitigation: 0 The LFRMS must ensure compliance | e with the WFD. | | | |
| | | | | | | | |

| New / raised defences | | | | | | | | | |
|---|--|--|--|----|---|--|--|--|--|
| | Minor in an analysis of an anhouse | None identified | Use of sustainably sourced biofuels for construction plant. | | Reduction in the harm done by extreme | | | | |
| Buildings and infrastructure | Minor increase in emissions of greenhouse gases as part of construction activities. | Residual effect with mitigation: | | ++ | flooding can help prevent deterioration in | | | | |
| | 3 | Can minimise effects, but emissions | are (by present standards) a certainty. | | townscape or landscape features. | | | | |
| Landscape and Townscape | | | | | | | | | |
| Built environment - residential and non-residential properties | | | In addition to 'Biodiversity' and 'Water Environment': | | | | | | |
| Recreational features | | | Ensure sensitive modification of structures, such as bridges so that landscape and townscape is not compromised. | | | | | | |
| Trees with Tree Preservation Orders | Likely to affect townscape setting and have urbanising effect in the landscape. If a large extent of defences, the impact may be major | Environment' de | Seek landscape expertise when designing defences to work with and strengthen landscape character where possible. | ++ | Reduction in the harm done by extreme flooding can help prevent deterioration in townscape or landscape features. | | | | |
| Area of High Landscape Value | adverse. | | 3.Where possible, avoid the need to cut down, top, lop or uproot any of trees listed under a Tree Preservation Order. | | | | | | |
| Historic environment features (see below) | R | Residual effect with mitigation: | | | | | | | |
| Other open countryside | | Can minimise significant effects, but requires monitoring. | minor adverse effects remain possible - | | | | | | |
| Historic Environment Scheduled Monuments Local plan policies for historic Local plan policies for historic Local plan policies for historic Description impacts upon historic assets | | | | | | | | | |
| Scheduled Monuments | | Local plan policies for historic environment. | Undertake cultural heritage assessment at project level to assess potential impacts upon historic assets. | | Protection of integrity and setting from damage by extreme flooding | | | | |
| Listed Buildings | —— May affect setting of historic assets. | | Environmental Action Plan (see above) | ++ | | | | | |
| | | Residual effect with mitigation: | | | | | | | |
| Conservation Areas | | Even with mitigation, if in a sensitive location, some adverse effect may not be avoidable or able to be made negligible. | | | | | | | |
| | | Legislation should lead to the Scheduling of any nationally important monuments | above) | | | | | | |
| | | Legislation requires the reporting of finds of 'treasure' | Any finds should be recorded immediately, with as precise a location as possible, and reported to the HER database | | Potential research / educational benefits if discovered. | | | | |
| Potential buried / undiscovered archaeological remains | Construction defences can require intrusion into the ground, and thus lead to loss of, or harm to, buried archaeology adjacent to the watercourse. | | 3. Any buried archaeology encountered should result in cessation of activity and appropriate archaeological investigation, consultation with English Heritage, followed by review of the design and activity | + | | | | | |
| | | Residual effect with mitigation: | | | | | | | |
| | | Any effects to nationally significant archaeology would be expected to be limited, as if nationally significant archaeology were discovered (via the mitigation identified above), detailed investigation would be expected as a minimum end result (up to preservation in situ and Scheduling). Effects to regionally or locally significant archaeology may include loss or partial loss, bu achieving preservation by record. | | | | | | | |
| Material Assets | | limited, as if nationally significant arc mitigation identified above), detailed <u>minimum</u> end result (up to preservati | haeology were discovered (via the investigation would be expected as a on <i>in situ</i> and Scheduling). Effects to | | | | | | |

| ס |
|----------|
| മ |
| Q |
| Ø |
| N |
| ∞ |
| ∞ |
| |

| New / raised defences | | | | | | |
|--|---|--|--|--------------------------|--|---|
| Business / commercial properties, including retail | | | As for 'Local Community' | As for 'Local Community' | | Reduction in flood risk to any business use / land, associated infrastructure, or other important infrastructure (helping to reduce damage / maintenance) |
| Agricultural Land | 0 | No significant adverse effects identified. | | | | |
| A Roads, B Roads and minor roads | | | | | | There may be opportunities for multiple benefits, for example through linking flood defence construction with new road |
| Railways | | Ī | Residual effect with mitigation: | | | construction. |
| Other infrastructure | | | 0 Can minimise significant effects and | reduce to negligible. | | |

| Flood proofing and resili | enc | e e | | | | | |
|---|------|---|--|---|------|--|-----------------------------------|
| Potentially Relevant Baseline Features within Lancashire & Blackpool | Pote | ential Significant Adverse Effect(s) | Pre-Existing Mitigation / Requirements | Recommended Mitigation | Pote | ential Opportunities / Benefits | Potential Enhancement Measures |
| Biodiversity | | | | | | | |
| All habitats and species | 0 | No significant adverse effects identified. | N/A | N/A | 0 | None identified. | None identified. |
| Local Community | | | | | | | |
| Local residents | | | Disability Discrimination Act | Ensure households are equipped and able to use flood resilience | | Reduced flood risk would improve + safety and mental health of local | |
| Local workers / commuters | _ | | Discussing Discussing and Trees | solutions proposed. | ++ | | None identified. |
| Other visitors | | Use of portable measures may leave | Residual effect with mitigation: | | | communities and visitors | Trong ragnamea. |
| (See also 'Recreation') | | vulnerable people or those away a lot at | 0 Can minimise significant effects ar | nd reduce to negligible. | | | |
| All service / facility buildings | | greater risk of flooding than others. | As above. | As above. | + | Protection from localised flooding | |
| and areas | - | | Residual effect with mitigation: | | + | Improved reliability of access. | None identified. |
| | | | 0 Can minimise significant effects ar | nd reduce to negligible. | · | improved reliability of access. | |
| Recreation | | | | | | | |
| | | | As for 'Local Community' | As for 'Local Community' | + | Protection from localised flooding | |
| All recreational features | - | As for 'Local Community' | Residual effect with mitigation: | | | | None identified. |
| Geology and Soils | | | Can minimise significant effects ar | nd reduce to negligible. | + | Improved reliability of access. | |
| All geological features and | | No significant potential adverse effects | | Т | l | | |
| soils | 0 | identified. | N/A | N/A | 0 | None identified. | None identified. |
| Water Environment | | | | | | | |
| WFD water bodies and ordinary watercourses or linked directly to them Ordinary watercourses Main rivers | 0 | No significant potential adverse effect identified. | N/A | N/A | + | Preventing flooding of properties will certain prevent chemical contaminants from entering water bodies during and immediately after flood events. | None identified. |
| Climatic Factors | | | | | | | |
| Buildings and infrastructure | 0 | No significant potential adverse effect identified. | N/A | N/A | + | Protection from localised flooding. | None identified. |
| Landscape and Townscape | | | | | | | |
| Built environment - residential and non-residential properties | _ | Minor detractions within townscape. | None relevant - impact must be managed by LFRMS. | Consider sensitive designs for sensitive locations, for example Conservation Areas. | + | Protection from localised | None identified. |
| Historic environment features (see below) | | | Residual effect with mitigation: | | | flooding. | None identified. |
| ` ' | | | Can minimise significant effects ar | nd reduce to negligible. | | | |
| Historic Environment | | | Local plan policies for historic | As above for Landscape and | | | |
| Scheduled Monuments | | May slightly affect setting of historic | environment. | As above for Landscape and townscape. | | Protection of integrity and setting | None identified. |
| Listed Buildings | - | assets. | Residual effect with mitigation: | Con minimina significant offers | | from damage by localised flooding | None identified. |
| Conservation Areas | | | 0 | Can minimise significant effects and reduce to negligible. | | llooding | None identified. |
| Material Assets | | | | | | | |
| Business / commercial properties, including retail | | | | | | Reduction in flood risk to any business use / land, associated | |
| Agricultural Land | 0 | No significant adverse effects identified. | N/A | N/A | ++ | | None identified. |
| A Roads, B Roads and minor roads | | | | | | infrastructure (helping to reduce damage / maintenance) | |

Page 289

| Land management | | | | | | | |
|---|-----|--|---|------------------------------|------|---|---|
| Potentially Relevant Baseline Features within Rotherham | Pot | ential Significant Adverse Effect(s) | Pre-Existing Mitigation / Requirements | Recommended Mitigation | Pote | ential Opportunities / Benefits | Potential Enhancement Measur |
| Biodiversity | | | | | | | |
| Sites of Special Scientific Interest (SSSI) | | | | | | | |
| Special Areas of Conservation (SAC) Special Protection Areas | 0 | It is assumed that land management would not impact these designated | N/A | N/A | _ | Possible protection from | None identified. |
| (SPA) Ramsar sites - wetlands of international importance | | sites. Therefore no significant effect is identified. | | | | damage by extreme flooding | |
| National Nature Reserve (NNR) | | | | | | | |
| Local Wildlife Sites and candidate sites | | | | | + | Possible protection from | |
| Local Nature Reserves and candidate reserves | 0 | No significant potential adverse effect is identified. Woodland and wildlife sites are not likely to be damaged by the | N/A | N/A | · | damage by extreme flooding | |
| Ancient Woodlands | | types of land management interventions required. | | 1077 | + | Potential opportunities to improve habitats such as through peat bog restoration or afforestation. | Potential opportunities to feed in wider RBMP objectives and link other local authorities within ther |
| Fisheries (fish spawning areas) | 0 | No potential significant adverse effects identified. | N/A | N/A | + | Land management may allow opportunities to maintain base flow in watercourses throughout year and enhance fish passage as a result. | catchment to create larger landscape scale initiatives. |
| Local Community | | | | | | | |
| Local residents | T | I | | I | | Reduced flood risk would | |
| Local workers / commuters | 0 | No potential significant adverse effects identified. | N/A | N/A | ++ | improve safety and mental health of local communities and visitors | |
| Other visitors | | identined. | | | + | Forests can be pleasant environments which improve human wellbeing. | Potential opportunities to involv volunteers or community group: |
| Town and local centres | | | | | | | landscape management initiative which may improve community |
| Other retail areas | | | | | | | cohesion and wellbeing. |
| Community facilities (e.g. education, places of worship, health facilities, post offices) | 0 | No potential significant adverse effects identified. | N/A | N/A | ++ | Protection from harm by extreme flooding | |
| Public Rights of Way | | | | | | | |
| Recreation | | | | | | | |
| Watercourses (angling / fishing, kayaking / canoeing, etc.) | | | | | | | |
| Doorstep Green | | | | | | | |
| Village Greens | | | | | | | |
| Country Parks | 0 | No potential significant adverse effects | | As for 'Local Community' and | ++ | Reduction in flood risk to | As for 'Local Community'. |
| Allotments | Ĭ | identified. | 'Biodiversity' | 'Biodiversity' | | recreational areas / facilities | As for Local Community. |
| Green space | 1 | | | | | | |

| Land management | | | | | | | |
|---|---|--|--|---|----|---|---------------------|
| Public Rights of Way | | | | | | | |
| Cycle routes | | | | | | | |
| Road and rail network | | | | | | | |
| Geology and Soils | | | | | | | |
| Local Geological Site | | | | | | | |
| Regionally Important Geological Sites (RIGS) (known as Geodiversity Heritage Sites in Lancashire) and candidate sites | 0 | = | Environmental protection and pollution control legislation. | Prior to any excavation activity, carry out testing of soils for potential contaminants. If found, must liaise with the local authority / Environment Agency and either avoid working those areas, orcreate an appropriate mitigation strategy. | ++ | Reduction in flood risk to geological sites or contaminated land | None identified. |
| Contaminated land (various types) | | | Local plan policies for agricultural | | | | |
| Agricultural Land | | Observation land man | Local plan policies for agricultural land use. | Avoid best and most versatile land. | | | |
| g.104114141 | _ | Changes in land management may result in lower agricultural yields or less | Residual effect with mitigation: | | + | Potential reduction in soil erosion from flooding. | |
| Soil quality (unknown) | | profitable produce. | Can minimise significant effect possible - requires monitoring | s, but minor adverse effects remain | | | |
| Water Environment | | | | | | | |
| WFD water bodies and ordinary watercourses or linked directly to them | | Changes in the flow and budgelows of | Legislation requires no cause of deterioration of a WFD water body | Avoid further modification of waterbodies. | | | |
| Man rivers | - | Changes in the now and hydrology of | , on a 'non-temporary' basis. | 2. Conduct WFD assessment of the proposals. | | Creates new water environments. | See 'Biodiversity'. |
| Adinary watercourses | | | Residual effect with mitigation: | | | | |
| od Risk Areas | | | 0 The LFRMS must ensure comp | pliance with the WFD. | | | |
| Climatic Factors | | | | | | | |
| Buildings and infrastructure | 0 | No potential significant adverse effects | As for 'Water Environment.' | N/A | ++ | Opportunity to improve resilience to flood risk through better land management. | See 'Biodiversity' |
| - | | identified. | | | | Changes to land management may improve the carbon storage capacity of soils. | |
| Landscape and Townscape | | | | | | | |
| Built environment - residential and non-residential properties | | | | In addition to 'Biodiversity' and 'Water Environment': | | | |
| Recreational features | | May result in alteration of landscape, | As for 'Biodiversity' and 'Water Environment' | Ensure sensitive choice of locations to avoid sensitive | | Reduction in the harm done by extreme flooding can help | |
| Area of High Landscape Value | - | countryside or historic environment. | | landscapes. | ++ | prevent deterioration in townscape or landscape | See 'Recreation'. |
| Historic environment features (see below) | | | Residual effect with mitigation: | | | features. | |
| Other open countryside | | | The mitigation identified is likel landscape effect. | y to avoid a significant townscape / | | | |
| Historic Environment | | | | A the deside with the 9 | | | |
| Scheduled Monuments | | | Local plan policies for historic environment. | Undertake cultural heritage assessment at project level to assess potential impacts upon historic assets. Avoid Scheduled monuments. | | | |

| Land management | Land management | | | | | | |
|--|-----------------|--|---|--|----|--|------------------|
| Listed Buildings | 0 | No potential significant effect identified. | | Environmental Action Plan (see above) | ++ | Protection of integrity and setting from damage by | None identified. |
| Conservation Areas | | | Legislation requires the reporting of finds of 'treasure' | Any finds should be recorded immediately, with as precise a location as possible, and reported to the HER database | | extreme flooding | |
| | | | Residual effect with mitigation: | | | | |
| Potential buried / undiscovered archaeological remains | - | Excavation activities can lead to loss of, or harm to, buried archaeology. | 0 | Likely to be negligible. | + | Potential research / educational benefits if discovered. | None identified. |
| Socio-Economics / Material | Asse | ets | | | | | |
| Business / commercial properties, including retail | | | | As for II and Community and | | Reduction in flood risk to any | |
| Agricultural Land | | Assuming land management options | As for 'Local Community' | As for 'Local Community' and 'Geology and Soils'. | | business use / land, associated infrastructure, or | |
| A Roads, B Roads and minor roads | 0 | would avoid key infrastructure, no significant adverse effect is identified. | | 0, | ++ | other important infrastructure | None identified. |
| Railways | | | Residual effect with mitigation: | | | (helping to reduce damage / maintenance) | |
| Other infrastructure | | | 0 Negligible. | | | maintenance) | |

Lancashire Local Flood Risk Management Strategy Habitat Regulations Assessment Final January 2014 (Amended September 2021)



Jacobs

BlackpoolCouncil





Document control sheet BPP 04 F8

Version 15; March 2013

Project

Lancashire Local Strategy

Client

Lancashire County Council (Amended Blackpool Council 2021)

Project No:

B1759000

Document title:

Habitats Regulations Assessment Screening Determination for the Lancashire Local Flood Risk Strategy

Ref. No:

2014-01-06_B1759000_Doc_HabitatRegulationsAssessment_D01_Final.doc

| Originated by | Checked by | Reviewe | ed by |
|---------------|---------------------------------|--|--|
| NAME | NAME | NAME | |
| Anna Smith | Diane Corfe/ Simon Bir | d Diane Co | orfe |
| NAME | | As Project Manager I confirm that the above document(s) have been subjected to Jacobs' Check and Review procedure and that I approve them for issue | |
| David Dickson | Jacobs' Check and Review | | |
| Document s | status Draft for Comment | | |
| | Anna Smith NAME David Dickson | NAME Anna Smith Diane Corfe/ Simon Bit NAME As Project Manager I confirm above document(s) have been Jacobs' Check and Review that I approve them for issues to the confirmation of th | NAME Anna Smith Diane Corfe/ Simon Bird NAME As Project Manager I confirm that the above document(s) have been subjected to Jacobs' Check and Review procedure and that I approve them for issue |

| REVISION | NAME | NAME | NAME | |
|---------------|--------------------|---|-------------|----------|
| 1 | Anna Smith | Diane Corfe/Simon Bird | Diane Corfe | |
| Approved by | NAME David Dickson | As Project Manager I confirm that the above document(s) have been subjected to Jacobs' Check and Review procedure and that I approve them for issue | | INITIALS |
| DATE 06/01/14 | Document stat | us Final | | 70. /- |

| REVISION | NAME | NAME | NAME | | |
|-------------|---------------------|---|-------------|--|--|
| | | | | | |
| Approved by | NAME | As Project Manager I confirm that above document(s) have been so Jacobs' Check and Review products. | ubjected to | | |
| DATE | | that I approve them for issue | | | |
| DATE | Document status 205 | | | | |

Jacobs U.K. Limited

This document has been prepared by a division, subsidiary or affiliate of Jacobs U.K. Limited ("Jacobs") in its professional capacity as consultants in accordance with the terms and conditions of Jacobs' contract with the commissioning party (the "Client"). Regard should be had to those terms and conditions when considering and/or placing any reliance on this document. No part of this document may be copied or reproduced by any means without prior written permission from Jacobs. If you have received this document in error, please destroy all copies in your possession or control and notify Jacobs.

Any advice, opinions, or recommendations within this document (a) should be read and relied upon only in the context of the document as a whole; (b) do not, in any way, purport to include any manner of legal advice or opinion; (c) are based upon the information made available to Jacobs at the date of this document and on current UK standards, codes, technology and construction practices as at the date of this document. It should be noted and it is expressly stated that no independent verification of any of the documents or information supplied to Jacobs has been made. No liability is accepted by Jacobs for any use of this document, other than for the purposes for which it was originally prepared and provided. Following final delivery of this document to the Client, Jacobs will have no further obligations or duty to advise the Client on any matters, including development affecting the information or advice provided in this document.

This document has been prepared for the exclusive use of the Client and unless otherwise agreed in writing by Jacobs, no other party may use, make use of or rely on the contents of this document. Should the Client wish to release this document to a third party, Jacobs may, at its discretion, agree to such release provided that (a) Jacobs' written agreement is obtained prior to such release; and (b) by release of the document to the third party, that third party does not acquire any rights, contractual or otherwise, whatsoever against Jacobs and Jacobs, accordingly, assume no duties, liabilities or obligations to that third party; and (c) Jacobs accepts no responsibility for any loss or damage

incurred by the Client or for any conflict of Jacobs' interests arising out of the Client's release of this document to the third party.

Contents

| 1. Introduc | tion | 1 |
|-------------|--|----|
| 1.1 | Background to the Local Strategy | 1 |
| 1.2 | | |
| 2.1 | L Methodology | 7 |
| 2.2 | 2 Stages involved in the HRA Assessment | 8 |
| 2.3 | B European Sites Assessed | 9 |
| 2.4 | Likely Significant Effects | 10 |
| 2.5 | Screening | 10 |
| 3. HRA Sci | eening Conclusion | 2 |
| Appendix | A | 4 |
| Lo | cation of the Natura 2000 sites subject to HRA Screening | 4 |
| Appendix | В | 23 |
| Eu | ropean Site Assessment and Screening Tables | 23 |
| | C | |
| | etailed Assessment of Each Objective | 51 |

1. Introduction

This report has been produced as a Habitat Regulations Assessment Screening determination which will be submitted to Natural England as a Stage 1 Screening (Assessment of Significant Likely Effects) in accordance with the Conservation of Habitats and Species Regulations 2010 (amended) (henceforth referred to as the Habitat Regulations 2010 (amended).

The purpose of this assessment is to identify if any of the objectives within the joint Lancashire, Blackpool, and Blackburn with Darwen draft Flood Risk Management Strategy (LFRMS) are likely to have a significant effect on a European Site (either alone or in combination with other plans or projects).

1.1 Background to the Local Strategy

In order to manage flood risk, Lancashire County Council, Blackpool Council, and Blackburn with Darwen are required to produce a Local Flood Risk Management Strategy (LFRMS). The Flood and Water Management Act 2010 (FWMA) has made local authorities responsible for assessing and managing flooding from local sources within their boundaries. Local sources are essentially flooding from small 'ordinary' watercourses, surface water (rainfall runoff) and groundwater.

