County Offices
Newland
Lincoln
LN1 1YL

4 April 2022

Environment and Economy Scrutiny Committee

A meeting of the Environment and Economy Scrutiny Committee will be held on **Tuesday, 12 April 2022 at 10.00 am in the Council Chamber, County Offices, Newland, Lincoln LN1 1YL** for the transaction of the business set out on the attached Agenda.

Yours sincerely

Debbie Barnes OBE
Chief Executive

Membership of the Environment and Economy Scrutiny Committee (11 Members of the Council)

Councillors R Wootten (Chairman), M A Griggs (Vice-Chairman), A J Baxter, M D Boles, I D Carrington, I G Fleetwood, A G Hagues, Mrs J E Killey, H Spratt, G J Taylor and L Wootten

ENVIRONMENT AND ECONOMY SCRUTINY COMMITTEE AGENDA
TUESDAY, 12 APRIL 2022

Democratic Services Officer Contact Details

Name: **Tom Crofts**

Direct Dial **07769 368547**

E Mail Address thomas.crofts@lincolnshire.gov.uk

Please note: for more information about any of the following please contact the Democratic Services Officer responsible for servicing this meeting

- Business of the meeting
- Any special arrangements
- Copies of reports

Contact details set out above.

Please note: This meeting will be broadcast live on the internet and access can be sought by accessing Agenda for Environment and Economy Scrutiny Committee on Tuesday, 12th April, 2022, 10.00 am (moderngov.co.uk)

All papers for council meetings are available on:
https://www.lincolnshire.gov.uk/council-business/search-committee-records

ENVIRONMENT AND ECONOMY SCRUTINY COMMITTEE
22 FEBRUARY 2022

PRESENT: COUNCILLOR R WOOTTEN (CHAIRMAN)

Councillors M A Griggs (Vice-Chairman), A J Baxter, I D Carrington, I G Fleetwood, A G Hagues, Mrs J E Killey, N Sear and G J Taylor

Councillors C J Davie (Executive Councillor for Economic Development, Environment and Planning), D McNally (Executive Councillor for Waste and Trading Standards) and M D Boles attended the meeting as observers.

Officers in attendance:-

Kiara Chatziioannou (Scrutiny Officer), Justin Brown (Assistant Director – Growth), David Hickman (Head of Environment), Chris Miller (Deputy Head of Environment) and Thomas Crofts (Democratic Services Officer)

Officers in attendance via Microsoft Teams:-

Dan Clayton (Sustainability Manager) and Mike Reed (Head of Waste)

52 APOLOGIES FOR ABSENCE/REPLACEMENT MEMBERS

Apologies for Absence were received from Councillors M Boles and H Spratt.

It was reported that, under Regulation 13 of the Local Government Committee and Political Groups) Regulation 1990, Councillor N Sear, was replacing Councillor L Wootten for this meeting only.

53 DECLARATIONS OF MEMBERS' INTERESTS

Declarations of interest are listed under each item.

54 MINUTES OF THE PREVIOUS MEETING HELD ON 18 JANUARY 2022

RESOLVED:

That the minutes of the meeting held on 18 January 2022 be confirmed and signed by the Chairman as a correct record.

55 ANNOUNCEMENTS BY THE CHAIRMAN, EXECUTIVE COUNCILLORS AND LEAD OFFICERS

Councillor Davie, Executive Councillor for Economic Development, Environment and Planning announced that he welcomed the further opening-up of the economy from pandemic restrictions and explained his concern regarding events in Ukraine and the impact that this could have on people and the economy.

Councillor Davie updated the committee on the following matters:

- The Council's economic newsletter was being distributed and included information on developments concerning the Food Enterprise Zone.
- The National Apprenticeship Week and the county's first ever Apprenticeship Champions Award were noted.
- The food sector remained strong with global and academic interest in the county's innovations regarding protein foods.
- Meetings had been scheduled with prospective investors regarding the Food Valley.
- The Leader of the Council, Councillor Hill, was able to raise matters concerning Levelling-Up, Highways funding and devolution with the Prime Minister during his recent visit to Lincolnshire.
- The Levelling-Up White Paper was launched on the 2nd of February.
- Work was underway to make the case for the relocation of the Great British Railways Headquarters to Lincolnshire – with potential locations having been identified.
- The Council was exploring new technological innovations in small modular reactors and raising housing energy efficiency.
- Ensuring the future sustainability of the county's coastlines was a priority and new research had been commissioned with the University of Lincoln to model the effects of climate change to investigate solutions.
- The Visit Lincolnshire conference was taking place on 22 March at the Lincolnshire Showground and would launch a green tourism toolkit for Lincolnshire with Ed Gillespie, environmental entrepreneur, was confirmed as keynote speaker.