Aims and Objectives

The Strategy sets out the approach Lancashire County Council, Blackpool Council, and Blackburn with Darwen will use to improve local flood risk management in Lancashire. Implementing this Strategy aims to:

- Reduce the likelihood and consequences of flooding, particularly from surface water, groundwater and Ordinary Watercourses;
- Support economic growth and improvements in the social and natural environment;
- Clarify the roles of the various Partners involved in local flood risk management and improve co-operative working, including across political boundaries;
- Improve communication of clear information regarding local flood risk and appropriate responses, thereby enabling the public and others to take action;
- Identify what measures are required to better manage flooding, including actual works and studies to better understand the risk and appropriate responses; and,
- Facilitate a strategic plan to fund further works and/or studies in priority areas.

The strategy details a series of objectives ('what will be done') and general measures ('how we will do it') to improve sustainable management of flood risk. The 59 objectives were grouped into the following six key themes:

- 1. Deliver Effective Flood Risk Management Locally
- 2. Understand our Local Risks and Challenges
- 3. Support Sustainable Flood Resilient Development

- 4. Improve Engagement with our Flood Family
- 5. Maximise Investment Opportunities to better protect our Businesses and Communities
- 6. Contribute towards a Climate Resilient Lancashire

"Measures" to be proposed will be procedures and general approaches to how flood risk will be managed across Lancashire, including how Lancashire County Council and its partner organisations can work together to investigate and manage flooding issues now and in the future. This may include the need for individual surface water management plans in any 'high risk' areas, plus the identification of other areas and neighbourhoods that may need attention.

Measures will not include specific development projects or specific types of development project), except potentially where this is the only recourse for managing a specific type or location of flood risk. Measures are likely to include very broad types of project (e.g. Sustainable Drainage Systems – SuDS).

Table 1 Objectives to improve Flood Risk Management grouped into six key themes.

| Key Themes | Objectives |
|-------------------------------|--|
| Delivering Effective Flood | 1.1 Maintain, apply and monitor the Lancashire Local Flood Risk Management (LFRM) Strategy 2021 – 2027 |
| Risk Management Locally | 1.2 Review and revise existing Section 19 Flood Investigation Report Policy, incorporating lessons learnt since 2010. |
| Locally | 1.3 Review and revise Consenting and Enforcement policy for regulating Ordinary Watercourses. |
| | 1.4 Work proactively with Local Planning Authorities to ensure effective local policies are in place for managing flood risk and coastal erosion through the Land and Marine Planning Processes |
| | 1.5 Address the need for a Highway Drainage Connection Policy |
| | 1.6 Consider the need for a 'Designation of Flood Risk Features' Policy |
| | 1.7 Deliver LLFA actions and engage with the delivery of actions that require partnership working contained within the National FCERM Strategy Action Plan. |
| | 1.8 Undertake a mid-term review of the Strategy. |
| Understanding our Local Risks | 2.1 Deliver any outstanding Surface Water Management Plans (SWMP), and identify further studies needed. |
| and Challenges | 2.2 Bid for funding to install groundwater monitoring equipment to improve our understanding of groundwater flooding in targeted areas in Lancashire. |
| | 2.3 Bid for funding to map all ordinary watercourses in Lancashire, and feed this mapping and any modelling into national maps to improve all risk management authority understanding of local ordinary watercourse networks |
| | 2.3 Bid for funding to improve understanding of opportunities for natural flood management and strategic surface water management across Lancashire through sustainable drainage retrofit. |
| | 2.4 Continue to populate the Flood Risk Asset Register and Record and utilise this data in managing local flood risks. |
| | 2.5 Spatially map all historic and new known flooding incidents across Lancashire since 2013 and categorise accordingly e.g. internal / external, property / businessetc. |

| Key Themes | Objectives |
|--|--|
| | 2.6 Support development of an 'all source' flooding map for the North West, to place all sources of flood risk on an equal footing. This could be achieved through Drainage and Wastewater Management Plan (DWMP) |
| | 2.7 Consider how Council processes can be improved to make it easier to gather information from residents and businesses which are affected / have been flooded from local sources (i.e. from ordinary watercourses, from surface water, from groundwater). |
| | 2.8 Benchmark LLFA datasets to ensure all available data is utilised in understand risks. |
| Supporting Sustainable Flood Resilient | 3.1 Support and provide input to Local Planning Authorities during plan making to ensure evidence base documents, policies and guidance are suitable and take account of best practice, climate change, biodiversity net gain and amenity aspirations. |
| Development | 3.2 Work with Local Planning Authorities to encourage adoption of the SuDS Pro-forma through their Local Planning Validation Checklist for 'Major' development. |
| | 3.3 Be represented on the North West RFCC's Planning Sub-Group to ensure Lancashire is contributing to and learning from best practice across the region and nationally in relation to planning, development and SuDS. |
| | 3.4 Establish a process which ensures 'as built' SuDS assets are validated and captured in Flood Risk Asset Registers. |
| | 3.5 Support the development of a natural capital accounting / biodiversity net gain approach for Lancashire, ensuring flood and coastal matters can be valued. |
| | 3.6 Explore the feasibility of developing a Lancashire-wide 'SuDS Suitability' guide, based on mapping of ground conditions and integrated with other agendas such as the Lancashire Ecological Network and blue-green infrastructure network. |
| | 3.7 Encourage all flood risk management authorities in Lancashire to become members of the Association of SuDS Authorities (ASA). |
| | 3.8 Where appropriate, recommend to Local Planning Authorities that developers provide a contribution (S106 / CIL monies) to FCERM schemes that provide benefits to better protecting the development / community from flood risks prior to the grant of planning permission. |
| | 3.9 Produce 'LLFA Standing Advice for Minor Planning Applications' to enable Local Planning Authorities to assess minor planning applications in relation to local flood risks without direct LLFA consultation in most circumstances. |
| Supporting Sustainable | 4.1 Improve the 'The Lancashire Partnership' webpage on The Flood Hub, including by setting out who our flood family is. |
| Flood Resilient Development | 4.2 Update Local Authority 'flooding' webpages and ensure they link to The Flood Hub to support community awareness, engagement and resilience. |
| | 4.3 Continue to support maintenance and development of The Flood Hub, including the launch of a new material. |
| | 4.4 Ensure Flood Action Groups (FLAGs) in Lancashire who consent to their 'get in touch' details being shared on The Flood Hub are published on the map and on the Partnership webpage. |
| | 4.5 Work better together to deliver more effective, targeted and partner focused asset maintenance regime for those assets owned by flood risk management authorities. |
| | 4.6 Continue to attend and work proactively with Catchment Partnerships to identify local opportunities to work together to co-fund and co-deliver natural flood management and other schemes within the community and private landownership. |

| Key Themes | Objectives |
|--|--|
| | 4.7 Develop a Communication and Engagement Plan showing clear lines of communication and reporting, within and amongst flood risk management authorities, wider partners and the people of Lancashire. This will include proactive communications and responsive communication to, for example, flood/weather alerts. This should also include a progress for how good practice is captured from across Lancashire, including from Catchment Partnership and wider partners, and shared appropriately with our flood family and the people of Lancashire |
| | 4.8 Ensure Lancashire is represented at every North West Regional Flood and Coastal Committee's (RFCC) and its sub-groups as formed, to ensure we are working effectively with regional partners, sharing best practice and influencing any decisions or recommendations made to the RFCC and sub-regional FCERM Partnerships. |
| | 4.9 Ensure all flood risk management authorities are proactively engaged with the Lancashire Resilience Forum (LRF) to continually improve our multi-agency and operational responses to flooding incidents. |
| | 4.10 Include separate Highway Authority and infrastructure provider representation on the Lancashire FCERM Partnership, at relevant levels, as appropriate, to ensure highway and other infrastructure flood risks are also captured. |
| | 4.11 Promote the educational resources provided on The Flood Hub and United Utilities SuDS for Schools programme via Local Authority Schools Portal / Educational Leads |
| Maximising Investment Opportunities to Better Protect our Businesses and | 5.1 Deliver schemes within the Investment Programme 2021 – 2027 to time and cost, including meeting partnership funding and efficiency requirements of grant funding. 5.2 Proactively monitor the delivery of the programme at every level of the Lancashire FCERM Partnership and hold delivery leads accountable, and ensure this is consistent with best practice established from across the region and/or other RFCCareas. |
| Communities | 5.3 Share the programme with partners at all levels and with Catchment Partnerships to identify any collaboration opportunities. |
| | 5.4 Continue to identify opportunities / need for investment in flood risk management infrastructure and ensure these are captured in the Investment Programme 2021 – 2027 at the earliest opportunity to secure an allocation, where viable. |
| | 5.5 Develop a 'funding catalogue' of all potential sources of funding from public, private, voluntary and other sectors. Explore opportunities to collate this for the region, working with other Project Advisors to achieve this |
| | 5.6 Establish a process for the Partnership which facilitates quick allocation, approval and delivery of 'Quick Win' funding allocated annually to the Partnership. This includes governance and a re-allocation of funding if not spent as agreed. |
| | 5.7 Influence national thinking on flood insurance and grants for those affected by flooding to encourage a consistent approach from government rather than on a storm basis. |
| | 5.8 Where opportunities arise and where appropriate to do so, make government aware of funding challenges experienced in Lancashire, relating to funding duties of flood risk management authorities and investment in areas at risk of local flooding. |
| | 5.9 Ensure The Flood Hub is updated with flood risk schemes in progress and completed on a periodic basis |

| Key Themes | Objectives |
|--|--|
| Contributing Towards a Sustainable, Climate | 6.1 Work with climate change action groups set up following Local Authority declaration of a climate emergency to ensure actions to address flood risk and coastal erosion are incorporated within climate change action plans. |
| Resilient Lancashire | 6.2 Ensure a climate change allowance is incorporated into all proposed new sustainable drainage systems on developments consistent with national and/or local planning requirements and published guidance. |
| | 6.3 Investigate the feasibility of retrofitting SuDS in schools and other local authority owned buildings across Lancashire to improve their resilience and provide an educational resource. |
| | 6.4 Explore the feasibility of delivering a series of 'water resilient parks' in council owned parks across Lancashire to retrofit SuDS and natural flood management measures to contribute towards surface water storage where evidence shows this would be beneficial and financially viable. |
| | 6.5 In contributing towards a climate resilient highway network and economy, consider how Highway Authorities in Lancashire could adopt SuDS components under the Highways Act 1980. Work with United Utilities to share learning following introduction of the Design and Construction Guide (DCG) for Sewers. |
| | 6.6 Support Local Planning Authorities in undertaking a climate change review of Planning Policy and the Use and Management of Water in Lancashire toidentify actions they can take to better manage flood risks presented by development and urban creep |
| | 6.7 Work with The Flood Hub and partner flood risk management authorities to promote property flood resilience measures and land flood resilience measures, and signpost to reputable suppliers if this is possible. |

1.2 Purpose of the Assessment

This report will be submitted to Natural England as a Stage 1 Screening (Assessment of Significant Likely Effects) Habitat Regulations Assessment (HRA), in accordance with the Habitat Regulations 2010 (amended).

The core HRA requirements of the Habitats Directive are given in Article 6 (3):

"Any plan or 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. In the light of the conclusions of the assessment of the implications for the site and subject to provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after have ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

In this document and in accordance with the Habitats Directive and the Habitat Regulations 2010 (amended), the following designations fall within the definition of a European Site:

- Special Protection Areas (SPAs), and potential SPAs (pSPAs);
- Special Areas of Conservation (SACs), and candidate or possible SACs (cSACs or pSACs);
- Ramsar sites (and potential Ramsar sites); and
- Sites of Community Importance (SCIs).

The purpose of this assessment is to determine whether any of the proposed objectives, are likely to have a significant effect on a European Site either within the Lancashire County Council boundary or up to 20km from the boundary. This 20km spatial scope has been adopted as it is considered highly unlikely that the objectives of the Plan would extend beyond this limit. If the Screening stage was to identify that a significant effect were likely, then a full Appropriate Assessment (Habitats Directive Article 6(4)) would be required.

A drawing showing the Lancashire County boundary, 20km HRA Screening extent and the location and extent of European sites is shown in a Figure, provided in Appendix A of this report. Appendix B includes a table which lists the European Sites that the objectives have been screened against. This table includes details of each site's qualifying features, nature conservation objectives and their vulnerabilities. The assessment also takes account of other projects and plans with potential "in-combination" effects.

This report will need to be issued formally to Natural England for their review and comment.

2. HRA Assessment

2.1 Methodology

Although the Habitats Directive and Regulations do not specify how the assessment should be undertaken the following documents and websites have been used to inform the preparation of this HRA Stage 1:

- The DCLG draft guidance document Planning for the Protection of European Sites: Appropriate Assessment Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC (DCLG 2006);
- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites:
 Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats
 Directive 92/43/EEC (EU 2001a);
- The Appropriate Assessment of Spatial Plans in England: a guide to why, when and how to do it (RSPB: Dodd et al. 2007);
- The Environment Agency Habitat Directive Risks Tool available from http://www.environment-agency.gov.uk/business/topics/permitting/143519.aspx [accessed 06/11/13];
- Lancashire Local Flood Risk Management Strategy (Consultation Draft) (September, 2013)
- Lancashire Local Flood Risk Management Strategy Draft Strategic Environmental Assessment Scoping Report (April, 2021)
- Environment Agency Flood Risk Maps available from http://www.environment-agency.gov.uk/homeandleisure/37837.aspx [accessed 07/11/13]
- Magic Interactive Mapping available from http://www.magic.gov.uk/ [accessed 07/11/13].

2.2 Stages involved in the HRA Assessment

The whole process is termed Habitat Regulation Assessment (HRA) and compromises the following stages.

1. HRA Stage 1:

Likely significant effects (screening): Identifies whether a plan or project is likely to have a significant effect on a European site;

2. HRA Stage 2:

Ascertaining the effect on site integrity by assessing the effects of the plan or project on the conservation objectives of any European Site that is "screened in" during HRA Stage 1; and,

3. HRA Stage 3:

Mitigation measures and alternative solutions are required where adverse effects are identified at HRA Stage 2. The plan or project should be altered so that all adverse effects are either removed or deleted.

This Screening Report sets out the following:

- A description of the key objectives and measures (where available) that form part of the Lancashire Local Flood Risk Management Strategy.
- A list of the European sites to be included in the assessment linked to a drawing which shows their location (Appendix A).
- Describes the qualifying features of each European Site included in the assessment, the sites' nature conservation objectives (if available) and its sensitivities/vulnerabilities (refer to Appendix B).
- Identification of possible "source pathway receptor" impacts and assessment of whether the effects are likely to be significant1.

The locations of European Sites in relation to the Lancashire boundary were determined using data downloaded from the MAGIC website (www.magic.co.uk).

As HRA focuses upon the "implications for the site in view of the site's conservation objectives" (EC 1992a, Article 6(3)), the reasons for the designation of European sites must be understood. This has been identified by desk top review. A high standard of proof is required at the HRA screening stage and as such only objective and robust evidence has been used in the assessment.

The potential pathways of air, water, ground and direct disturbance pathways have been reviewed for each of the Lancashire County Council objectives. The potential for these pathways and identified impacts to result in a likely significant effect on a European site has been assessed.

2.3 European Sites Assessed

The list of sites to be assessed as part of this HRA is split between those located within the Lancashire CC boundary (seven sites) and those up to 20km from the boundary (twenty sites). Each of the sites are listed below, the location is shown in Appendix A and detailed further in Appendix B. This comprises a "long" list of all sites located within the spatial scope of this HRA.

Within the Lancashire County Council boundary:

- Ribble & Alt Estuaries (SPA/Ramsar) (Site 1 within Appendix A)
- South Pennine Moors (SPA/SAC) (Site 2 within Appendix A)
- North Pennine Moors (SAC and SPA) (Site 3 within Appendix A)
- North Pennine Dales Meadows (SAC) (Site 4 within Appendix A)
- Duddon Estuary (SPA/Ramsar) (Site 5 within Appendix A)
- Bowland Fells (SPA) (Site 6 within Appendix A)
- Martin Mere (Ramsar/SPA) (Site 7 within Appendix A)

Outside the Lancashire County Council boundary but within 20km of the boundary:

- Dee Estuary (SAC/SPA/Ramsar) (Site 8 within Appendix A)
- Manchester Mosses (SAC) (Site 9 within Appendix A)
- Craven Limestone Complex (SAC) (Site 10 within Appendix A)
- Calf Hill and Cragg Woods (SAC) (Site 11 within Appendix A)
- Morecambe Bay (SAC/ SPA and Ramsar) (Site 12 within Appendix A)
- Morecambe Bay Pavements (SAC) (Site 13 within Appendix A)
- Ingleborough Complex (SAC) (Site 14 within Appendix A)
- Subberthwaite, Blawith & Torver Low Commons (SAC) (Site 15 within Appendix A)
- River Kent (SAC) (Site 16 within Appendix A)
- Rochdale Canal (SAC) (Site 17 within Appendix A)
- Roudsea Wood & Mosses (SAC) (Site 18 within Appendix A)
- Sefton Coast (SAC) (Site 19 within Appendix A)

1 "any effect that may reasonably be predicted as a consequence of a plan or project that may affect the conservation objectives of the features for which the site was designated, but excluding trivial or inconsequential effects." (Habitat Regulations Note 3, English Nature 1999), 2014-01-06 B1759000 Doc HabitatRegulationsAssessment D01 Final 7

- Witherslack Mosses (SAC) (Site 20 within Appendix A)
- Yewbarrow Woods (SAC) (Site 21 within Appendix A)
- Asby Complex (SAC) (Site 22 within Appendix A)
- River Eden (SAC) (Site 23 within Appendix A)
- Mersey Estuary (SPA/Ramsar) (Site 24 within Appendix A)
- Mersey Narrows & North Wirral Foreshore (SPA/Ramsar) (Site 25 within Appendix A)
- Leighton Moss (SPA/Ramsar) (Site 26 within Appendix A)
- Malham Tarn (Ramsar) (Site 27 within Appendix A)
- Shell Flat and Lune Deep (SAC) (Site 28 within Appendix A)
- Liverpool Bay (SPA) (Site 29 within Appendix A).

2.4 Likely Significant Effects

The objectives and measures outlined in the LFRMS are policy level and have not been assigned a spatial location, other than they will be implemented within the boundary of Lancashire. Generally, the listed objectives and measures are considered positive for the environment and therefore are considered to have a positive impact on European sites in the area. It is assumed (although not exclusively) that this positive impact will be most prevalent for European sites surrounding high risk flood areas such as river systems and coastal zones.

There are opportunities to also reference ecosystem services and the presence of European sites in the objectives that sit under theme relating to Delivering Effective Flood Risk Management Locally and Maximising Investment Opportunities to Better Protect our Businesses and Communities. Objectives under the theme Understanding our Local Risks and Challenges there are also opportunities to have access to up-to-date environmental information to inform decision making on flood-risk schemes.

2.5 Screening

A summary of the source of environmental impacts assessed as arising from the LFRMS themes is identified in Table 1 below.

A further consideration of key objectives under these themes is summarised in Appendix C showing how the European sites may be affected by implementing the source-pathway-receptor model. This requires all elements to be present to result in a likely significant effect on any given European site. At this stage, not all objectives of the 2021 LFRMS have been reviewed.

Table 1 Summary of environmental impacts assessed as arising from each of the LFRMS themes

| Theme | Implications for European Sites | |
|---|--|--|
| Deliver Effective Flood Risk Management Locally | None – Coordinating partnership working including processes and procedures within the council particularly roles and responsibilities. | |
| Understand our Local Risks and Challenges | None – Commissioning plans or studies such as Surface Water Management Plans (SWMPs) and keeping up to date with flood risk information and awareness raising | |
| Support Sustainable Flood Resilient Development | Objectives under this theme encourages developers to think about climate change, flood risk and water quality which would have an indirect beneficial impact on surrounding sites. It also promotes water sensitive urban design at the Master planning stage and establishes policy for LLFA consultation on planning applications which could result in positive impacts on European Site These objectives will most likely have a beneficial impact the Ribble & Alt Estuarties (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar); Malham Tarn (Ramsar) and Liverpool Bay (SPA) | |
| Improve Engagement with our Flood Family | None – develop community awareness/understanding of flooding | |
| Maximise Investment Opportunities to better | Objectives under this theme will likely increase investment with more schemes going ahead. | |
| protect our Businesses and Communities | These objectives will most likely have a beneficial impact on European Sites such as Ribble & Alt Estuarties (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar); Malham Tarn (Ramsar) and Liverpool Bay (SPA). | |
| Contribute towards a Climate Resilient Lancashire | Objectives under this theme encourages all stakeholders to think about climate change and flood risk. These objectives will most likely have a indirect beneficial impact on surrounding sites, potentially the Ribble & Alt Estuarties (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar); Malham Tarn (Ramsar) and Liverpool Bay (SPA) | |

3. HRA Screening Conclusion

The HRA screening has been completed in accordance with current best practice and the following conclusions have been reached for the objectives:

Of the key objectives assessed, number are considered likely to result in an impact (positive) on a European site(s) which promote flood risk management work, would improve water quality and reduce flood risk within some of the European sites.

None of the key objectives assessed are likely to result in an adverse effect on any given European site as these relate to roles and responsibilities, funding and logistics and not the assessment of risk or the identification of the Flood Risk Management option to assess. At this strategic stage, there is no locational data to allow a definitive outcome for individual European sites, however, for the purposes of this HRA, the sites most likely to experience a positive impact have been highlighted in Appendix B as they are located close to river systems, wetlands or coastal areas.

The LFRMS objectives listed have the potential to increase the number of flood risk management schemes and encourage sustainable systems in appropriate locations with a positive outcome for European designations. It is not possible to assess where flood risk management schemes would be introduced but if they were proposed within or near to a European site they would be subject to a separate HRA screening at the project level. Therefore any impacts that arise from the objectives would be considered on their individual merit if close to a European site.

As all the objectives are considered to be positive, the assessment has assumed all the impacts will also be positive. At this stage it is not possible to determine what the full measures and action plan will be that come out of the objectives therefore at this stage they are assumed to be positive. If for example, maintenance is not carried out correctly or development increases flood risk in some areas, then there is potential for negative impacts but this is not possible to assess at this stage. When at the scheme level there may be potential for negative impacts, these should be assessed as part of the project level HRA, if required.

Overall it is considered that there would be a positive impact on the European sites screened as part of this HRA, with particular improvements likely to be experienced at the following sites by nature of their qualifying habitats and/or species. The scale of improvement could only be quantified at the project level when locational and scheme information would be available:

- Ribble & Alt Estuaries (SPA/Ramsar)
- North Pennine Dales Meadows (SAC);
- Martin Mere (SPA/Ramsar);
- Dee Estuary (SAC/SPA/Ramsar);
- Calf Hill & Cragg Woods (SAC);
- Morecambe Bay (SAC/SPA/Ramsar);
- River Kent (SAC);

- River Eden (SAC);
- Mersey Estuary (SPA/Ramsar);
- Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar);
- Leighton Moss (SPA/Ramsar);
- Malham Tarn (Ramsar); and,
- Liverpool Bay (SPA).

No in-combination effects, with other projects and plans, have been identified. All strategic plans either produced by Lancashire County Council or the Environment Agency (particularly flood risk management projects/plans) will be or have been subject to a separate HRA. For example, the Lancashire County Council Core Strategy was subject to a Habitat Regulations Assessment which is included within the Final Sustainability Report (November 2007). In addition, planning policies set out in the Lancashire County Council boundary have been written to avoid an adverse effect on individual European Sites.

It is not anticipated that there will be any direct impacts by land take or damage to any European Site by construction or operational activities associated with the LFRMS objectives.

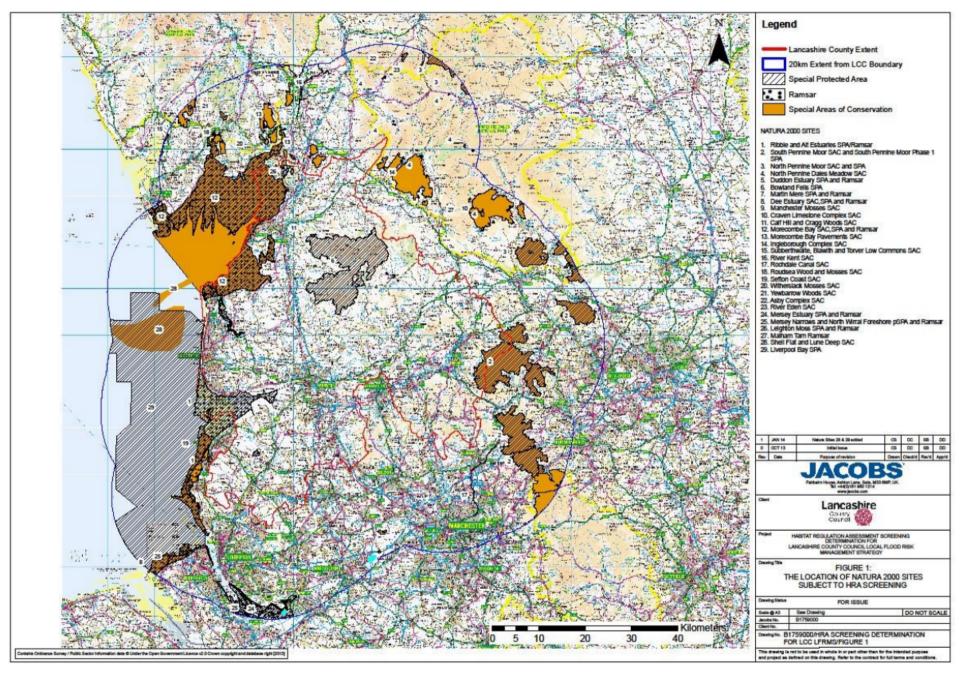
Furthermore, there are no indirect or significant pathways by which impacts either alone or "in-combination" with other plans or policies are likely to result in significant effects on the integrity of any European Site within Lancashire County Council boundary and/or 20km from the boundary.

In accordance with the Habitat Regulations 2010 (as amended), the Draft Screening Report needs to be issued to NE, for comment.

For the above reasons, we consider that an Appropriate Assessment is not required as part of the SEA submission.

Appendix A

Location of the Natura 2000 sites subject to HRA Screening



Appendix B

European Site Assessment and Screening Tables

Table 2: Key designation criteria for the Natura 2000 sites located within 20km of Lancashire boundary

The sites highlighted in yellow are considered to be more susceptible to a positive change due to the implementation of the LFRMS given their proximity to rivers, coastlines and wetland areas and giving consideration to the Environment Agency Flood Risk Maps.

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|-------------------------------------|---|--|--|
| Ribble & Alt Estuaries (SPA/Ramsar) | Annex I birds present, Bewick's swan - non-breeding (Cygnus columbianus bewickii); Whooper swan - non-breeding (Cygnus Cygnus); Pink-footed goose - non-breeding (Anser brachyrhynchus); Common shelduck - non-breeding (Tadorna tadorna); Eurasian wigeon - non-breeding (Anas Penelope); Eurasian teal (non-breeding) Anas crecca; Northern pintail (non-breeding) Anas acuta; Eurasian oystercatcher (non-breeding) Haematopus ostralegus; Ringed plover (non-breeding) Charadrius hiaticula; European golden plover (non-breeding) Pluvialis squatarola; Red knot (non-breeding) Calidris canutus; Sanderling (non-breeding) Calidris alba; Dunlin (non-breeding) Calidris alba; Dunlin (non-breeding) Calidris alpina; Ruff (Breeding) Philomachus pugnax; Black-tailed godwit (non-breeding) Limosa limosa islandica; Bar-tailed godwit (non-breeding) Limosa lapponica; Common redshank (non-breeding) Tringa tetanus; Lesser black-backed gull (breeding) Larus fuscus; Common tern (breeding) Sterna hirundo; Waterbird assemblage and Seabird assemblage. Ramsar - Natterjack toads Bufo calamita. Lesser black-backed gull , Larus fuscus graellsii, Ringed plover , Charadrius hiaticula, Grey plover, Pluvialis squatarola, Red knot, Calidris canutus islandica, Sanderling, Calidris alba, Dunlin, Calidris alpina alpina, Black-tailed godwit, Limosa limosa islandica, Common redshank , Tringa totanus totanus, Tundra swan, Cygnus columbianus bewickii, Whooper swan, Cygnus cygnus, Pink-footed goose, Anser brachyrhynchus, Common shelduck, Tadorna tadorna, Eurasian wigeon, Anas penelope, Eurasian teal, Anas crecca, Northern pintail, Anas acuta, Eurasian oystercatcher, Haematopus ostralegus ostralegus, Bar-tailed godwit, Limosa lapponica lapponica. | The site, in places is subject to pressure from: recreation, built development (including coastal defence), wildfowling and industry, including sand-winning. Wider land management issues are being developed via the neighbouring Ribble and Mersey Estuary Strategies. The issues of grazing pressure. Along the Flyde coast there are issues with water quality. | Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive. Subject to natural change, to maintain or restore: The extent and distribution of the habitats of the qualifying features; the qualifying features; habitats of the qualifying features rely; The populations of the qualifying features within the site. |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|--|---|--|--|
| South Pennine Moors SAC and South Pennine Moors Phase 1 SPA SAC occupies 64,983.1ha SPA occupies: 45,301.5ha | SAC – Annex I and Annex II habitats present; Annex I; European dry heath, blanket bog, old sessile oak woods with ilex and blechnum. Annex II; North Atlantic wet heaths with Erica tetralix and transition mires and quaking bogs. SPA – the site is designated because of it's importance as a breeding site for a number of upland species; • Birds of prey e.g. merlin (>30 pairs), short-eared owl (> 22 pairs) and peregrine. • Waders e.g. golden plover (>435 pairs). | Key pressures to bird species are: • Habitat loss todevelopment. • Damage of moorland due to recreational activities, including increased erosion of peatland and robbing of bird's nests. • Drainage of peatland. • Burning, over-grazing and reseeding of moorland. Key pressures to habitats are: • large populations of people area the periphery use the area for recreational activities (trampling). • Agricultural pressures (burning for grouse management) • Invasive non-native plant species • Atmospheric pollution affecting woodland, bog and heath habitats | Avoid the deterioration of the qualifying natur habitats and the habitats of qualifying species and the significant disturbance of those qualifying species, ensuring the integrity of th site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species; |
| | | | ☐ The distribution of qualifying species within the site. |
| North Pennine Moor SAC and SPA | SAC - Annex I and Annex II habitats present; Annex I; H4010. Northern Atlantic wet heaths with Erica tetralix; Wet heathland with cross-leaved heath H4030. European dry heaths H5130. Juniperus communis formations on heaths or calcareous grasslands; Juniper on heaths or calcareous grasslands H6130. Calaminarian grasslands of the Violetalia calaminariae; Grasslands on soils rich in heavy metals H6150. Siliceous alpine and boreal grasslands; | Key pressures include: • Excessive livestock grazing • Drainage of wet areas disrupting the hydrology and causing erosion • over-intensive and inappropriate burning is damaging to heath and blanket bog • Acid and nitrogendeposition continue to have damaging | Avoid the deterioration of the qualifying natur habitats and the habitats of qualifying species and the significant disturbance of those qualifying species, ensuring the integrity of th site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|---------------------------------------|---|---|--|
| | Montane acid grasslands H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>); Dry grasslands and scrublands on chalk or limestone H7130. Blanket bogs H7220. Petrifying springs with tufa formation (<i>Cratoneurion</i>); Hard-water springs depositing lime H7230. Alkaline fens; Calcium-rich springwater-fed fens H8110. Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae and Galeopsietalia ladani</i>); Acidic scree H8210. Calcareous rocky slopes with chasmophytic vegetation; Plants in crevices in base-rich rocks H8220. Siliceous rocky slopes with chasmophytic vegetation; Plants in crevices on acid rocks H91A0. Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; Western acidic oak woodland Annex II; S1528. <i>Saxifraga hirculus</i> ; Marsh saxifrage SPA - A082 <i>Circus cyaneus</i> ; Hen harrier (Breeding) A098 <i>Falco columbarius</i> ; Merlin (Breeding) A103 <i>Falco peregrinus</i> ; Peregrine falcon (Breeding) A140 <i>Pluvialis apricaria</i> ; European golden plover (Breeding) | effects on the site. | □ The extent and distribution of qualifying natural habitats and habitats of qualifying species; □ The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; □ The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; □ The populations of qualifying species; □ The distribution of qualifying species within the site. |
| North Pennine Dales Meadows SAC | Annex I habitats present: H6410. Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae); Purple moor-grass meadows H6520. Mountain hay meadows | These grasslands are dependent upon traditional agricultural management, with hay-cutting and no or minimal use of agrochemicals. Such management is no longer economic. Management agreements and ESA payments are being used to promote the continuation of traditional management. The refining of | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|-------------------------------------|---|---|--|
| | | the prescriptions underpinning these schemes in the light of the findings of monitoring programmes is an important, continuing, part of delivering favourable condition. | natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species; The distribution of qualifying species within the site. |
| Duddon Estuary SPA and Ramsar | SPA - A054 Anas acuta; Northern pintail (Nonbreeding) A143 Calidris canutus; Red knot (Nonbreeding) A162 Tringa totanus; Common redshank (Nonbreeding) A191 Sterna sandvicensis; Sandwich tern (Breeding) Waterbird assemblage A137 Charadrius hiaticula; Ringed plover (Nonbreeding) A144 Calidris alba; Sanderling (Nonbreeding) Ramsar – Natterjack toad Bufo calamita, Northern pintail, Anas acuta, Red knot, Calidris canutus islandica, Common redshank, Tringa totanus tetanus. | Vulnerability of habitats is linked to changes in the physical environment. For example: • The intertidal zone is being threatened by coastal squeeze as a result of land claim and coastal defence works as well as sea level rise and storm surges. • Saltmarshes are grazed by agricultural stock. • Waterfowl wintering on estuaries are vulnerable to loss of feeding areasthrough disturbance, land claim and development. • Recreational pressure and bait digging. • various developments for housing, amenity and industry adjacent to the site | Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive. Subject to natural change, to maintain or restore: The extent and distribution of the habitats of the qualifying features; The structure and function of the habitats of the qualifying features; The supporting processes on which the habitats of the qualifying features rely; The populations of the qualifying features; The distribution of the qualifying features within the site. |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|----------------------------------|--|---|--|
| Bowland Fells SPA | A082 Circus cyaneus; Hen harrier (Breeding) A098 Falco columbarius; Merlin (Breeding) A183 Larus fuscus; Lesser black-backed gull (Breeding) | The expansive blanket bog and heather dominated moorland provides suitable habitat for a diverse range of upland breeding birds. Favourable nature conservation status of the site depends on appropriate levels of sheep grazing, sympathetic moorland burning practice, sensitive water catchment land management practices and on going species protection. | Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive. Subject to natural change, to maintain or restore: The extent and distribution of the habitats of the qualifying features; The structure and function of the habitats of the qualifying features; The supporting processes on which the habitats of the qualifying features rely; The populations of the qualifying features within the site. |
| Martin Mere SPA and Ramsar | SPA - A037 Cygnus columbianus bewickii; Bewicks swan (Non-breeding) A038 Cygnus cygnus; Whooper swan (Non-breeding) A040 Anser brachyrhynchus; Pink-footed goose (Non-breeding) A052 Anas crecca; Eurasian teal (Non-breeding) A054 Anas acuta; Northern pintail (Non-breeding) Waterbird assemblage Ramsar - Pink-footed goose, Anser brachyrhynchus, Tundra swan, Cygnus columbianus bewickii, Whooper swan, Cygnus cygnus, Eurasian wigeon, Anas penelope, Northern pintail, Anas acuta. | The refuge is vulnerable to: • water levels being adversely affected water abstraction for agriculture. • changes in farming practice. Grazing management is largely dependent upon cattle from surrounding farms. • Nutrients brought in with the water supply from the surrounding arable farmland and inadequate sewage treatment adds considerably to the large deposits of guano from wintering waterfowl. This results in the refuge being | Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive. Subject to natural change, to maintain or restore: The extent and distribution of the habitats of the qualifying features; The structure and function of the habitats of the qualifying features; |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|--------------|--|--|---|
| Olto Hamo | Quality ing 1 out al co | highly eutrophic with extremely | habitats of the qualifying features rely; |
| | | poor water | nabitate of the qualifying leatures rely, |
| | | quality conditions and creates | ☐ The populations of the qualifying features; |
| | | the possible risk of water | The populations of the qualitying reactives, |
| | | borne diseases which could | ☐ The distribution of the qualifying features |
| | | affect waterfowl, although | within the site. |
| | | no such outbreaks have been | William the cite. |
| | | recorded. Water quality issues | |
| | | have started to be addressed | |
| | | by WWT with the creation of | |
| | | reedbed water filtration | |
| | | systems and a series of | |
| | | settlement lagoons helps to | |
| | | reduce suspended solids of | |
| | | effluent water arising from | |
| | | waterfowl areas. | |
| | | Regular herbicide control of | |
| | | trifid burr marigold is | |
| | | necessary in order to prevent | |
| | | this plant from invading | |
| | | lake/scape margins to the | |
| | | detriment of bird populations. | |
| Dee Estuary | SAC – Annex I and II habitats include: | The majority of the site is in | |
| SAC, SPA and | Annex 1; 1140 Mudflats and sandflats not covered by | the ownership and sympathetic | |
| Ramsar | seawater at low tide | management of public bodies | |
| | 1310 Salicornia and other annuals colonizing mud | and voluntary conservation | |
| | and sand | organisations. Unlike most | |
| | 1330 Atlantic salt meadows (Glauco-Puccinellietalia | western estuaries, sizeable | |
| | maritimae) | areas of the Dee saltmarshes | |
| | 1130 Estuaries | remain ungrazed and therefore | |
| | 1210 Annual vegetation of drift lines | plant species that are | |
| | 1230 Vegetated sea cliffs of the Atlantic and Baltic | susceptible to grazing are | |
| | Coasts | widespread. This distinctive | |
| | 2110 Embryonic shifting dunes | flora would therefore be | |
| | 2120 "Shifting dunes along the shoreline with Ammophila arenaria ('white dunes') | sensitive to increase in grazing | |
| | 2130 Fixed coastal dunes with herbaceous | pressure. The intertidal and | |
| | vegetation ('greydunes') | subtidal habitats of the estuary | |
| | 2190 Humid dune slacks | are broadly subject to natural successional change and the | |
| | 2 100 Harris dallo didoko | 30000331011al Charige and the | |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|-----------|---|---|-------------------------|
| | Annex II; 1095 Sea lamprey Petromyzon marinus 1099 River lamprey Lampetra fluviatilis 1395 Petralwort Petalophy6llum ralfsii SPA - A048 Tadorna tadorna; Common shelduck (Nonbreeding) A052 Anas crecca; Eurasian teal (Nonbreeding) A054 Anas acuta; Northern pintail (Nonbreeding) A130 Haematopus ostralegus; Eurasian oystercatcher (Nonbreeding) A141 Pluvialis squatarola; Grey plover (Nonbreeding) A143 Calidris canutus; Red knot (Nonbreeding) A149 Calidris alpina alpina; Dunlin (Nonbreeding) A156 Limosa limosa islandica; Black-tailed godwit (Nonbreeding) A157 Limosa lapponica; Bar-tailed godwit (Nonbreeding) A160 Numenius arquata; Eurasian curlew (Nonbreeding) A161 Sterna sandvicensis; Sandwich tern (Nonbreeding) A193 Sterna hirundo; Common tern (Breeding) A193 Sterna albifrons; Little tern (Breeding) Waterbird assemblage Ramsar – Annex 1 features present on the pSAC as detailed above. In addition, Redshank, Tringa totanus, Teal, Anas crecca, Shelduck, Tadorna tadorna, Oystercatcher, Haematopus ostralegus, Curlew, Numenius arquata, Pintail, Anas acuta, Grey plover, Pluvialis squatarola, Knot, Calidris canutus islandica, Dunlin, Calidris alpina alpina Black-tailed godwit, Limosa limosa islandica, Bar-tailed godwit, Limosa lapponica, | Dee Estuary continues to show annual net sediment accretion. Saltmarshes on the English side of the estuary continue to accrete overall whilst on the Welsh shoreline the main river channel has moved onshore leading to localised erosion of the saltmarshes Threats to the estuary's conservation come from its industrialised shorelines on the Welsh side and the impact of adjacent historic industrial use including waste disposal from former manufacturing industry such as chemical and steel manufacture. Contemporary issues relate to dock development and navigational dredging, coastal defence works and their impact on coastal process, regulation of fisheries, and the recreational use of intertidal, sand dunes and saltmarshes. The statutory agencies are working with landowners and regulatory bodies towards the further remediation of historic threats and the reconciliation of conservation management with human and commercial pressures. | |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|--------------------------|---|---|--|
| | Redshank, Tringa tetanus. | | |
| | | | |
| | | | |
| | | | |
| Manakastan | Cabanana han | Manadan de distanta de la | A sid the deterioration of the available in a set well |
| Manchester Mosses SAC | Sphagnum bog | Mossland which historically covered a large part of Greater | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, |
| IVIOSSES SAC | Annex I habitat: Degraded raised bog still capable of | Manchester and the Mersey | and the significant disturbance of those |
| Warrington | natural regeneration. | Basin has been lost to | qualifying species, ensuring the integrity of the |
| | | agriculture, industry and other | site is maintained and the site makes a full |
| Comprises the | | development. The 3 SSSIs are | contribution to achieving Favourable |
| following | | some of the few degraded | Conservation Status of each of the qualifying |
| SSSIs: | | raised bogs left. Key pressures: | features. Subject to natural change, to maintain or |
| - Astley & | | Drainage of surrounding | restore: |
| Bedford | | agricultural land and water | 100010. |
| Mosses | | extraction for local industry | ☐ The extent and distribution of qualifying |
| - Holcroft Moss | | leading to drying out of | natural habitats and habitats of qualifying |
| - Risley Moss | | mosses and subsequent natural succession which in | species; |
| 172.81ha | | turn lowers groundwater | ☐ The structure and function (including typical |
| 172.01114 | | levels. | species) of qualifying natural habitats and |
| | | Loss of Sphagnum species | habitats of qualifying species; |
| | | due to drying out of peat and | |
| | | industrial pollution (air pollution | ☐ The supporting processes on which qualifying natural habitats and habitats of |
| | | from heavy industry). • Peat extraction (legal/ | |
| | | illegal). | qualifying species rely; |
| | | Damage to peat land due to | ☐ The populations of qualifying species; |
| | | recreational activities. | |
| | | Fly tipping. | ☐ The distribution of qualifying species within |
| | | Afforestation as a result of | the site. |
| Craven | H3140. Hard oligo-mesotrophic waters with benthic | natural succession • Heavy livestock or rabbit | Avoid the deterioration of the qualifying natural |
| Limestone | vegetation of <i>Chara</i> spp.; Calcium-rich nutrient-poor | grazing has been damaging | habitats and the habitats of qualifying species, |
| Complex SAC | lakes, lochs and pools | and the Wildlife Enhancement | and the significant disturbance of those |
| | H6130. Calaminarian grasslands of the <i>Violetalia</i> | Scheme and other forms of | qualifying species, ensuring the integrity of the |
| | calaminariae; Grasslands on soils rich in heavy | agri-environmental agreement | site is maintained and the site makes a full |
| | | | |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|-------------------------------------|--|--|--|
| | metals H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>); Dry grasslands and scrublands on chalk or limestone H6410. <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>); Purple moor-grass meadows H7110. Active raised bogs* H7220. Petrifying springs with tufa formation (<i>Cratoneurion</i>); Hard-water springs depositing lime H7230. Alkaline fens; Calcium-rich springwater-fed fens H8240. Limestone pavements H9180. <i>Tilio-Acerion</i> forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes. S1092. <i>Austropotamobius pallipes</i> ; White-clawed (or Atlantic stream) crayfish S1163. <i>Cottus gobio</i> ; Bullhead S1902. <i>Cypripedium calceolus</i> ; Lady`s-slipper orchid | are being used, successfully, to promote appropriate management. Removal of limestone pavement for sale as rockery stone and limestone quarrying The raised bog has suffered some past drainage but the hydrology has been made secure and the site is carefully managed. Malham Tarn is vulnerable to nutrient enrichment in the catchment and action has been taken to minimise such inputs. | contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within the site. |
| Calf Hill and Cragg Woods SAC | H91A0. Old sessile oak woods with <i>llex</i> and <i>Blechnum</i> in the British Isles; Western acidic oak woodland H91E0. Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion, Alnion incanae, Salicion albae</i>); Alder woodland on floodplains. | Currently there is limited intervention in land-use/management terms. There is also no immediate need for woodland management in order to safeguard the interest of the site. • Some grazing is considered desirable (to help maintain the diversity of the ground flora) but it would be beneficial to be able to exclude sheep altogether for certain times of the year, or altogether for a limited period in order to encourage natural | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|---|--|---|--|
| | | regeneration. • In addition, since the canopy of the oak woodland is fairly dense and natural regeneration is quite limited, it would be desirable over the long-term to instigate small-scale selective fellings/silvicultural thinning, whilst felling a small stand ofplanted larch/pine (<0.5 ha) and replacing it with oak/birch. | species) of qualifying natural habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species; The distribution of qualifying species within the site. |
| Morecambe Bay SAC, SPA and Ramsar Page 327 | SAC – H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks H1130. Estuaries H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats H1150. Coastal lagoons H1160. Large shallow inlets and bays H1170. Reefs H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves H1310. Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand H1330. Atlantic salt meadows (Glauco-Puccinellietalia maritimae) H2110. Embryonic shifting dunes H2120. Shifting dunes along the shoreline with Ammophila arenaria ("white dunes"); Shifting dunes with marram H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland* H2150. Atlantic decalcified fixed dunes (Calluno-Ulicetea); Coastal dune heathland* H2170. Dunes with Salix repens ssp. argentea (Salicion arenariae); Dunes with creeping willow | Coastal protection and flood defence works. Saltmarsh is traditionally grazed and is generally in favourable condition for its bird interest. Positive management is being secured through NGO reserve management plans, English Nature's Site Management Statements and Coastal Wildlife Enhancement Scheme, the European Marine Site Management Schemes for the Duddon Estuary and Morecambe Bay, and the Duddon Estuary and Morecambe Bay Partnerships. These aim for sustainable use of the site, taking account of other potential threats including commercial fisheries, aggregate extraction, gas exploration, recreation and | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|-----------|---|--|-------------------------|
| nte name | H2190. Humid dune slacks S1166. <i>Triturus cristatus</i> ; Great crested newt SPA — A040 <i>Anser brachyrhynchus</i> ; Pink-footed goose (Non-breeding) A048 <i>Tadorna tadorna</i> ; Common shelduck (Non-breeding) A054 <i>Anas acuta</i> ; Northern pintail (Non-breeding) A063 <i>Somateria mollissima</i> ; Common eider (Breeding) A130 <i>Haematopus ostralegus</i> ; Eurasian oystercatcher (Non-breeding) A137 <i>Charadrius hiaticula</i> ; Ringed plover (Non-breeding) A140 <i>Pluvialis apricaria</i> ; European golden plover (Non-breeding) A141 <i>Pluvialis squatarola</i> ; Grey plover (Non-breeding) A143 <i>Calidris canutus</i> ; Red knot (Non-breeding) A145 <i>Calidris canutus</i> ; Red knot (Non-breeding) A157 <i>Limosa lapponica</i> ; Bar-tailed godwit (Non-breeding) A160 <i>Numenius arquata</i> ; Eurasian curlew (Non-breeding) A162 <i>Tringa totanus</i> ; Common redshank (Non-breeding) A163 <i>Larus fuscus</i> ; Lesser black-backed gull (Breeding) A184 <i>Larus argentatus</i> ; Herring gull (Breeding) A191 <i>Sterna sandvicensis</i> ; Sandwich tern (Breeding) A193 <i>Sterna hirundo</i> ; Common tern (Breeding) A195 <i>Sterna albifrons</i> ; Little tern (Breeding) Waterbird assemblage A144 <i>Calidris alba</i> ; Sanderling (Non-breeding) | other activities. Along the Flyde coast there are issues with water quality. | the site. |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|-----------|---|-----------------------------|-------------------------|
| | hiaticula; Lesser black-backed gull, Larus fuscus graellsii; Herring gull, Larus argentatus argentatus; Sandwich tern, Sterna (Thalasseus) sandvicensis sandvicensis; Great cormorant, Phalacrocoraxcarbo carbo; Common shelduck, Tadorna tadorna; Northern pintail, Anas acuta; Common eider, Somateria mollissima Mollissima; urasian oystercatcher, Haematopus ostralegus Ostralegus; Grey plover, Pluvialis squatarola; Sanderling, Calidris alba; Eurasian curlew, Numenius arquata arquata; Common redshank, Tringa totanus tetanus; Ruddy turnstone, Arenaria interpres interpres; Great crested grebe, Podiceps cristatus Cristatus; Pink-footed goose, Anser brachyrhynchus; Eurasian wigeon, Anas Penelope; Common goldeneye, Bucephala clangula Clangula; Redbreasted merganser, Mergus serrator; European golden plover, Pluvialis apricaria Apricaria; Northern lapwing, Vanellus vanellus; Dunlin, Calidris alpina alpine; Bar-tailed godwit, Limosa lapponica lapponica. | | |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|--------------------------------------|---|--|--|
| Morecambe Bay Pavements SAC | H3140. Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.; Calcium-rich nutrient-poor lakes, lochs and pools H4030. European dry heaths H5130. <i>Juniperus communis</i> formations on heaths or calcareous grasslands H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>); Dry grasslands and scrublands on chalk or limestone H7210. Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> ; Calcium-rich fen dominated by great fen sedge (saw sedge) H8240. Limestone pavements H9180. <i>Tilio-Acerion</i> forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes H91A0. Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; Western acidic oak woodland H91J0. <i>Taxus baccata</i> woods of the British Isles; Yew-dominated woodland S1014. <i>Vertigo angustior</i> ; Narrow-mouthed whorl snail | The cSAC is subject to a number of problems related to the decline of traditional management practices. • The under-grazing of grasslands and decline of traditional cattle grazing is leading to the loss of sward diversity and scrub encroachment problems. Localised overgrazing (sheepdominated) has impoverished the pavement flora on one of the component sites. • A decline of traditional coppice management has reduced the interest of some of the woodland sites. The planting of non-native conifer crops on some of the sites has led to localised declines in condition. | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within the site. |
| Ingleborough Complex SAC | H5130. Juniperus communis formations on heaths or calcareous grasslands; Juniper on heaths or calcareous grasslands H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia); Dry grasslands and scrublands on chalk or limestone H6410. Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae); Purple moor-grass meadows H7130. Blanket bogs | Heavy livestock or rabbit grazing has been damaging Removal of limestone pavement for sale as rockery stone and limestone quarrying have both caused problems in the past and are now addressed through Limestone Pavement Orders. | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|---|---|---|--|
| | H7220. Petrifying springs with tufa formation (<i>Cratoneurion</i>); Hard-water springs depositing lime H7230. Alkaline fens; Calcium-rich springwater-fed fens | | ☐ The extent and distribution of qualifying natural habitats and habitats of qualifying species; |
| | H8210. Calcareous rocky slopes with chasmophytic vegetation; Plants in crevices in base-rich rocks H8240. Limestone pavements H9180. <i>Tilio-Acerion</i> forests of slopes, screes and | | ☐ The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; |
| | ravines; Mixed woodland on base-rich soils associated with rocky slopes | | ☐ The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; |
| | | | ☐ The populations of qualifying species; |
| | | | ☐ The distribution of qualifying species within the site. |
| Subberthwaite, Blawith & Torver Low Commons SAC | H7140. Transition mires and quaking bogs; Very wet mires often identified by an unstable `quaking` surface H7150. Depressions on peat substrates of the Rhynchosporion | This site comprises a complex mosaic of over 200 discrete mires set within an agriculturally unimproved landscape. The mires are at or near favourable condition and would only be threatened by intensification of land-use on the surrounding commons or by interference with the site hydrology. There is a good liaison with a commoners association over part of the site. Lowland heath is not listed as a SAC feature on the site because of its degraded, unfavourable condition. Heathland may be inhibited from recovery by the livestock | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; |
| | | management regime but at current livestock levels this is not believed to be affecting the | ☐ The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|-------------------|---|--|--|
| | | mire interest. | ☐ The populations of qualifying species; ☐ The distribution of qualifying species within the site. |
| River Kent SAC | H3260. Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation; Rivers with floating vegetation often dominated by water-crowfoot S1029. <i>Margaritifera margaritifera</i> ; Freshwater pearl mussel S1092. <i>Austropotamobius pallipes</i> ; White-clawed (or Atlantic stream) crayfish S1163. <i>Cottus gobio</i> ; Bullhead | The maintenance of breeding and nursery areas for the species on this site depends on the habitat quality of streams and their margins. Some areas of the site suffer from poor habitat quality. The intention is to address this through implementation of habitat improvement schemes. The impact of point-discharges on water quality will be reviewed and action proposed where necessary. A particular problem on this site and affecting white-clawed crayfish is incidents of pyrethroid sheep-dip pollution of watercourses. These are currently under investigation. The dwindling population of freshwater pearl mussels needs to be investigated in relation to the factors affecting its recruitment and structure. A management plan will be developed for the part of the catchment supporting this species. | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within the site. |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|--|--|--|---|
| Rochdale Canal SAC (includes Rochdale SSSI) 25.73ha | The canal supports a significant population of the Annex II species, floating water plantain (Luronium natans). The canal also supports a diverse community of plants such as many pondweed species (Potamogeton spp). | The canal stretches 20km through urban and industrial landscapes and has been fully restored. It is under pressures from the following: • Future impacts potentially caused by boat movements • Possible disturbance impacts resulting from increased human pressure. | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within the site. |