Members noted the announcements and asked numerous questions – they received the following clarification form Councillor Davie:

- The Council was looking to create an environment newsletter but would always keep Members updated with relevant matters.
- Solar panel works had been programmed to roll out when buildings were scheduled for roof refurbishments.
- Research undertaken by the University of Lincoln was commissioned to show how best to adapt to issues caused by climate change and achieve sustainability.
- Holiday parks were anticipated to be affected by the spiking fuel crisis, concerning the supply of bottled gas.
- The Visit Lincolnshire conference was hosted at an environmentally sound premises and car sharing was encouraged.
- Lincolnshire proved to be a popular place to live with approximately one third of properties within the county to being sold to buyers from the South. Businesses were

also relocating away from London, both of which showed promise for local economic growth.

- It was the Council's ambition to promote economic growth but also protect the attractiveness of the county as a major asset.

56 SERVICE LEVEL PERFORMANCE REPORTING AGAINST THE PERFORMANCE FRAMEWORK 2021-2022 - QUARTER 3

Consideration was given to a report which set out the performance of the Tier 2 Service Level Performance measures for 2021/22 Quarter 3 for Economy, Flooding and Waste which were within the remit of this Committee.

The Assistant Director for Growth reported that 899 businesses across Lincolnshire had received business assistance grants, 150 commercial tenants had received further aid, and digital provisions for educational needs had been successfully met. It was projected that external funding targets would be met and that the grants constituted an investment in the future of the county's economy.

The Head of Environment reported that Section 19 investigations were triggered by internal flooding of one or more domestic properties or where there was significant impact on the highway network and/or community amenities. The team awaited full details of impacts from the recent storms but so far impacts appeared to have been relatively limited in comparison with previous events. 18 new section 19 investigations were initiated during the last quarter.

The Head of Waste reported that household recycling had increased but remained below target, overall recycling had decreased, and the amount of household waste had increased. Changes in performance had been due, in part, to fewer visitors to recycling centres, which had been reflected nationally throughout the pandemic. The further rollout of separate collection schemes was anticipated to improve recycling performance.

Members considered the report and during the discussion the following comments were noted:

- Concerning businesses that received grants, a robust process was undertaken to ensure the appropriate procedural management throughout. Trained accountants provided assurance on the viability of businesses and clarified trading ambitions and growth potentials with owners and whilst acknowledging that some may not stand the economic hardships efforts were made to ensure effective use of funds and guard against fraud.
- A report regarding the tracked employment prospects and outcomes of those in receipt of qualification support was due to be considered by this Committee in July 2022.
- Economic development of large sector businesses remained important, whilst acknowledging that small and micro businesses were equally important, therefore

information was sought through the Business Recovery Fund Program to facilitate shaping provision in the future.

- Flooding near misses were a concern and despite not being significant enough to be investigated under Section 19, they still merited a need for Members' oversight. A request was made that Anglian Water shared a list of near misses with Members.
- Fines were not used in the enforcement of recycling noncompliance. Instead, education and engagement proved to be a more efficient use of resources.
- Waste that could be processed locally was only exported outside the county in emergencies.
- The recent rollout of a separate paper and card collection scheme in North Kesteven had proven successful – with a 99.5% recyclate purity. A robust sampling regime had been introduced a specialist sampling officer was recruited offering a detailed breakdown allowing to develop on the experience of the paper and card roll out and use knowledge and evidence to improve other recycling operations and continue good practices.
- Further information on a timeframe for further rollout of separate card and paper collection across the county was sought; Officers agreed to report back on this and combine with some additional data from the existing rollout, at a future Committee Meeting.
- Officers explained that targets concerning waste and recycling were based on historical trends previously established as benchmarks to track progress a review of those targets was required to ensure that they remained realistic and meaningful.
- Increases in fly-tipping had been recorded and were linked to activities of a small number of unscrupulous businesses. The Environmental Crime Partnership was set up to create stronger penalties to deter people from fly-tipping. It was further clarified that where people have paid for a business to dispose materials and the latter tipped that in the countryside, the former remained liable for prosecution for.
- Generic comments and feedback were offered by Members in terms of presentation of performance indicators to ensure scientific accuracy. Officers agreed to raise this with Corporate Leads. Increases in fly tipping had been recorded and was linked to activities of a small number of unscrupulous businesses.