| Site name Roudsea Wood and Mosses SAC | Qualifying Features H7110. Active raised bogs H7120. Degraded raised bogs still capable of natural regeneration H9180. Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes H91J0. Taxus baccata woods of the British Isles; Yew-dominated woodland | Vulnerability and Pressures In the latter part of the 20th century, coppicing of the woodland ceased and lower water tables on the bogs, caused by drainage for peatcutting, had allowed scrub to spread across them. Most of the site is now managed as a National Nature Reserve. Woodland management is carried out and much scrub has been cleared from Deer Dike Moss and ditches blocked to allow regeneration of the bog vegetation. Management of the southern bog, recently added to the National Nature Reserve, has been addressed in the management plan. | Conservation Objectives Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within the site. |
|---------------------------------------|--|---|--|
|---------------------------------------|--|---|--|

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|---------------------|--|--|---|
| Sefton Coast SAC | H2110. Embryonic shifting dunes H2120. Shifting dunes along the shoreline with Ammophila arenaria ("white dunes"); Shifting dunes with marram H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland* H2150. Atlantic decalcified fixed dunes (Calluno-Ulicetea); Coastal dune heathland* H2170. Dunes with Salix repens ssp. argentea (Salicion arenariae); Dunes with creeping willow H2190. Humid dune slacks S1166. Triturus cristatus; Great crested newt S1395. Petalophyllum ralfsii; Petalwort | The extensive sand dunes and intertidal areas attract large numbers of summer tourists. This impact is addressed in Sefton Metropolitan Borough Council's Beach Management Plan. Concerns have been raised regarding water abstraction on the coast. The coniferous plantations are also a source of debate, with a balance needed between restoration of dune habitats and public enjoyment of the woodlands. | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within the site. |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|---------------------------|---|---|---|
| Witherslack Mosses SAC | H7110. Active raised bogs H7120. Degraded raised bogs still capable of natural regeneration | Past drainage for peat extraction and forestry has lowered the water table and allowed scrub to spread across the mosses. A programme of restoration works is in place on two of the mosses, and a management plan has been completed for major works on the third. | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within the site. |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|------------------------|---|--|--|
| Yewbarrow Woods SAC | H5130. Juniperus communis formations on heaths or calcareous grasslands; Juniper on heaths or calcareous grasslands H91A0. Old sessile oak woods with Ilex and Blechnum in the British Isles; Western acidic oak woodland H91J0. Taxus baccata woods of the British Isles; Yew-dominated woodland | Although lack of regeneration at Yewbarrow is a problem resulting from browsing by deer, woodland grants have been given in recent years to encourage regeneration of native trees, together with funding for stockproof fencing. Estimates of areas covered by yew, juniper and heath will be checked the next time the site is surveyed. | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within the site. |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|------------------|---|--|---|
| Asby Complex SAC | H3140. Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.; Calcium-rich nutrient-poor lakes, lochs and pools H4030. European dry heaths H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>); Dry grasslands and scrublands on chalk or limestone H6410. <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>); Purple moor-grass meadows H7210. Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> ; Calcium-rich fen dominated by great fen sedge (saw sedge) H7220. Petrifying springs with tufa formation (<i>Cratoneurion</i>); Hard-water springs depositing lime H7230. Alkaline fens; Calcium-rich springwater-fed fens H8240. Limestone pavements S1013. <i>Vertigo geyeri</i> ; Geyer`s whorl snail S1393. <i>Drepanocladus (Hamatocaulis) vernicosus</i> ; Slender green feather-moss | Limestone pavements have been extensively damaged in the past for supply of decorative rockery stone. Unauthorised damage still continues as a minor and local problem. Asby Complex suffers from overgrazing. The limestone pavement flora and the dry heathland are particularly affected, though the fen and spring habitats appear tolerant of the grazing levels. There has been some agricultural pressure on the fen and tufa springs but damage from drainage and fertiliser application is being addressed through management agreements. | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within the site. |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|-------------------|--|--|---|
| River Eden SAC | H3130. Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> ; Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels H3260. Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation; Rivers with floating vegetation often dominated by water-crowfoot H91E0. Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion, Alnion incanae, Salicion albae</i>); Alder woodland on floodplains S1092. <i>Austropotamobius pallipes</i> ; White-clawed (or Atlantic stream) crayfish S1095. <i>Petromyzon marinus</i> ; Sea lamprey S1096. <i>Lampetra planeri</i> ; Brook lamprey S1099. <i>Lampetra fluviatilis</i> ; River lamprey S1106. <i>Salmo salar</i> , Atlantic salmon S1163. <i>Cottus gobio</i> ; Bullhead S1355. <i>Lutra lutra</i> ; Otter | Many of the streams within the site suffer from overgrazing of riverbanks and nutrient runoff. The water-crowfoot communities as well as the species are sensitive towater quality, particularly eutrophication. Practices associated with sheep-dipping pose a potential threat at this site, and are currently under investigation. Much of the alluvial forest cover is fragmented and/orin poor condition. | Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: The extent and distribution of qualifying natural habitats and habitats of qualifying species; The structure and function (including typical species) of qualifying natural habitats and habitats and habitats of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species within the site. |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|--|--|---|--|
| Mersey Estuary SPA and Ramsar | A048 Tadorna tadorna; Common shelduck (Nonbreeding) A052 Anas crecca; Eurasian teal (Non-breeding) A054 Anas acuta; Northern pintail (Non-breeding) A140 Pluvialis apricaria; European golden plover (Non-breeding) A149 Calidris alpina alpina; Dunlin (Non-breeding) A156 Limosa limosa islandica; Black-tailed godwit (Non-breeding) A162 Tringa totanus; Common redshank (Nonbreeding) Waterbird assemblage Ramsar - Common shelduck, Tadorna tadorna; Black-tailed godwit, Limosa limosa islandica; Common redshank, Tringa totanus tetanus; Eurasian teal, Anas crecca; Northern pintail, Anas acuta; Dunlin, Calidris alpina alpine. | Wintering bird numbers and associated intertidal flats are robust to day-to-day change. Nevertheless, the estuary is subject to multiple uses; it is heavily industrialised, a substantial urban conurbation, has multiple transport requirements and increasing recreational activities. The site is vulnerable to physical loss through land-claim and development, physical damage caused by navigation capital and maintenance dredging, agricultural requirements, non-physical loss, toxic and non-toxic contamination and biological disturbance by wildfowling. | Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive. Subject to natural change, to maintain or restore: The extent and distribution of the habitats of the qualifying features; the qualifying features; The populations of the qualifying features rely; The distribution of the qualifying features within the site. |
| Mersey Narrows & North Wirral Foreshore pSPA and Ramsar | Annex 1: Bar-tailed Godwit Limosa lapponica Common Tern Sterna hirundo Little Gull Hydrocoloeus minutus Knot Calidris canutus islandica Ramsar - regularly supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions Knot Calidris canutus; Bar-tailed Godwit Limosa lapponica; Little Gull Hydrocoloeus minutes; Common Tern sterna hirundo. | | |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|------------------------------------|---|---|--|
| Leighton Moss SPA and Ramsar | A021 Botaurus stellaris; Great bittern (Breeding) A021 Botaurus stellaris; Great bittern (Non-breeding) A081 Circus aeruginosus; Eurasian marsh harrier (Breeding) Ramsar - Large reedbed habitat characteristic of the biogeographically region. The reedbeds are of particular importance as a northern outpost for breeding populations of great bittern Botaurus stellaris, Eurasian marsh harrier Circus aeruginosus and bearded tit Panurus biarmicus. Species occurring in nationally important numbers outside the breeding season include northern shoveler Anas clypeata and water rail Rallus aquaticus. | Leighton Moss is the largest reedbed in North West England and is vulnerable to changes in water quality and water levels. The decline of booming bitterns on the site, reflecting a national trend, has been halted through detailed research and improved management of the site. The Moss is also susceptible to saline intrusion upstream of its tidal sluice from Morecambe Bay. | Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive. Subject to natural change, to maintain or restore: The extent and distribution of the habitats of the qualifying features; The structure and function of the habitats of the qualifying features; The supporting processes on which the habitats of the qualifying features rely; The populations of the qualifying features within the site. |
| Malham Tam Ramsar | Contains the highest marl lake in Britain, along with acidophilous bog, calcareous fen and soligenous mire. Supports the nationally rare alpine bartisia Bartsia alpina and narrow small reed Calamagrostis stricta and seven nationally scarce species. Supports five listed British Red Data Book invertebrates including the caddis fly Agrypnia crassicornis. | | |

| Site name | Qualifying Features | Vulnerability and Pressures | Conservation Objectives |
|------------------------------------|---|---|--|
| Shell Flat and Lune Deep SAC | 1110 Sandbanks which are slightly covered by sea water at all time 1170 Reefs | Operations likely to affect the habitats are: i) Physical loss by smothering; ii) Physical damage by siltation or abrasion; iii) Toxic contamination by introduction of synthetic or non-synthetic compounds; iv) Non-toxic contamination from changes in nutrient loading, organic loading, or changes in turbidity; v) Changes in salinity; vi) Biological disturbance by Introduction of microbial pathogens, introduction of nonnative species and translocation, or selective extraction of species. | □ Subject to natural change, maintain the sandbanks slightly covered by seawater all the time in favourable condition. □ Subject to natural change, maintain the reefs in favourable condition. |
| SPA Bay | A001 Gavia Stellata A065 Melanitta nigra | Commercial/Recreational fishing Dredging Off shore renewable energy industry Marine tourism and leisure activities including marina developments. Along the Flyde coast there are issues with water quality. | □ Subject to natural change, maintain or enhance the red-throated diver population and its supporting habitats in favourable condition. □ Subject to natural change, maintain or enhance the common scoter population and its supporting habitats in favourable condition □ Subject to natural change, maintain or enhance the waterbird assemblage and its supporting habitats in favourable condition. |

Appendix C

Detailed Assessment of Each Objective

Table 3: Implications of key objectives for European Sites

| Objective | Noise/ Vibration Impacts | Air Quality Impacts | Water Quality Impacts | General disturbance |
|-------------------|--|--|---|---|
| 4.1 to 4.11 | No significant change | No significant change | No significant change | No significant change |
| 1.3 1.7 | No significant change | No significant change | No significant change | No significant change |
| 1.1 | No significant change | No significant change | No significant change | No significant change |
| 2.1 2.3 | No significant change | No significant change | No significant change | No significant change |
| 2.5 2.6 | No significant change | No significant change | No significant change | No significant change |
| 2.4 2.5 | No significant change | No significant change | No significant change | No significant change |
| 6.2 6.5 6.6 | No significant change | No significant change | No significant change | Potential indirect positive impact from incorporating climate change and flood risk into planning and development proposals could benefit European sites such as the Ribble & Alt Estuaries (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar), Malham Tarn (Ramsar) and Liverpool Bay (SPA). |
| 5.5 5.1 5.4 | No significant change No significant change | No significant change No significant change | No significant change Greater funding of FRM works increased number of schemes which could improve water quality of European sites suchas the Ribble & Alt | No significant change Greater funding of FRM works increased number of schemes potential for a scheme within the Ribble & Alt Estuaries (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & |

51

| Objective Noise/ Air Quality Water Qual Vibration Impacts Impacts | | Water Quality Impacts | General disturbance | |
|---|-----------------------|--------------------------|---|--|
| | impacts | | North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar); Malham Tarn (Ramsar) and Liverpool Bay (SPA) if a scheme was developed nearby. | Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar); Malham Tarn (Ramsar) and Liverpool Bay (SPA) indirectly. If there are an increased number of schemes there could be an impact on the sites detailed above if not assessed sufficiently for impacts on ecology as part of the project level HRA. Schemes could potentially affect water levels positively or negatively in other watercourses and could impact on ecology within those habitats which would be assessed with locational data at the project level. |
| 1.7 4.5 4.6 | No significant change | No significant change | No significant change | No significant change |
| 2.8 | No significant change | No significant change | No significant change | No significant change |
| 4.4 4.7 | No significant change | No significant change | No significant change | No significant change |
| 3.1 3.2 | No significant change | No significant change | Potential for improved water quality (for example through controlled drainage development under Schedule 3 of the Flood Water Management Act which requires developments to obtain SuDs Approval Board approval) in the Ribble & Alt Estuaries (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden | Potentially less chance of flooding in Ribble & Alt Estuaries (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar) Leighton Moss (SPA/Ramsar) or Liverpool Bay (SPA) if scheme nearby. |

| Objective | Noise/ Vibration Impacts | Air Quality Impacts | Water Quality Impacts | General disturbance |
|-------------------|--------------------------------|------------------------|--|--|
| | Impacts | | (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar); Malham Tarn (Ramsar) and Liverpool Bay (SPA) if development is nearby. | |
| 3.2 3.4 3.6 | No significant change | No significant change | Increased use and statutory regulation of SuDs in European sites such as Ribble & Alt Estuaries (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar) and Malham Tarn (Ramsar) would reduce flood risk and improve water quality. | Increased use and statutory regulation of SuDs in European sites such as Ribble & Alt Estuaries (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar) and Malham Tarn (Ramsar) would reduce flood risk and improve water quality. |
| 2.4 | No significant change | No significant change | No significant change | No significant change |
| 4.5 4.6 | No significant change | No significant change | Potential positive impact if increased maintenance of assets with a flood risk management function within the Ribble & Alt Estuaries (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar); | Potential increased maintenance of assets with a flood risk management function within the Ribble & Alt Estuaries (SPA/Ramsar); North Pennine Dales Meadows (SAC); Martin Mere (SPA/Ramsar); Dee Estuary (SAC/SPA/Ramsar); Calf Hill & Cragg Woods (SAC); Morecambe Bay (SAC/SPA/Ramsar); River Kent (SAC); Sefton Coast (SAC); River Eden (SAC); Mersey Estuary (SPA/Ramsar); Mersey Narrows & North Wirral Foreshore (pSPA/Ramsar); Leighton Moss (SPA/Ramsar); Malham Tarn (Ramsar) and Liverpool Bay (SPA). |

| Objective | Noise/ Vibration Impacts | Air Quality Impacts | Water Quality Impacts | General disturbance |
|-----------|--------------------------------|------------------------|--|---------------------|
| | | | and Liverpool Bay (SPA) this could improve water quality and reduce flood risk. | |

Agenda Item 8.4 **EXECUTIVE BOARD DECISION**



REPORT OF: **Executive Member for Finance and Governance**

LEAD OFFICERS: Director of Finance

DATE: 11th November 2021

PORTFOLIO/S

AFFECTED:

WARD/S AFFECTED: ΑII

KEY DECISION: YES ⊠ NO □

ΑII

SUBJECT: CORPORATE REVENUE BUDGET MONITORING REPORT QUARTER 2 - 2021/22

1. EXECUTIVE SUMMARY

To report the overall revenue financial position of the Council, highlighting any significant issues and explaining variations in the second quarter of the financial year.

2. RECOMMENDATIONS

The Executive Board is asked to approve:

- the portfolio cash limit adjustments outlined in Appendix 1
- the budget summary provided in Appendix 2
- the Earmarked reserves position shown in Appendix 3

3. BACKGROUND

All portfolios are required to examine their revenue budget position on a monthly basis. Regular reports are submitted to Executive Board for review along with a final report, detailing the financial outturn position.

4. KEY ISSUES & RISKS

- a) Actual revenue expenditure at 30th September 2021 in relation to controllable budgets across all portfolios was £53.605 million, which is 42.13% of the current budget. Further details relating to the financial position of each portfolio are outlined in Section 6.
- b) Based on the information currently available, Earmarked Reserves available for discretionary use within the Council are £46.206 million at 30th September 2021 compared with a balance of £47.665 million at 31st March 2021, with a further £13.078 million of 'Other Reserves' held mainly in relation to schools.

5. POLICY IMPLICATIONS

Page 349

Page 1 of 7 EBD: V1/16

The information contained within the report accords with the three year budget forecast within the Medium Term Financial Strategy 2021-24, as approved at Finance Council on 1st March 2021.

6. FINANCIAL IMPLICATIONS

6.1 CASH LIMITS AND REVENUE EXPENDITURE

6.1.1 Revenue Budget Overview

The 2021/22 Budget and MTFS 2021-2024 approved by Finance Council in March 2021 set a balanced budget for the year based on the assumptions made at that time. The Covid-19 pandemic continues to create a significant shock to the economy and result in unplanned expenditure and income losses for the Council, as set out in previous reports to the Executive Board and Council Forum.

Work will continue over the coming months to monitor and forecast the costs and savings associated with both the pandemic and any other emerging budget pressures. In the meantime, arrangements are continuing to scrutinise all existing expenditure plans and Executive Members and their Directors are working to develop potential savings options for consideration.

6.1.2 Performance Against Controllable Budgets

Appendix 1 details the portfolio controllable budgets approved by the Executive Board in September 2021 together with the details of the adjustments recommended to the Board for approval in this report. These include:

- transfers (budget virements) between portfolios
- transfers from Unallocated reserves to support budget pressures
- transfers from contingencies
- transfers from Earmarked reserves in respect of grants / contributions and other budgets approved for carry forward from 2020/21

The principle issues at the end of the second quarter of the year are summarised below and provided in detail at Appendix 2:

Summary

| | Original Budget 2021/22 £000 | Variations £000 | Working Budget 2021/22 £000 | Forecast Outturn £000 | Variation £000 |
|---------------------------------|---------------------------------------|--------------------|--------------------------------------|-----------------------------|-------------------|
| Portfolio Expenditure | 119,949 | 6,033 | 125,982 | 131,639 | 5,658 |
| Corporate Income and | | | | | |
| Expenditure | (7,797) | (9,429) | (17,226) | (17,226) | 0 |
| Contribution to/(from) Reserves | (4,463) | 3,004 | (1,459) | (1,459) | 0 |
| General Fund Working Balance | 53 | 392 | 445 | (5,213) | (5,658) |
| Net Expenditure | 107,741 | 0 | 107,741 | 107,741 | 0 |
| Total Income | (107,741) | 0 | (107,741) | (107,741) | 0 |

Covid-19

As stated above, the Covid-19 pandemic has resulted in significant unplanned expenditure and income losses, which are being monitored and repetite by sortfolios. The Government's Sales, Fees and

EBD: V1/16 Page 2 of 7

Charges support scheme finished at the end of June 2021 and all subsequent losses will need to be covered by Council resources.

With regard to economic activity and the potential ongoing impact, the government's own data indicates activity is not expected to return to pre-Covid-19 levels until 2023. The impact of the pandemic led to a 10% fall in economic output over 2020 which is only expected to recover by 4% this year and 7% in 2022/23.

As noted in the last quarterly report an amount of £5.149m has been allocated for response and recovery activity across the portfolios, to manage increased demand and to provide capacity to deal with outstanding backlogs as we move to business as usual. This expenditure is being monitored closely and will be incurred across the financial years 2021-22 and 2022-23.

Portfolio positions

The underlying budget issues for each portfolio at the end of the first quarter of the year are as follows:

Adult Services & Prevention

At the end of September monitoring, based on current levels of demand and information presently available, net spend for the portfolio for 2021/22 is predicted to breakeven.

Pressures exist within the commissioning budget due to the additional demand and cost of care, however these are offset by one off income in this financial year.

As a result of changes to discharge and joint funding pathways the portfolio is beginning to see an increase in referrals and care package costs reverting back to Local Authority funding. Hospital discharge trackers continue to be monitored to estimate care costs coming back to Social Care to take into consideration the impact of Covid-19 and hospital discharge wherever possible and it should be recognised that this may result in further escalating costs in 2021/22 which will require funding from Covid-19 grants carried forward. The impact of Covid-19, together with winter pressures is likely to result in escalating costs over the next few months.

Neighbourhood and Prevention Services is forecasting to break even.

Public Health & Wellbeing

Leisure, Heritage & Cultural Services:

On the basis of the current position following the reopening of leisure facilities and information presently available, net spend for the portfolio for 2021/22 is predicted to be an overspend of £1.011m. This is a significantly improved position from a predicted overspend of £1.725m in Quarter 1 and reflects the positive uptake of Leisure services and hence increasing income following the re-opening of sites.

Whilst income generation in leisure is improving, membership numbers are showing slower signs of recovery at Blackburn Sports and Leisure Centre and Witton Park Arena which is impacting on their income levels. Leisure recovery will need careful monitoring throughout the year.

The Executive Board on 14th October 2021 approved investment in health and fitness facilities at Witton Park Arena and Blackburn Sports and Leisure Centre for new gym equipment, new flooring and new lighting. The purchase of new equipment for WPA and BSLC from the £5.149m COVID recovery monies noted above will enable the centres to develop and grow the membership base following the reductions incurred as a result of the pandemic.

The impact of the extended service closures during the Covid restrictions will continue throughout this financial year and the portfolio will require further support to offset its ongoing income losses.

Page 351

Public Health:

The currently predicted forecast in respect of Public Health assumes a break even position for the year.

Children, Young People & Education

The portfolio continues to feel the ongoing financial impact of the Covid-19 pandemic, and this is likely to continue into the foreseeable future.

The main areas facing significant budget pressures are Special Guardianship Orders, Education Transport and Fostering. There has also been a reduction in the latest income projections for Free Flexible Entitlement income within the Children's Centres for the Autumn and Spring terms, which is currently under review.

The current forecast is an estimated overspend against budget of £1.736m at financial year end.

Dedicated Schools Grant / Schools Block

Services in Schools & Education (DSG) are currently forecast to spend the funding available in 2021/22 through the DSG and Pupil Premium.

Schools and Education funding from DSG is monitored by the Schools Forum and reports are considered on a regular basis.

Environmental Services

The portfolio is currently predicting an overspend of £557k. This predicted overspend is a result of COVID impacted income losses from taxi licensing and parking services in particular. Waste disposal budgets continue to be monitored closely for pressures that may arise as the year progresses.

Growth & Development

The portfolio is currently forecasting an overspend of £844k which is mainly in respect of the Highways budgets and commercial income losses as the current trading position remains impacted by the pandemic and additional COVID related expenditure.

Digital & Customer Services

The portfolio is currently predicted breakeven; income across Registrars and Customer Services which was impacted by COVID 19 in 2020-21 is now returning to pre-pandemic levels.

Finance & Governance

The portfolio has estimated income losses of £1.51m due to Covid-19 losses arising from reduced commercial and traded service income. The forecast for Quarter 1 was an overspend of £2.052m. The current forecast reflects that the trading position is improving at present but this, as with the other portfolios could be impacted by a move to the Government's Plan B for dealing with the rising COVID cases over the winter period and/or the implementation of a further lockdown in this financial year. The significant losses included within this forecast are income losses from commercial rents including the Council's income share from the Mall.

6.2 General Fund Unallocated Reserves

| | £million |
|---|----------|
| Balance on Unallocated General Fund reserves at 30 September 2021 | 8.818 |

There are no further changes to report at this point in the financial year.

6.3 Earmarked reserves

Taking account of the adjustments highlighted at Appendix 3, the level of Earmarked reserves held for discretionary use by the Council at 30th September 2021 will be £46.206 million compared with a balance of £47.665 million as at 31st March 2021.

| Summary of movement | £million |
|--|----------|
| Balance on Earmarked reserves at 30 June 2021 | 38.151 |
| Section 31 Grant - compensation for lost Business Rates income | 8.100 |
| Funding to be carried forward into 2022/23 (see Appendices 1 and 3) | 0.327 |
| Utilise COVID-19 Funding reserve to finance capital expenditure on replacement | (0.285) |
| gym equipment | |
| Utilise CCTV Hub reserve to finance capital expenditure on CCTV equipment | (0.070) |
| Utilise Support for future redundancy costs reserve | (0.017) |
| Balance on Earmarked reserves at 30 September 2021 | 46.206 |

6.4 Collection Fund

Business Rates

As reported at quarter 1, the government has introduced a scheme of enhanced rates reliefs applying to occupied retail, leisure and hospitality properties in the year 2021/22. The discounts are 100% for the period April to June reducing to 66% from July, and are currently estimated to reduce 2021/22 business rates income by £8.1 million.

Funds to fully reimburse local authorities for the local share of these enhanced reliefs are once again being paid on account using a grant under section 31 of the Local Government Act 2003, with a full reconciliation to be carried out at year-end. The budget for "Other non-ringfenced grants" has, therefore, been increased by £8.1m with a corresponding transfer to earmarked reserves, which will be used to offset any business rates deficit carried forward as a pressure on 2022/23 budgets.

The current projected year end position for the Business Rates Collection Fund is a deficit carried forward into 2022/2 of £9.6 million, comprising:

| | BR Collection Fund Total | Blackburn with Darwen Share |
|--|-----------------------------|--------------------------------|
| | £m | £m |
| Impact of extended reliefs - compensated by s31 grant | 8.1 | 4.0 |
| Deficit deferred from 2020/21 in line with 3 year deficit spreading arrangements | 0.7 | 0.3 |
| Net reduction in collection | 0.8 | 0.4 |
| Total projected deficit | 9.6 | 4.7 |

The rate of collection for Business Rates is behind target (4.57%) but ahead of last financial year. The change in the rate of discounts awarded from 100% to 66% has resulted in the Council having to rebill those businesses in receipt of the enhanced rates reliefs. As a result, the profile of direct debit instalments has been extended to March rather than January 2022, which makes projection of the likely overall collection rate more difficult.

Page 353

Council Tax

The Council's rate of collection for council tax was 0.7% below target at the end of September 2021. Local Council Tax Support working age claimants are now declining after hitting a peak in 2021/22, and recovery action is continuing as planned.

Taking all these factors into account, the current projected year end position for the Council Tax Collection Fund is break even. It should be noted, however, that a deficit of £1.1 million has been deferred from 2020/21 under the 3 year deficit spreading arrangements, with £0.556 million being recovered from the General Fund budget in each of the years 2022/23 and 2023/22.

7. LEGAL IMPLICATIONS

The Council has a duty to ensure it can deliver a balanced budget. The Local Government Act 2003 imposes a duty on an authority to monitor its budgets during the year and consider what action to take if a potential deterioration is identified.

| if a potential deterioration is identified. |
|--|
| |
| 8. RESOURCE IMPLICATIONS |
| None. |
| |
| |
| 9. EQUALITY AND HEALTH IMPLICATIONS |
| Please select one of the options below. Where appropriate please include the hyperlink to the |
| EIA. |
| |
| Option 1 Equality Impact Assessment (EIA) not required – the EIA checklist has been completed. |
| Option 2 In determining this matter the Executive Member needs to consider the EIA associated |
| with this item in advance of making the decision. (insert EIA link here) |
| The same was a second of the same grant of the same same same same same same same sam |
| Option 3 In determining this matter the Executive Board Members need to consider the EIA |
| associated with this item in advance of making the decision. (insert EIA attachment) |
| |
| |
| 10. CONSULTATIONS |
| Not applicable. |
| |
| |

11. STATEMENT OF COMPLIANCE

The recommendations are made further to advice from the Monitoring Officer and the Section 151 Officer has confirmed that they do not incur unlawful expenditure. They are also compliant with equality legislation and an equality analysis and impact assessment has been considered. The recommendations reflect the core principles of good governance set out in the Council's Code of Corporate Governance.

12. DECLARATION OF INTEREST

All Declarations of Interest of any Executive Member consulted and note of any dispensation granted by the Chief Executive will be recorded in the Summary of Decisions published on the day following the meeting.

Page 354

EBD: V1/16 Page **6** of **7**

| VERSION: | V2 |
|------------------|------------------------|
| | |
| | Julie Jewson |
| CONTACT OFFICER: | Senior Finance Manager |
| | Tel 01254 585893 |
| DATE: | 30th October 2021 |
| BACKGROUND | N/A |
| PAPER: | |

| | Adult Services | Public Health & | Children, Young People & | Environmental | Growth & | Digital & Customer | Finance & | Schools & Education | |
|---|----------------|-----------------|--------------------------|---------------|-------------|-----------------------|------------|------------------------|---------------|
| | and Prevention | Wellbeing | Education | Services | Development | Services | Governance | (DSG) | TOTAL |
| | £ | £ | £ | £ | £ | £ | £ | £ | £ |
| Controllable Budget approved at Executive Board September 2021 | 57,996,827 | 3,570,710 | 32,009,755 | 9,405,380 | 8,398,740 | 6,170,160 | 9,690,203 | (941,000) | 126,300,775 |
| Transfers between portfolios | | | | | | | | | |
| Budget transfer in relation to Workforce Development Support | (40,000) | | | | | | 40,000 | | 0 |
| Transfors (to) /from contingency | | | | | | | | | C |
| Transfers (to)/from contingency | | | | | | | | | 0 |
| | | | | | | | | | O |
| Carry forward of grants, contributions and other budgets from 2020/21 | | | | | | | | | |
| | | | | | | | | | 0 |
| | | | | | | | | | 0 |
| Carry forward of grants, contributions and other budgets from 2020/21 | | | | | | | | | 0 |
| Cfwd Social Integration Programme funding | (200,747) | | | | | | | | (200,747) |
| Cfwd Strengthening Communities - Volunteering in Lancashire | | | | | | | | | |
| (SCVL) monies | (109,641) | | | | | | | | (109,641) |
| Cfwd More Positive Together (MPT) funding | (16,870) | | | | | | | | (16,870) 0 |
| | | | | | | | | | О |
| Other transfers (to)/from earmarked reserves Budget increase for costs of Early Retirement / Voluntary | | | | | | | | | |
| Redundancy | | | | 17,300 | | | | | 17,300 |
| | | | | | | | | | C |
| Transfers (to)/from unallocated reserves | | | | | | | | | 0 |
| | | | | | | | | | C |
| Oth on buildings and inches and in | | | | | | | | | 0 |
| Other budget adjustments Utilise revnue budget to finance capital expenditure - Witton | | | | | | | | | |
| Cycle Track | | (9,696) | | | | | | | (9,696) |
| Revised Controllable Budget as at 30th September 2021 | 57,629,569 | 3,561,014 | 32,009,755 | 9,422,680 | 8,398,740 | 6,170,160 | 9,730,203 | (941,000) | 125,981,121 |

Corporate Budget Monitoring - Quarter 2

| | Original Budget | | Working Budget | Forecast | |
|---|--------------------|------------|-------------------|-----------|-----------|
| | 2021/22 | Variations | 2021/22 | Outturn | Variation |
| | £000 | £000 | £000 | £000 | £000 |
| Adult Services and Prevention | 53,747 | 3,883 | 57,630 | 57,630 | 0 |
| Public Health and Wellbeing | 2,239 | 1,322 | 3,561 | 4,572 | 1,011 |
| Childrens | 32,194 | (184) | 32,010 | 33,746 | 1,736 |
| Environmental Services | 9,172 | 251 | 9,423 | 9,979 | 556 |
| Growth and Development | 8,076 | 323 | 8,399 | 9,243 | 844 |
| Digital and Customer Services | 5,771 | 399 | 6,170 | 6,170 | (0) |
| Finance and Governance | 9,691 | 39 | 9,730 | 11,240 | 1,510 |
| Schools and Education DSG | (941) | 0 | (941) | (941) | 0 |
| Net Cost of Services | 119,949 | 6,033 | 125,982 | 131,639 | 5,658 |
| Corporate Income and Expenditure | | | | | |
| RCCO | 3,381 | 902 | 4,283 | 4,283 | 0 |
| School Contribution to Capital | (416) | 0 | (416) | (416) | 0 |
| Contingencies | 8,251 | (1,709) | 6,542 | 6,542 | 0 |
| Debt Charges | 18,287 | (505) | 17,782 | 17,782 | 0 |
| Other Non-Ringfenced Grants | (37,490) | (8,117) | (45,607) | (45,607) | 0 |
| Town and Parish Council Precepts | 190 | 0 | 190 | 190 | 0 |
| Net Revenue Expenditure | 112,152 | (3,396) | 108,755 | 114,413 | 5,658 |
| Contribution to/(from) Reserves | (4,463) | 3,004 | (1,459) | (1,459) | 0 |
| General Fund Working Balance | 53 | 392 | 445 | (5,213) | (5,658) |
| Net Expenditure | 107,741 | (0) | 107,741 | 107,741 | (0) |
| | | | | | |
| Business Rates - Top Up Grant | (24,275) | 0 | (24,275) | (24,275) | 0 |
| Retained Business Rates | (20,545) | 0 | (20,545) | (20,545) | 0 |
| Revenue Support Grant | (13,597) | 0 | (13,597) | (13,597) | 0 |
| Collection Fund - Council Tax (Surplus)/Deficit | 538 | 0 | 538 | 538 | 0 |
| Collection Fund - NNDR (Surplus)/Deficit | 7,345 | 0 | 7,345 | 7,345 | 0 |
| Council Tax Income | (57,207) | 0 | (57,207) | (57,207) | 0 |
| Total Income | (107,741) | 0 | (107,741) | (107,741) | 0 |

| | Balance at 30 June 2021 | | nsfers to/(from) serves in Qtr 2 | Balance at 30 Sept 2021 |
|--|--|---------------------------------------|-------------------------------------|----------------------------|
| | Q1 2021/22 - As reported to Exec Board September 2021 £000 | Transfers between reserves £000 | Other transfer to /(from) reserves | Q2 £000 |
| Welfare, council tax and business rates reforms | | | | |
| Welfare and council tax reforms | 3,049 | | | 1,549 |
| Section 31 Grant - Compensation for lost Business Rates income | 695 | | 8,100 | 8,795 |
| Investment in assets and infrastructure | | | | |
| Office Accommodation and property improvements | 562 | | | 562 |
| Highways winter maintenance | 595 | | | 595 |
| Support for the Local Plan | 73 | | | 73 |
| Flood Defence | 77 | | | 77 |
| Support for Other Resources and Transformation projects | | | | |
| Legal Advice Reserve | 105 | | | 105 |
| Partnerships & Transformation | 78 | | | 78 |
| Insurance risk investment fund | 43 | | | 43 |
| Brexit Preparation Funding | 149 | | | 149 |
| Support for People Services | | | | |
| Schools Improvement (SSIF) | 546 | | | 546 |
| Troubled Families / Targetted Youth Support | 224 | | | 224 |
| YOT partnership | 291 | | | 291 |
| Music Services | 117 | | | 117 |
| Disabled Facilities Grants | 289 | | | 289 |
| Future Demand Pressures | 1,799 | | | 1,799 |
| Better Care Fund | 316 | | | 316 |
| Support for Place Services | | | | |
| Investment to support business rates growth | 520 | | | 520 |
| Place Shaping Investment Reserve | 400 | | | 400 |
| | | | | |
| Contingent sums to support future downsizing and transformation programmes | 2 244 | | (47) | 2 404 |
| Support for future redundancy costs Support for part year effect of future savings plans | 2,211 2,187 | | (17) | 2,194 1,187 |
| Support for Future Cost Pressures | 1,000 | | | 0 |
| Digital Transformation | 2,868 | | | 1,368 |
| Response and Recovery Reserve | 6,000 | (3,500) | | 2,500 |
| Budget Support Reserve | 0 | 3,000 | | 5,000 |
| Invest to Save Reserve | 0 | 5,000 | | 5,000 |
| Amounts b/fwd from previous year(s) in respect of unspent grants and contributions | | | | |
| Transformation Challenge Award | 64 | | | 64 |
| SEN / SEND Reform Grant /SEND Prep for Empl | 25 | | | 25 |
| Public Health Grant | 0 | | | 0 |
| Transforming Lives | 37 | | | 37 |
| One Public Estate grant | 474 | | | 474 |
| Electoral Grant DCLG Transparency Code New Burdens | 57 13 | | | 57 13 |
| Adult PSS - Local Reform and Community Voices | 108 | | | 108 |
| Adult PSS - War Pensions Disregard | 30 | | | 30 |
| Flexible Homelessness Support Grant (FHSG) | 68 | | | 68 |
| Homelessness Reduction Act New Burdens Funding | 0 | | | 0 |
| Social Integration funding NHS Funding for I PRES integration with Mosaic and spine mini services | 270 29 | | 201 | 471 |
| NHS Funding for LPRES integration with Mosaic and spine mini services COVID-19 Funding from MHCLG | 11,664 | | (285) | 29 9,879 |
| Combined Authority Grant | 48 | | (203) | 48 |
| Burdens Fund monies | 3 | | | 3 |
| Custom build Grant | 15 | | | 15 |
| Social Prescribig Link Workers Monies | 11 | | | 11 |
| More Positive Together monies Virtual School Grant | 96 | | 17 | 17 96 |
| Clincally Extremely Vulnerable COVID Funding | 290 | | | 290 |
| zamosni, zamomoni, rumerusto de ris rumumg | | | | 250 |
| Amounts committed in future year budgets/MTFS | | | | |
| Budget carry over for implementation of Concerto (Property system) | 20 | | | 20 |
| Budget carry over for Intack Depot driveway | 10 | | , | 10 |
| CCTV Hub carry forward Development Investment Fund (Capital) | 152 | | (70) | 82 |
| Development Investment Fund (Capital) Strengthening Communities Volunteering in Lancashire (SCVL) | | | 109 | 1 109 |
| Community Support Unit - request to carry forward specific budget underspends | 77 | | 109 | 77 |
| Motivate Fund Raising | 2 | | | 2 |

| | Balance at 30 June 2021 | Requested Transfers to/(from) earmarked reserves in Qtr 2 | | Balance at 30 Sept 2021 |
|---|----------------------------|---|-------------------|----------------------------|
| | Q1 2021/22 - As | Transfers | Other transfer to | Q2 |
| | reported to Exec | between reserves | /(from) reserves | |
| | Board September | | | |
| | 2021 £000 | £000 | £000 | £000 |
| Reserves held for specified purposes | | | | |
| Developers Contributions (S106 Income) * | (808) | | | (808) |
| Future Maintenance of Wainwright Bridge | 28 | | | 28 |
| Future Maintenance of Witton Park 3G Pitches | 125 | | | 125 |
| Leisure Equipment Pay-back | 60 | | | 60 |
| Future remediation costs in respect of former landfill sites | 400 | | | 400 |
| Highways claims anticipated for years up to current year but not yet received | 300 | | | 300 |
| Art Acquisitions Fund | 18 | | | 18 |
| W. Ferrier Bequest (for museum re Kathleen Ferrier) | 20 | | | 20 |
| Allowance for contingent liabilities (e.g. MMI) | 250 | | | 250 |
| TOTAL EARMARKED RESERVES FOR DISCRETIONARY USE | 38,151 | 0 | 8,055 | 46,206 |
| | | | | |
| 'Other Earmarked' Reserves | | | | |
| Reserves held in respect of joint arrangements and charitable bodies | | | | |
| Darwen Market Traders Association | 2 | | | 2 |
| Joint Building Control Account | 151 | | | 151 |
| Turton Tower Charity | 73 | | | 73 |
| LSCB Safeguarding Partners Fund | 192 | | | 192 |
| Reserves held in relation to schools | | | | |
| Dedicated Schools Grant - Surplus | 3,599 | | | 3,599 |
| LMS Schools Balances | 9,061 | | | 9,061 |
| TOTAL 'OTHER EARMARKED' RESERVES | 13,078 | 0 | 0 | 13,078 |
| TOTAL EARMARKED RESERVES | 51,229 | 0 | 8,055 | 59,284 |
| LINALLOCATED DESERVES | 8,818 | 0 | 0 | 0 010 |
| UNALLOCATED RESERVES | 8,818 | U | U | 8,818 |

^{*} Developers Contributions (S106 Income) - this reserve appears above in a negative position. This is due to the fact that income received during 2021/22 will only be reflected in the reserve once the year end outturn entries have been completed, as is the normal practice.

Agenda Item 8.5 **EXECUTIVE BOARD DECISION**



REPORT OF: Executive Member for Finance and Governance

LEAD OFFICERS: Director of Finance

DATE: 11 November 2021

| PORTFOLIO/S AFFECTED: | All |
|--------------------------|--------|
| WARD/S AFFECTED: | All |
| KEY DECISION: | YES NO |

SUBJECT: CORPORATE CAPITAL BUDGET AND BALANCE SHEET MONITORING REPORT 2021/22 – Quarter 2 (6 months to 30th September 2021)

1. EXECUTIVE SUMMARY

To report the overall financial position of the Council in respect of the capital programme as at 30th September 2021, highlighting key issues and explaining variations in the first 6 months of the financial year.

2. RECOMMENDATIONS

The Executive Board is asked;

- to approve the revised capital programme as per Appendix 1,
- to approve the variations to the programme shown in Appendix 2,

3. BACKGROUND

All portfolios are required to examine their capital budget position on a monthly basis.

4. KEY ISSUES & RISKS

- a) The total cost of the Council's capital investment programme for 2021/22 has now increased from £37.387 million, as approved by Executive Board on 12th August 2021, to £38.339 million. The net variation of £0.952 million (detailed in Appendix 2) reflects;
 - Variations made to reflect the approval of schemes during the second quarter of the year, including an increase of £3.282 million (of which £0.700 million is funded from reallocation of budgets within the existing 2021/22 programme)
 - further variations during the second quarter of the year, for which approval is requested (£0.755 million)
 - slippage and re-profiling of budgets during the second quarter of the year (£2.385 million).
- b) As at 30th September 2021, the capital expenditure across the portfolios was £4.926 million (representing 12.8% of the current, revised projected capital spend).
- c) The estimated capital receipts expected in 2021/22 is £5.1 million; £3,009,048 has been received in the first six months of the year.

 Page 360

EBD: V1/16 Page **1** of **7**

5. POLICY IMPLICATIONS

The information contained within the report accords with the capital strategy and the three year budget forecast within the Medium Term Financial Strategy 2021-24, as approved at Finance Council on 1st March 2021.

6. FINANCIAL IMPLICATIONS

6.1 CAPITAL PROGRAMME

EBD: V1/16

The variations in actual spend and resource availability for 2021/22 are summarised by portfolio in Appendix 1. Variations in spending are set out in Appendix 2.

The capital programme for 2021/22 has increased by £0.952 million in the second quarter of the year. The other main points to note are as follows:

6.1.1 New Approved Capital Schemes

Several capital schemes (new schemes and amendments to existing schemes) were approved in the second quarter of 2021/22 and have now been added to the capital programme as follows:

| Scheme | Amount | Approved By | Date Approved |
|---------------------------------------|----------|------------------|------------------|
| Adults and Prevention Service | S | | |
| CCTV Hub Upgrade - £75,000 | £145,000 | Executive Member | 05-Mar-21 |
| reallocation from Corporate ICT | | Decision | |
| earmarked scheme | | | |
| Children's Young People & Ed | ucation | | |
| Shadsworth Infant School – Heating | £150,000 | Executive Board | 09-Sept-21 |
| Ashleigh – Heating and ventilation | £35,000 | Executive Board | 09-Sept-21 |
| Ashworth Nursery – Fencing | £20,000 | Executive Board | 09-Sept-21 |
| Audley Infants – Upgrade fire alarm | £25,000 | Executive Board | 09-Sept-21 |
| Audley Infants – Resurfacing pathways | £20,000 | Executive Board | 09-Sept-21 |
| Audley Infants – Replace fascias and | £55,000 | Executive Board | 09-Sept-21 |
| soffits | | | |
| Audley Infants & Juniors – Replacing | £60,000 | Executive Board | 09-Sept-21 |
| windows and upstandings to lean-to | | | |
| roof structure | | | |
| Avondale – Resurface playground | £140,000 | Executive Board | 09-Sept-21 |
| Belmont – Replace fire alarm | £30,000 | Executive Board | 09-Sept-21 |
| Brookhouse Primary – Replace roof | £75,000 | Executive Board | 09-Sept-21 |
| system | | | |
| Brookhouse Primary – Replace Boilers | £40,000 | Executive Board | 09-Sept-21 |
| Intack Primary – Replacement of | £18,000 | Executive Board | 09-Sept-21 |
| external doors | | | |
| Longshaw Juniors – Replace fire alarm | £40,000 | Executive Board | 09-Sept-21 |
| Lower Darwen Primary – Heating | £210,000 | Executive Board | 09-Sept-21 |
| Roe Lee – Roofing, upstandings and | £195,000 | Executive Board | 09-Sept-21 |
| windows | | | |
| Roe Lee – Repairs to service road, | £100,000 | Executive Board | 09-Sept-21 |
| external areas and automates gates | Page 361 | | |

Page 361

| Shadsworth Juniors – Replacement of boilers | £40,000 | Executive Board | 09-Sept-21 |
|--|------------|--|------------|
| Turton and Edgworth – Upgrade fire alarm | £30,000 | Executive Board | 09-Sept-21 |
| Meadowhead Infants – Drainage installations | £20,000 | Executive Board | 09-Sept-21 |
| Roe Lee – Perimeter fencing | £4,000 | Executive Board | 09-Sept-21 |
| Lower Darwen Primary School – Fire alarm replacement | £16,000 | Executive Board | 09-Sept-21 |
| Project management fee | £50,000 | Executive Board | 09-Sept-21 |
| Contingency budget | £100,000 | Executive Board | 09-Sept-21 |
| Public Health and Wellbeing | | | |
| Replacement Gym Equipment | £285,000 | Executive Board | 14-Oct-21 |
| Growth and Development | | | |
| Land Release Fund – Clarendon Road Site | £195,000 | Director of Finance - Grant Application | 27-Sept-21 |
| Acquisition of Penny Street Car Park | £25,000 | Executive Board | 11-Feb-21 |
| Prayer Shelter at Pleasington Cemetery | £325,000 | Executive Board | 12-Aug-21 |
| Greenfields CC and Mill Hill Juniors FC Grants | £50,000 | Executive Member Decision | 22-Oct-21 |
| Digital and Customer Services | | | |
| Microsoft 365 and Unified Comms – Reallocation from the Corporate ICT earmarked scheme | £624,950 | Executive Board | 08-Jul-21 |
| Finance and Governance | | | |
| Treescapes Fund | £158,900 | Strategic Director Place - Grant Application | 20-Sept-21 |
| Total | £3,281,850 | | |

6.1.2 Adults and Prevention Services

Disabled Facilities Grant

The Council has received an additional allocation of £253,000 for the Disabled Facilities Grant. A variation is requested to increase the scheme by this amount.

6.1.3 Children's Young People & Education

Capital Allocations for Schools

The final Schools Capital allocation of £4.793 million has been partially allocated, leaving a remaining balance of £3.788 million, as noted in the report approved by Executive Board on 09/09/2021. The scheme allocations, as approved by Executive Board on 09/09/2021, are detailed in 6.1.1.

6.1.4 Public Health and Wellbeing

Witton Park Cycle Track

A request is made to add a scheme to the capital programme totalling £19,000 for works installing a cycling track at Witton Park. This is to be funded partially by a grant from British Cycling and the remainder by a contribution from revenue.

Page 362

EBD: V1/16 Page **3** of **7**

6.1.5 Growth and Development

Local Transport Plan / Reel Cinema and Jubilee Square

A transfer of £45,000 is requested from the Local Transport Plan to the Reel Cinema and Jubilee Square scheme for works to be undertaken on Jubilee Square.

It is anticipated that the emerging additional costs reported at quarter 1 on the Wainwright Railway Bridge refurbishment scheme will be managed within the existing LTP budget.

Growth Team Housing Schemes

Approval is sought to slip the following Growth Team Housing Scheme allocations, as these schemes are all on going:

| Scheme | Slippage Requested £ |
|---------------------------------|----------------------|
| Bank Top and Griffin Clearance | 150,000 |
| Neighbourhood Intervention Fund | 600,000 |
| Equity Loans | 50,000 |
| Empty Homes Cluster | 300,000 |
| Land Release Fund | 450,000 |
| Total Slippage | 1,550,000 |

6.1.6 Digital and Customer Services

<u>Corporate ICT Schemes – Slippage</u>

A request is made to approve the following re-profiling Corporate ICT scheme budgets into 2022/23 for schemes not expected to be completed during the current year:

| Scheme | Slippage Requested £ |
|-------------------------------------|----------------------|
| Core Infrastructure Programme | 100,000 |
| Corporate Website | 10,000 |
| Town Hall IT Infrastructure Upgrade | 100,000 |
| Digital Customer Portal | 100,000 |
| Microsoft 365 and Unified Comms | 525,000 |
| Total Slippage | 835,000 |

6.2 CAPITAL RECEIPTS

Actual capital receipts in the first 6 months of the year were £3,009,048. All of these receipts will be utilised in support of the Minimum Revenue Provision.

6.3 BALANCE SHEET POSITION

6.3.1 Overview

EBD: V1/16

Good balance sheet management assists in the effective use and control over the Council's assets and liabilities. Key assets comprise of the Council's tangible fixed assets, debtors, investments and bank balances. Key liabilities include long and short-term borrowing, creditors and reserves.

6.3.2 Non-current Assets

Tangible non-current assets include property, plant and equipment held by the Council for use in the production or supply of goods and services, for rental to others or for administrative purposes. Property assets are the responsibility of the Finance and Governance portfolio. One fifth of all assets are revalued every year, and annual reviews are undertaken to establish whether any impairment or other adjustments need to be applied. New assets and enhancements to existing assets are managed by way of the capital programme, as reported in Appendix 1.

6.3.3 Borrowing and Investments

Long-term borrowing requirements flow from the capital programme. Regular dialogue and meetings take place between the Director of Finance, their staff and the Council's independent treasury consultants Arlingclose, and options for optimising borrowing requirements are actively reviewed.

Both short and long-term borrowing interest rates have risen over the period. Investment interest rates have remained at low rates throughout the second quarter of the year. No further changes are currently forecast from those reported at quarter 1.

Interest and Debt Repayments Revenue Budget

| | Original Budget £ | Forecast at Quarter 1 £ | Movement Quarter 2 £ | Forecast at Quarter 2 £ |
|--------------------------------|-------------------------|-------------------------------|----------------------------|-------------------------------|
| Interest and investment income | (15,000) | (15,000) | - | (15,000) |
| Debt interest payable | 12,285,500 | 11,905,000 | - | 11,905,000 |
| MRP | 6,016,000 | 5,892,000 | - | 5,892,000 |
| Total | 18,286,500 | 17,782,000 | - | 17,782,000 |

The current borrowing and investment position is as follows:

| | Amounts at 30/09/21 £000 | Amounts at 30/06/21 £000 | Amounts at 31/03/21 £000 |
|---|--------------------------|--------------------------|--------------------------|
| Short term borrowing | 40,000 | 69,250 | 78,250 |
| Long term borrowing | 143,564 | 145,681 | 145,681 |
| Transferred debt re Local Government Reorganisation | 13,311 | 13,582 | 13,582 |
| Recognition of debt re PFI arrangements | 60,673 | 61,138 | 61,603 |
| TOTAL BORROWING | 257,548 | 289,651 | 299,116 |
| Investments made by the Council | 61,873 | 75,548 | 58,633 |

The totals include the debt recognised on the balance sheet as a result of accounting adjustments in respect of bringing the BSF school buildings in to use, which are financed through PFI arrangements. These adjustments are made to ensure that the Council's effective control over, and use of, these assets is recognised with corresponding adjustments to the debt. These changes do not add to the costs faced by the Council Tax payer as the actual capital costs for these schools form part of

EBD: V1/16 Page **5** of **7**

the ongoing stream of payments made to the PFI contractor (which are in turn largely offset by PFI grant funding from the Government).

6.3.4 Debtors

The Council has a corporate debt policy, as well as other specific policies for the management of debt in the key areas of council tax, business rates and housing benefit overpayments. The table below summarises the collection performance of the various debts and the total outstanding debt in the respective areas at 30th September 2021. The table also shows the corresponding level of debt at the same point in the last financial year.

| | Position at 30/09/2021 | Position at 30/09/2020 |
|-------------------------------|------------------------|------------------------|
| Council tax | | |
| Current year balance (£000) | 33,986 | 31,021 |
| Previous year arrears (£000) | 12,573 | 13,753 |
| Total Council tax balances | 46,559 | 44,774 |
| Collection rates | 52.5% | 52.4% |
| Business rates | | |
| Current year balance (£000) | 18,264 | 13,878 |
| Previous year arrears (£000) | 2,922 | 3,556 |
| Total Business rates balances | 21,186 | 17,434 |
| Collection rates | 51.3% | 50.7% |
| Housing Benefit | | |
| Overpayments balances (£000) | 2,527 | 2,756 |

^{*} Last day in month Direct Debits slightly delayed therefore not credited in calculation

Last year the Business Rates collection rate was significantly affected by the measures taken by both central government and the council, to support businesses in the borough through the COVID pandemic. To allow businesses sufficient breathing space from April to June 2020, the council took the decision that it would not request direct debit payments, and instead it would recalculate all Business Rate bills with the instalments reprofiled over the period from July to March.

7. LEGAL IMPLICATIONS

The Council has a duty to ensure it can deliver a balanced budget. The Local Government Act 2003 imposes a duty on an authority to monitor its budgets during the year and consider what action to take if a potential deterioration is identified.

8. RESOURCE IMPLICATIONS

None.

9. EQUALITY AND HEALTH IMPLICATIONS

Please select one of the options below. Where appropriate please include the hyperlink to the EIA.

Option 1 Equality Impact Assessment (PA) get 3605 ired – the EIA checklist has been completed.

EBD: V1/16 Page **6** of **7**

| with this item in advance Option 3 In determine | ning this matter the Executive Member needs to consider the EIA associated e of making the decision. (insert EIA link here) ning this matter the Executive Board Members need to consider the EIA in advance of making the decision. (insert EIA attachment) |
|--|--|
| | |
| 10. CONSULTATIONS None | |
| | |
| Officer has confirmed the equality legislation and a | OMPLIANCE are made further to advice from the Monitoring Officer and the Section 151 at they do not incur unlawful expenditure. They are also compliant with an equality analysis and impact assessment has been considered. The at the core principles of good governance set out in the Council's Code of |
| | |
| | INTEREST est of any Executive Member consulted and note of any dispensation granted will be recorded in the Summary of Decisions published on the day following |
| | |
| VERSION: | V1.0 |
| | |
| CONTACT OFFICER: | Jody Spencer-Anforth (Ext 507748) Julie Jewson (Ext 5893) |
| DATE: | October 2021 |
| BACKGROUND | N/A |
| PAPER: | |

| Overall Capital Monitoring 2021/22 | | | | | |
|---|--|------------------------------------|-----------------------------|--------------|---------------------------------------|
| | | | Current Year 2021/22 | | |
| | Budget Approved by Finance Council on 1 March 2021 | Revised Budget at Qtr 1 Monitoring | Virement / Supp Estimate | Slippage | Revised Budget at Qtr 2 Monitoring |
| | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 |
| Costs | | | | | |
| Adults and Prevention Services | 2,594 | 3,017 | 398 | | 3,415 |
| Children, Young People and Education | 5,800 | 8,252 | 1,956 | _ | 10,208 |
| Environmental Services | 333 | 337 | 1,550 | _ | 337 |
| Public Health and Wellbeing | 333 | - | 304 | _ | 304 |
| Growth and Development | 6,133 | 14,881 | 595 | (1,550) | 13,926 |
| Digital and Customer Services | 1,254 | 2,271 | 625 | (835) | 2,061 |
| Finance and Governance | 2,347 | 4,366 | 159 | (833) | 4,525 |
| Tillance and dovernance | 2,347 | 4,300 | 133 | - | 4,323 |
| Portfolios Total | 18,461 | 33,124 | 4,037 | (2,385) | 34,776 |
| Earmarked Schemes | 5,532 | 2,763 | (700) | - | 2,063 |
| Contingent Schemes | 1,500 | 1,500 | - | - | 1,500 |
| Total Spend | 25,493 | 37,387 | 3,337 | (2,385) | 38,339 |
| Financing | | | | | |
| Department for Education | 3,282 | 5,764 | 1,956 | - | 7,720 |
| Department for Transport | 362 | 4,249 | - | _ | 4,249 |
| Disabled Facilities Grant | 3,417 | 3,324 | 253 | _ | 3,577 |
| Department for Levelling Up, Housing and Communities | 742 | 1,384 | 195 | (732) | 847 |
| Department for Business, Energy and Industrial Strategy | - | 2,253 | - | - | 2,253 |
| Home Office | <u> </u> | 235 | - | _ | 235 |
| Environment Agency | _ | 28 | - | - | 28 |
| Heritage Lottery | 771 | 1,098 | - | - | 1,098 |
| Forrestry Commission | _ | - | 159 | - | 159 |
| British Cycling | - | - | 9 | - | 9 |
| Total Grants | 8,574 | 18,335 | 2,572 | (732) | 20,175 |
| External Contributions | 231 | 1,115 | - | _ | 1,115 |
| Revenue Contributions | 3,381 | 3,918 | 365 | _ | 4,283 |
| Unsupported Borrowing | 13,307 | 14,019 | 400 | (1,653) | 12,766 |
| Total Financing | 25,493 | 37,387 | 3,337 | (2,385) | 38,339 |

| | | | | | Current Year 2021/22 | _ | | | |
|---|---|--|--------------------------------------|-------------------|---|-------------------------------|-------------------|-------------------|-------------------------------------|
| | Budget Approved by Finance Council on 1 March 2021 £ 000 | Revised Budget at Qtr 1 Monitoring £ 000 | Virement / Supp Estimate £ 000 | Slippage £ 000 | Revised Budget at Qtr 2 Monitoring £ 000 | Actual Spend to Date £ 000 | Variance £ 000 | Forecast £ 000 | Variance After Slippage £ 000 |
| Adults and Prevention Services | | 1 | 1 | | | | | | 4 |
| Disabled Facilities Grant | 2,324 | 2,502 | 253 | | 2,755 | 5 439 | (2,316) | 2,755 | 4 |
| Telecare Project | 270 | 280 | A H | | 280 | | (239) | 280 | 4 |
| Safer Streets Fund | | 235 | 1 | | 235 | | (235) | 235 | 4 |
| CCTV Hub Upgrade | _ P | 4 k | 145 | | 145 | | (145) | 145 | 4 |
| CCT v Hub Opgrade | 2,594 | 3,017 | | | - 3,415 | | (2,935) | 3,415 | |
| | , | , | | | | | | | |
| Children, Young People & Education | 7 | , , , | | | | | (510) | 522 | |
| Disable Facilities Grant | 823 | 682 | (| | 682 | | (619) | 682 | 4 |
| Two Year Old Grant | -]' | 214 | | | 214 | - | (214) | 214 | |
| Schools capital programme | | ı[]' | | | | | | | |
| Capital allocations | 1,637 | 3,305 | 483 | | 3,788 | | (3,788) | 3,788 | 4 |
| St Barnabas and St St Pauls | | 135 | | | 135 | (13) | (148) | 135 | |
| Newfield ASD Demolition | - | - | | | - | (113) | (113) | - | d |
| Audley Infant and Junior - New Heating System | - | - 1 | 1 | | - | (20) | (30) | - | 4 |
| Audley Junior - Roofing Works | - | - | 1 | | - | (40) | (10) | - | 4 |
| Roe Lee Park - Classroom Works | - | - | 4 | | - | (2) | (3) | - | 4 |
| Avondale Kitchen | - | 48 | 1 | | 48 | | (35) | 48 | 4 |
| Griffen Park - Kitchen | - | - | 1 | | - | | 2 | 2 | 4 |
| Shadsworth Infants - Heating | 90 | 100 | 150 | | 250 | | (247) | 250 | 4 |
| St Cuthberts SEND | | 9 | 100 | | 9 | | 1 | 10 | 4 |
| Belmont Drainage and External Painting | | 9 | 1 | | 9 | | 6 | 15 | 4 |
| | - | | + | | | | - | | 4 |
| Meadowhead Infants external works and lighting | - | 716 | 1 | | 716 | (9) | (9) | 716 | |
| BCHS/Crosshill SEN | 380 | 716 | 4 | | 716 | | (89) | 716 | |
| Lammack Extension | 1,300 | 1,961 | 1 | | 1,961 | | (1,925) | 1,961 | |
| Darwen - Additional School Places | 550 | - (10 | 4 | | - 610 | | - | - (10 | , |
| Longs Paw Nursery Relocation | 660 | 619 | 4 # | | 619 | | (619) | 619 | |
| Lower Disability Access Adaptations | 15 | 50 | 4 4 | | 50 | | (34) | 50 | |
| Brung Nursery External Fencing | | 30 | 1 | | 30 | | (30) | 30 | |
| Feniscowles Disability Access Adaptations | 125 | 135 | | | 135 | | (93) | 135 | |
| Shadsworth Infants Extension and Remodel | 220 | 239 | | | 239 | | (222) | 239 | |
| Ashleigh Heating and Ventilation | - | - | | | 35 | | (35) | 35 | |
| Ashworth Nursery Perimeter Fencing | -]' | - | 20 | | 20 | | (20) | 20 | |
| Audley infants (Nursery) Upgrade Fire Alarm | - | - | 25 | | 25 | | (25) | 25 | |
| Audley Infants Resurfacing Pathways | - | - | 20 | | 20 | - | (20) | 20 | |
| Audley Infants Replacement of Fascias & Soffits | - | - | 55 | | 55 | | (55) | 55 | d |
| Audley Inf & Jnr Replace windows & upstands to lean to roof | - | - | 60 | | 60 | | (60) | 60 | 4 |
| Avondale Resurface Playground | - | - | 140 | | 140 | | (140) | 140 | 4 |
| Belmont Replace Fire Alarm System | - | - | 30 | | 30 | | (30) | 30 | 4 |
| Brookhouse Primary (Nursery) Replace Roof System | - | - | 75 | | 75 | | (75) | 75 | d |
| Brookhouse Primary Replace Boilers | - | - | 40 | | 40 | | (40) | 40 | 4 |
| Intack Primary Replacement of External Doors | - | - | 18 | | 18 | | (18) | 18 | 4 |
| Longshaw Juniors Replace Fire Alarm System | - | - | 40 | | 40 | | (40) | 40 | 4 |
| Lower Darwen Primary Heating Scheme | - | - | 210 | | 210 | | (210) | 210 | 4 |
| Roe Lee Roofing, Upstandings & Windows | - | - | 195 | | 195 | | (195) | 195 | 4 |
| Roe Lee Repairs to Service Road, Ext Areas & Auto Gates | - | - | 104 | | 193 | | (104) | 195 | 4 |
| Shadsworth Juniors Replacement of Boilers | - | - | 40 | | 40 | | (40) | 40 | 4 |
| · | | | | | 30 | | (30) | | d . |
| Turton & Edgworth Upgrade Fire Alarm | - | - | 30 | | | | | 30 | 4 |
| Meadowhead Infants Drainage Installations | - | - | 20 | | 20 | | (20) | 20 | |
| Lower Darwen Primary Sch Partial Replace Fire Alarm System | - | - | 16 | | 16 | | (16) | 16 | |
| Contingency | - | - | 100 | | 100 | | (96) | 100 | |
| Project Management Fee | - ' | - ' | 50 | | 50 | | (50) | 50 | |
| | 5,800 | 8,252 | 1,956 | | - 10,208 | 670 | (9,538) | 10,217 | |

| Scheme variations to 2021/22 Capital Progra | <u>.</u> | | | | | | | | |
|--|----------|---------------------------------------|-----------------------------|----------|---------------------------------------|----------------------|--------------|----------|----------------------------|
| | | | | | Current Year 2021/22 | | | | |
| | | Revised Budget at Qtr 1 Monitoring | Virement / Supp Estimate | Slippage | Revised Budget at Qtr 2 Monitoring | Actual Spend to Date | Variance | Forecast | Variance After Slippage |
| | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 |
| Fusing a manufal Compiese | | | | | | | | | |
| Environmental Services Old Bank Lane Car Park | _ | - | | | _ | (17) | (17) | - | |
| Land Remediation Scheme | 103 | 107 | | | 107 | (17) | (107) | 107 | |
| Purchase of Blue Bins | 103 | 107 | | | 107 | (4) | | 107 | |
| | 220 | 220 | H | | 230 | (4) | (4) | 220 | |
| Blakewater Car Park Feilden St Car Park ANPR | 230 | 230 | H | | 230 | (2) | (230) | 230 | |
| FEIIGEII SI CAI PAIK AINPR | 333 | 337 | | | 337 | (23) | (2) (360) | 337 | |
| | 333 | 35/ | - | - | 337 | (23) | (360) | 337 | |
| Public Health & Wellbeing | | | | | | | | | |
| Witton 3G Pitches | - | - | | | _ | (6) | (6) | - | |
| Witton Park Cycle Track | - | - | 19 | | 19 | - | (19) | 19 | |
| Replacement Gym Equipment | - | - | 285 | | 285 | (8) | (293) | 285 | |
| торилоги о ут таритоги | - | - | 304 | - | 304 | (14) | (318) | 304 | |
| | | | | | | | | | |
| Growth & Development | | | | | | | | | |
| Bank Top and Griffin Clearance | 150 | 187 | | (150) | 37 | 1 | (36) | 37 | |
| Neighbourhood Intervention Fund | 720 | 831 | | (600) | 231 | 47 | (184) | 231 | |
| Equity Loans | 100 | 100 | | (50) | 50 | - | (50) | 50 | |
| Empty Homes Cluster | 360 | 360 | | (300) | 60 | - | (60) | 60 | |
| Other Acquisition costs | 10 | 10 | | | 10 | - | (10) | 10 | |
| Development Investment Fund | 250 | 250 | | | 250 | 76 | (174) | 250 | |
| Assistance to Industry | 150 | 224 | | | 224 | 60 | (164) | 224 | |
| Blakey Moor | 2,257 | 2,585 | | | 2,585 | 35 | (2,550) | 2,585 | |
| Cathedral Quarter Office Block Fit Out | 38 | 38 | | | 38 | 10 | (28) | 38 | |
| Local Tansport Plan | 1,698 | 7,218 | (45) | | 7,173 | 1,063 | (6,110) | 7,173 | |
| Bury Gold Brook | - | 14 | | | 14 | - | (14) | 14 | |
| Reel Chema and Jubilee Square | - | - | 45 | | 45 | (216) | (261) | 45 | |
| Land Blease Fund Milking Lane SPV | 400 | 604 | 195 | (450) | 349 | - | (349) | 349 | |
| Milking Lane SPV | - | 250 | | | 250 | 250 | - | 250 | |
| Affordable Warmth Grants | - | 10 | | | 10 | 1 | (9) | 10 | |
| Pottery Farm Alleviation | - | 10 | | | 10 | - | (10) | 10 | |
| Waterfall Study | - | 1 | | | 1 | - | (1) | 1 | |
| Grimshaw Park FAS Blackburn | - | 3 | | | 3 | - | (3) | 3 | |
| Old Gates Drive FAS Blackburn | - | - | | | - | 56 | 56 | 56 | |
| Darwen Tower | - | 283 | | | 283 | 94 | (189) | 283 | |
| Darwen Towns Fund | - | 233 | | | 233 | 200 | (33) | 233 | |
| Barbara Castle Statute | - | - | | | - | 1 | 1 📗 | 1 | |
| Thwaites SPV | - | 1,470 | | | 1,470 | 1,091 | (379) | 1,470 | |
| Acquisition of former Fleece Inn | - | 200 | | | 200 | 200 | - [| 200 | |
| Acquisition of Penny St Car Park | - [| - | 25 | | 25 | 25 | - | 25 | |
| Prayer Shelter at Pleasington Cemetery | - | - [| 325 | | 325 | - | (325) | 325 | |
| Greenfields CC and Mill Hill Juniors FC Grants | - | - | 50 | | 50 | - | (50) | 50 | |
| | 6,133 | 14,881 | 595 | (1,550) | 13,926 | 2,994 | (10,932) | 13,983 | |

| | | | | | Current Year 2021/22 | | | | |
|--|--------|---------------------------------------|-----------------------------|----------|------------------------------------|----------------------|----------|----------|----------------------------|
| | | Revised Budget at Qtr 1 Monitoring | Virement / Supp Estimate | Slippage | Revised Budget at Qtr 2 Monitoring | Actual Spend to Date | Variance | Forecast | Variance After Slippage |
| | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 | £ 000 |
| | | | | | | | | | |
| Digital & Customer Services | | | | | | | | | |
| Corporate ICT - Finance System | - | 66 | | | 66 | 29 | (37) | 66 | |
| Corporate ICT - Desktop Refresh | 113 | 96 | | (:) | 96 | 6 | (90) | 96 | |
| Corporate ICT - Core Infrastructure Programme | 120 | 140 | | (100) | 40 | 4 | (36) | 40 | |
| Coprorate ICT - Ticketing System KGH/DLT | - | 24 | | | 24 | - | (24) | 24 | |
| Corporate ICT - Legal Services Case Management System | 25 | 42 | | | 42 | 1 | (41) | 42 | |
| Corporate ICT - Corporate Website | 86 | 79 | | (10) | 69 | - | (69) | 69 | |
| Coporate ICT - Town Hall IT Infrastructure Upgrade | 190 | 191 | | (100) | 91 | 16 | (75) | 91 | |
| Coporate ICT - Digital Customer Portal | 587 | 557 | | (100) | 457 | 38 | (419) | 457 | |
| Coporate ICT - Reablement System | - | 36 | | | 36 | - | (36) | 36 | |
| Coporate ICT - Round Management System | 133 | 134 | | | 134 | 24 | (110) | 134 | |
| Coporate ICT - Microsoft Licence Agreement Server and Database | - | 125 | | | 125 | - | (125) | 125 | |
| Coporate ICT - Replacement HR and Payroll System | - | 716 | | | 716 | 23 | (693) | 716 | |
| Coporate ICT - Implementation Liquidlogic Group Work Module | - | 65 | | | 65 | 20 | (45) | 65 | |
| Coporate ICT - Microsoft 365 and Unified Comms | - | - | 625 | (525) | 100 | - | (100) | 100 | |
| | 1,254 | 2,271 | 625 | (835) | 2,061 | 161 | (1,900) | 2,061 | |
| Finance & Governance | | | | | | | | | |
| | 67 | 67 | | | 67 | | (67) | 67 | |
| Carbon Management Plan Public Sector Decarbonisation Scheme | | 2,253 | | | 2,253 | 186 | (2,067) | 2,253 | |
| Corporate Accommodation Strategy Phase 2 | 2,000 | 1,630 | | | 1,630 | 189 | (1,441) | 1,630 | |
| 15a Town Hall Street roofing | 2,000 | 1,030 | | | 1,030 | (5) | (5) | 1,030 | |
| Darwen Town Hall Reroofing | 220 | 291 | | | 291 | 180 | (111) | 291 | |
| Witton 3G Changing Room Roof | - | 65 | | | 65 | 54 | (11) | 65 | |
| Mill Hill Community Centre Roof | 60 | 60 | H | | 60 | J4 | (60) | 60 | |
| Treescapes Fund | 00 | | 159 | | 159 | - | (159) | 159 | |
| (D) | 2,347 | 4,366 | 159 | - | 4,525 | 604 | (3,921) | 4,525 | |
| ω | 2,347 | 4,300 | 133 | - | 4,323 | 004 | (3,321) | 4,323 | |
| 7 | | | | | | | | | |
| Portfolios Total | 18,461 | 33,124 | 4,037 | (2,385) | 34,776 | 4,872 | (29,904) | 34,842 | |
| . or troiled Total | 10,401 | 33,124 | 7,037 | (2,303) | 34,770 | 7,072 | (23,304) | 37,072 | |
| Earmarked schemes: | | | | | | | | | |
| Corporate ICT | 2,000 | 896 | (700) | | 196 | - | (196) | 196 | |
| Corporate Property Investment | 3,000 | 1,335 | . 1 | | 1,335 | - | (1,335) | 1,335 | |
| Vehicles (funded from capital or leased) | 532 | 532 | | | 532 | 54 | (478) | 532 | |
| Total | 5,532 | 2,763 | (700) | | 2,063 | 54 | (2,009) | 2,063 | |
| Total | 5,552 | 2,703 | (700) | - | 2,003 | 34 | (2,009) | 2,003 | |
| Contingent schemes: | | | | | | | | | |
| Asset Management Strategy | 1,500 | 1,500 | | | 1,500 | _ | (1,500) | 1,500 | |
| Total | 1,500 | 1,500 | | | 1,500 | | (1,500) | 1,500 | |
| Total | 1,500 | 1,500 | - | - | 1,300 | - | (1,500) | 1,500 | |
| | | | | | | | | | |
| | 25,493 | 37,387 | 3,337 | (2,385) | 38,339 | 4,926 | (33,413) | 38,405 | |

Agenda Item 8.6 **EXECUTIVE BOARD DECISION**



REPORT OF: Executive Member for Finance and Governance

LEAD OFFICERS: Director of Finance

DATE: 11th November 2021

PORTFOLIO/S

Finance and Governance

AFFECTED:

WARD/S AFFECTED: All

KEY DECISION: YES ⊠ NO □

SUBJECT: TREASURY MANAGEMENT MID-YEAR STRATEGY REVIEW FOR 2021/22

1. EXECUTIVE SUMMARY

To update Members with regard to the Treasury Management position to date, and the proposed Strategy for the remainder of 2021/22.

2. RECOMMENDATIONS

It is recommended that the Executive Board:

- 1. notes the Treasury Management position for the year to date, and approves the proposed Strategy for the remainder of the year, detailed in Appendix 1, and
- 2. approves that there are no changes to the existing Treasury and Prudential Indicators for 2021/22, as set at Executive Board (11th March 2021).

3. BACKGROUND

Treasury Management is the management of the Council's cash flows, borrowing and investments, and the associated risks. The Council borrows and invests substantial sums of money and is therefore exposed to financial risks, including the loss of invested funds and the revenue effect of changing interest rates. The successful identification, monitoring and control of financial risk is therefore central to the Council's prudent financial management.

In March 2021 the Executive Board agreed a Treasury Management Strategy for 2021/22. It is necessary to review and consider updating the Strategy, if required.

This mid-year review was considered and noted by the Audit and Governance Committee at their meeting on 26th October 2021.

4. KEY ISSUES & RISKS

Treasury Priorities

EBD: V1/16

| The Council has operated within CIPFA and statutory guidance and requirements in respect of Treasury |
|--|
| Management practice. The approved Treasury Management Policy Statement, together with the more |
| detailed Treasury Management Practices and each year's Annual Strategy have all emphasised the |
| importance of security and liquidity over yield. |
| |
| |
| 5. POLICY IMPLICATIONS |
| The information contained within the report accords with the Treasury Management Strategy, as |
| approved at Executive Board on 11 th March 2021. |
| |
| 6. FINANCIAL IMPLICATIONS |
| The financial implications arising from the 2020/21 Treasury Outturn and latest position for 2021/22 |
| have been incorporated into Corporate Budget Monitoring Reports. |
| |
| Z LECAL IMPLICATIONS |
| 7. LEGAL IMPLICATIONS Under the Local Government Act 2003, local authorities determine locally their levels of capital |
| investment and associated borrowing. The Prudential Code has been developed to support local |
| authorities in taking these decisions, and the Council is required by Regulation to have regard to the |
| Code when carrying out its duties under Part 1 of the Local Government Act 2003. |
| The Department for Communities and Local Communities and Continued Children on Local Communities |
| The Department for Communities and Local Government issued Guidance on Local Government |
| Investments, under the Local Government Act 2003, effective from 1st April 2010. Authorities must |
| manage their investments within an approved strategy, setting out what categories of investment they |
| will use and how they will assess and manage the risk of loss of investments. |
| |
| 8. RESOURCE IMPLICATIONS |
| None. |
| |
| |
| 9. EQUALITY AND HEALTH IMPLICATIONS |
| Please select one of the options below. Where appropriate please include the hyperlink to the |
| EIA. |
| |
| Option 1 Equality Impact Assessment (EIA) not required – the EIA checklist has been completed. |
| Option 2 In determining this matter the Executive Member needs to consider the EIA associated |
| with this item in advance of making the decision. (insert EIA link here) |
| |
| Option 3 In determining this matter the Executive Board Members need to consider the EIA |
| associated with this item in advance of making the decision. (insert EIA attachment) |
| |
| 10. CONSULTATIONS |
| The issues raised in this report have been discussed previously with Audit and Governance |
| Committee and Treasury Management Group. |
| |
| |

EBD: V1/16 Page **2** of **3**

11. STATEMENT OF COMPLIANCE

The recommendations are made further to advice from the Monitoring Officer and the Section 151 Officer has confirmed that they do not incur unlawful expenditure. They are also compliant with equality legislation and an equality analysis and impact assessment has been considered. The recommendations reflect the core principles of good governance set out in the Council's Code of Corporate Governance.

12. DECLARATION OF INTEREST

EBD: V1/16

All Declarations of Interest of any Executive Member consulted and note of any dispensation granted by the Chief Executive will be recorded in the Summary of Decisions published on the day following the meeting.

| VERSION: | v1 |
|------------------|--|
| | |
| CONTACT OFFICER: | Jody Spencer-Anforth (Ext 507748) |
| | |
| DATE: | October 2021 |
| | |
| BACKGROUND | Treasury Management Strategy for 2021/22 approved at Executive Board |
| PAPER: | 11 th March 2021. |
| | |

MID-YEAR TREASURY MANAGEMENT STRATEGY REVIEW 2021/22

1 Original Strategy for 2021/22

1.1 The Treasury Management Strategy for 2021/22 was approved by Executive Board on 11th March 2021.

The broad strategy continued the approach of looking to minimise borrowing costs, in the context of the Council's long-term debt being considerably lower than its accumulated Capital Financing Requirement, with the difference covered by the use of short-term borrowing and any available balances. This approach had generated savings on interest costs over the last few years.

At the time, it was expected that interest rates could increase slowly, so it was noted that it might be possible, and appropriate, to take out more long-term borrowing.

1.2 The Original 2021/22 Investment Limits were set by reference to amount, duration and credit rating – and distinguished between Unsecured Deposits, which would be subject to greater risk of credit loss, and Secured Deposits, in which there was less risk. The limits set were largely comparable to those applying in previous years.

2 Economic Review 2021/22

- 2.1 The economic recovery from coronavirus pandemic continued to dominate the first half of the financial year. By the end of the period over 48 million people in the UK had received their first dose of a COVID-19 vaccine and almost 45 million their second dose
- 2.2 The Bank of England (BoE) held Bank Rate at 0.1% throughout the period and maintained its Quantitative Easing programme at £895 billion, unchanged since the November 2020 meeting. In its September 2021 policy announcement, the BoE noted it now expected the UK economy to grow at a slower pace than was predicted in August, as the pace of the global recovery had shown signs of slowing and there were concerns inflationary pressures may be more persistent. Within the announcement, Bank expectations for GDP growth for the third (calendar) quarter were revised down to 2.1% (from 2.9%), in part reflecting tighter supply conditions. The path of CPI inflation is now expected to rise slightly above 4% in the last three months of 2021, due to higher energy prices and core goods inflation. While the Monetary Policy Committee meeting ended with policy rates unchanged, the tone was more hawkish.
- 2.3 Government initiatives continued to support the economy over the quarter but came to an end on 30th September 2021, with businesses required to either take back the 1.6 million workers on the furlough scheme or make them redundant.
- 2.4 The latest labour market data showed that in the three months to July 2021 the unemployment rate fell to 4.6%. The employment rate increased, and economic activity rates decreased, suggesting an improving labour market picture. Latest data showed growth in average total pay (including bonuses) and regular pay (excluding bonuses) among employees was 8.3% and 6.3% respectively over the period. However, part of the robust growth figures is due to a base effect from a decline in average pay in the spring of last year associated with the furlough scheme.

- 2.5 Annual CPI inflation rose to 3.2% in August, exceeding expectations for 2.9%, with the largest upward contribution coming from restaurants and hotels. The Bank of England now expects inflation to exceed 4% by the end of the calendar year owing largely to developments in energy and goods prices. The Office of National Statistics' preferred measure of CPIH, which includes owner-occupied housing, was 3.0% year/year, marginally higher than expectations for 2.7%.
- 2.6 The successful vaccine rollout programme is credit positive for the financial services sector in general and the improved economic outlook has meant some institutions have been able to reduce provisions for bad loans. While there is still uncertainty around the full extent of the losses banks and building societies will suffer due to the pandemic-related economic slowdown, the sector is in a generally better position now compared to earlier this year and 2020.
- 2.7 As ever, the institutions and durations on the Authority's counterparty list recommended by treasury management advisors Arlingclose remain under constant review.

3 Treasury Performance to date

3.1 Thus far, cash balances have ranged between £50M and £85M, continuing to be higher than in previous years as a result of grants received in advance from central government. These investment levels have also been supported by short-term borrowing (at rates averaging around 0.36%). No further long-term borrowing has been taken, while short-term borrowing levels have fluctuated, currently standing at levels lower than the start of the year.

| Analysis of Debt Outstanding | 31 st March 2021 £m | 30 th September 2021 £m |
|---|--------------------------------------|--|
| Short-Term Debt | 78.3 | 40.0 |
| Longer-Term Debt: Public Works Loan Board (PWLB) Market Loans Other Market Debt | 127.4 18.0 0.3 145.7 | 125.3 18.0 0.3 |
| Lancashire County Council (LCC) Debt | 13.6 | 13.3 |
| Debt re PFI Arrangements | 61.6 | 60.7 |
| Gross Borrowings | 299.2 | 257.6 |
| This was offset by investments of: | 58.6 | 61.9 |
| Net Borrowing (gross borrowing less investments) | 240.6 | 195.7 |
| Net Borrowing (if LCC and PFI debt are excluded) | 165.4 | 121.7 |

- 3.2 Investments have continued to be made with a limited range of banks and Money Market Funds, along with other local authorities and the Government's Debt Management Office (DMO), earning exceptionally low levels of interest. Interest rates have remained historically low to date this year, with the average interest earned on investment balances being around 0.05% in the first half of the year. It is likely that investment returns will remain low in the second half of the year.
- 3.3 Decreased net interest costs have already been reported through corporate monitoring, reflecting lower interest rates achieved on short-term borrowings this year.

4 Investment and Borrowing Strategy for the rest of the year

Investment

- 4.1 Both the CIPFA Code and government guidance require that funds be invested prudently, and with regard to security and liquidity, before seeking the optimum rate of return or yield. The Council's objective when investing money is to strike an appropriate balance between risk and return, minimising the risk of incurring losses from defaults and the risk of receiving unsuitably low investment income.
- 4.2 The Council's Investment Criteria allow investment in a range of other organisations and structures, but as there are limited opportunities for straightforward trading in Secured Deposits, and as priority is given to maintaining liquidity, short-dated and simpler options are mainly used. Investments are made in: fixed term deposits and instant access accounts with banks and building societies; instant access Money Market Funds; and fixed term deposits with local authorities and the UK Government's Debt Management Office. It is expected that these will continue to be the main investment options taken up across the remainder of the year.
- 4.3 In the light of the continuing pandemic and the higher likelihood of unexpected calls on cash flow, the Authority continues to keep more cash available at very short notice. Liquid cash was diversified over several counterparties and Money Market Funds to manage both credit and liquidity risks.
- 4.4 It is proposed that there be no changes to the existing Investment Criteria and Investment Counterparty Limits.

Borrowing

- 4.5 The Council's key objective when borrowing has been to strike an appropriately low risk balance between securing low interest costs and achieving cost certainty over the period for which funds are required. The flexibility to renegotiate loans, should long-term plans change is a further, secondary objective.
- 4.6 In keeping with these objectives, no new long term borrowing was undertaken in the first half of the year, while £38.3M of existing short term loans were allowed to mature without replacement. This strategy enabled the Authority to reduce net borrowing costs (despite foregone investment income) and reduce overall treasury risk.
- 4.7 It is proposed that the Borrowing Strategy remain unchanged, with the Council looking to take new borrowing as determined by cash flow requirements and by reference to movements in actual and projected long-term interest rates.

5 Risk Management

5.1 The Council's main objective for the management of its investments is to give priority to the security and liquidity of its funds before seeking the best rate of return. Therefore, most surplus cash is held in short-term investments with government bodies, and with highly rated banks and pooled funds. In addition, the Council can hold investments that entail a slightly higher level of risk, but such risks are mitigated by limiting the amount and duration of exposure.

- 5.2 The Council's main objective for the management of its debt is to ensure its long-term affordability. The largest part of its loans is from the PWLB at long-term fixed rates of interest.
- 5.3 Another significant element of the Council's long-term debt is £18M of loans from banks and other institutions. £13M worth are "lender's option, borrower's option" (LOBO) loans, under which the Lender can, at pre-determined times, exercise an Option to increase the rate payable on the debt, and the Borrower has the Option to either accept the proposed increase or repay the whole loan.

These loans have interest rates fixed at levels that were relatively low when they began, but if the Lender Option is exercised, the Borrower has to deal with whatever interest rates turn out to be at that later date. This exposes the Council to some risk of rising long-term interest rates, but that is mitigated by the fact that £5M of this debt (forming a large part of the lowest interest rate elements) can only be "called" once in every five years. Current projected future interest rates suggest LOBOs are unlikely to be called in the next 5 years.

- 5.4 A combination of short duration investments and long duration debt exposes the Council to the risk of falling investment income during periods of low interest rates. However, the risk of low investment returns is viewed as lower priority compared to the benefits of optimising the security and liquidity of investments, and the savings made on borrowing costs. Also, though the Council has no long term investments, at this stage, it is hedged against the investment return risk by its short term debt holdings.
- 5.5 The significant part of the debt portfolio of around £40M in short-term loans from other local authorities does raise interest rate risk issues. If the medium to long-term cost of debt were to move sharply upwards, it may be necessary to restructure the Council's debt quickly, and cope with an increased cost of borrowing. This issue is kept under review, with regular updates from Arlingclose.

6 Indicators

- 6.1 The originally approved Indicators were set at cautious levels and can remain unchanged.
- 6.2 The Council has complied with the Limits and Indicators it has set, and expects to do so over the remainder of the year.

7 Codes of Practice – consultation and proposed changes

- 7.1 Earlier this year CIPFA consulted on the principles to support the changes to the Treasury Management in the Public Services Code of Practice and Cross-Sectoral Guidance Notes (Treasury Management Code), as well as on the changes to the Prudential Code for Capital Finance in Local Authorities.
- 7.2 The final outcomes from these consultation exercises may result in changes to the Council's Treasury Management Strategy going forward.

Agenda Item 8.7 **EXECUTIVE BOARD DECISION**



REPORT OF: Executive Member for Finance and Governance

LEAD OFFICER: Director of Finance

DATE: 11th November 2021

PORTFOLIOS AFFECTED: All

WARDS AFFECTED: All

KEY DECISION: Y

TITLE OF REPORT: Household Support Fund

PURPOSE

1.1 The purpose of this report is to seek agreement from the Executive Board to the proposed distribution of the Household Support Fund (HSF).

2. RECOMMENDATIONS

- 2.1 It is recommended that the Executive Board:
 - a) agree to the distribution of the Household Support Fund as set out in the report;
 - b) give delegated authority to the Director of Finance, in consultation with the Executive Member for Finance and Governance, to determine a scheme of targeting financial support for recipients of Council Tax Support using the HSF allocation.

3. BACKGROUND

- 3.1 At the beginning of October 2021, the Government announced that a new HSF worth over £500m would be made available to Upper Tier Local Authorities to support those households most in need over the coming winter.
- 3.2 Details of the grant allocations and supporting information on how the grant should be used were released to Councils on 7th October 2021. **The allocation for Blackburn with Darwen is £1.619m of which 50% must be spent on families with children**.
- 3.3 This is a new scheme and unlike previous schemes of this nature, the Household Support Fund can be used on a much broader range of household-related costs. The Department for Work and Pensions (DWP) have indicated that it is not their intention to provide a definitive list of areas that Councils must provide support for; it is for Councils to use their discretion.

3.4 The grant funding must be used by 31st March 2022 (although there is an implicit acknowledgement from DWP that funds committed by that date can be defrayed after the end of the financial year should that be necessary).

4. RATIONALE

4.1 The distribution of the Household Support Fund is intended to provide much needed support to those households most in need over the winter period.

5. KEY ISSUES

- 5.1 Guidance on the use of the Housing Support Fund was released with the grant allocations on 7th October 2021. The objective of the Fund is provide support to vulnerable households in most need of support over the coming winter as the economy recovers. In doing so, Councils are required to develop a 'local eligibility framework and approach' to enable the distribution that ensures at least 50% of the funding is for vulnerable households with children. The remainder of the funding is available for vulnerable households without children (including individuals).
- 5.2 Within the context of this overriding objective, when administering the Scheme, Councils are encouraged to adopt the following principles:
 - use discretion on how to identify and support those most in need, taking into account a wide range of information;
 - use the funding from 6 October 2021 to 31 March 2022 to meet immediate needs and help those who are struggling to afford food, energy and water bills, and other related essentials. It can also be used to support households who are struggling to afford wider essentials;
 - in exceptional cases of genuine emergency, it can additionally be used to support housing costs where existing housing support schemes do not meet this exceptional need;
 - this includes payments made, or committed to, by the Authority or any person acting on behalf of the Authority, from 6 October 2021 to 31 March 2022. For example, this would allow any vouchers issued before the end of the funding period to be redeemed in April 2022. All authorities are encouraged to ensure that any vouchers issued are redeemed before the end of the scheme, or shortly thereafter, or consider recycling unused vouchers;
 - Councils have the flexibility to work with multiple organisations to provide a local delivery network that supports vulnerable households with a broad range of support;
 - Council can claim for reasonable administrative costs incurred in administering the Scheme;
- 5.3 The Council has a good track record of developing and implementing welfare support schemes like the HSF; in recent times, and in response specifically to the impact of the Covid-19 Pandemic, much needed support has been delivered using both the Winter Grant and the Covid Local Support Grant Fund, with the former providing support to over 30,000 individuals.

5.4 Building on the frameworks that have been used for both the delivery of the Winter Grant and the Covid Local Support Grant Fund, it is proposed to use the HSF in the following way:-

| Area of Support | £m |
|--|-------|
| Provision of Free School Meal (FSM) Vouchers for School Holidays (in October 2020, 1 week at Christmas (with 1 week funded by the Holiday Activity Fund Scheme), February 2022 and Easter Holidays 2022) | 0.380 |
| Targeted Council Tax Support for households that have been impacted by Covid-19 | 0.381 |
| Support for food, utility bills, white goods, boiler servicing and repairs etc delivered in partnership with the Help Hub and the Covid | 0.781 |
| Administration (FSM Vouchers, Administrative Support to VCFS) | 0.077 |
| Total Household Support Fund | 1.619 |

- 5.5 The Executive Board should note that the allocation of funding for targeted Council Tax Support for households is subject to the development of a scheme for this purposes. In this respect, agreement is sought for delegated authority to the Director of Finance, in consultation with the Executive Member for Finance and Governance, to develop the scheme which will focus on those affected by Covid-19.
- 5.6 By taking this whole systems, partnership and strength based approach with the HSF, the Council will have the opportunity to reach some of the most vulnerable households in the community thereby complying with the objectives of the Scheme.
- 5.7 As ever with these types of grant allocations, the Council is required to provide the DWP with statements on the use of the grant and arrangements are in place to satisfy this requirement.

6. POLICY IMPLICATIONS

6.1 There are no policy implications arising directly from this report.

7. FINANCIAL IMPLICATIONS

7.1 The Council will receive a grant of £1.619m from the Household Support Fund. Details of the proposed distribution of the funding are as set out in the report.

8. LEGAL IMPLICATIONS

8.1 There are no legal implications arising directly from the contents of this report.

8.2 This report is to be considered under Rule 15 of the Council's Procedure Rules relating to Access to Information and Decisions and Attendance at Public Meetings (Constitution, Part 4, section 2) insofar as it has not been possible to give the normal 28 days notice of this item on the Council's Forward Plan. This is due to timing of the notification of the funding and the need to put in place a plan to distribute the funding promptly.

9. RESOURCE IMPLICATIONS

9.1 There are no other resources implications arising from the contents of this report.

| 10. | EQUALITY | AND HEALTH | IMPLICATIONS |
|-----|----------|------------|--------------|
|-----|----------|------------|--------------|

| Please select one of the options below. | | |
|--|--|--|
| Option 1 ⊠ Equality Impact Assessment (EIA) not required – the EIA checklist has been completed. | | |
| Option 2 | | |
| Option 3 | | |
| 11. CONSULTATIONS | | |
| | | |

12. STATEMENT OF COMPLIANCE

The recommendations are made further to advice from the Monitoring Officer and the Section 151 Officer has confirmed that they do not incur unlawful expenditure. They are also compliant with equality legislation and an equality analysis and impact assessment has been considered. The recommendations reflect the core principles of good governance set out in the Council's Code of Corporate Governance.

13. DECLARATION OF INTEREST

All Declarations of Interest of any Executive Member consulted and note of any dispensation granted by the Chief Executive will be recorded in the Summary of Decisions published on the day following the meeting.

| CONTACT OFFICER: | Dean Langton dean.langton@blackburn.gov.uk |
|------------------|--|
| | |
| DATE: | 26 th October 2021 |
| | |
| BACKGROUND | |
| | |
| PAPERS: | |