RESOLVED:

1. That the report and comments made be noted.
2. That a scrutiny review of the effectiveness of waste and recycling targets be considered.

57 THEDDLETHORPE GEOLOGICAL DISPOSAL FACILITY WORKING GROUP UPDATE

Consideration was given to the report by the Assistant Director (Growth). The Committee was advised of the following updates from the Working Group:

- Radioactive Waste Management (RWM) had changed their name to Nuclear Waste Services (NWS) and had identified the search area as the district level wards of Theddlethorpe and Withern, and Mablethorpe.
- The Working Group was ensuring that the process being carried out by NWS was as transparent as possible and had established a website that included all meeting minutes and a virtual exhibition.
- A community investment fund had been agreed to support the local area.
- Two other companies had also expressed interest in the site: Neptune Energy, within the blue hydrogen industry, and Harbour Energy who wished to use the site for carbon capture and storage.
- The Committee would be regularly updated as the situation progresses.

Members noted the report and discussed the following matters:

- Campaign groups had been grateful that efforts had been made to make the process transparent.
- The three interested businesses had been encouraged to speak to each other to understand if their activities could coexist within the site.
- The Council was considering proposals based on their environmental and economic impact.
- The Working Group had asked RWS to set a regular meeting to brief local councillors.
- It was anticipated that the interested businesses would offer long-term benefits for employment and education within science and engineering. However, Members noted that the site was located in an area that currently had a demographic of older people, and it was noted that Mablethorpe does not have a secondary school.
- NWS was also investigating several other potential sites to base their operations across the country. A list of the types of employment that their development would offer would be published in the coming weeks and made available to the Working Group and this Committee.

RESOLVED:

1. That the report and comments made be noted.
2. That a progress update be reported in three months' time – May 2022.

58 THE LANDSCAPES REVIEW - LINCOLNSHIRE WOLDS AREA OF OUTSTANDING NATURAL BEAUTY

(NOTE: Councillor Carrington wished it to be noted that he worked within Local Authority Planning)

Consideration was given to a report by the Deputy Head of Environment, which updated the Committee on the Government's Glover Report. The following was reported:

- Part of the Glover Report recommendations included the levelling up of Areas of Natural Beauty (AONBs) to an equivalent position with National Parks under a new strategy for National Landscapes.
- The Lincolnshire Wolds was an existing AONB that would fall into the category.
- Alongside the Government's planning reforms, the new categorisation of AONBs meant that they would serve as statutory consultees for relevant planning applications.
- Under the new category, AONBs would now have access to longer funding settlements.

Members welcomed the reform but expressed concerns regarding sustainability and appropriateness of development around and within AONBs. They felt that Lincolnshire's natural capital was its greatest asset, and that community and economic development should be appropriate so as not to harm the beauty of the area.

RESOLVED:

That the report and comments made be noted.

59 ENVIRONMENT AND ECONOMY SCRUTINY COMMITTEE WORK PROGRAMME

Consideration was given to a report by the Scrutiny Officer, which invited the Committee to consider and comment on its own work programme.

Members noted the report and asked that the following be added to the list of items to be included in the 2022-23 Work Programme:

- A report detailing the impacts of recent changes to the Environment Act.
- A report on the timetabled rollout of new recycling and waste collection schemes.

RESOLVED:

That the work programme be approved, subject to the additions highlighted above.

60 LOCAL TRANSPORT PLAN (LTP 5)

The Committee received the report for information only.

The meeting closed at 12.20 pm

Open Report on behalf of Andy Gutherson - Executive Director - Place

Report to:	**Environment and Economy Scrutiny Committee**
Date:	**12 April 2022**
Subject:	**Flood and Coastal Resilience Project - the Greater Lincolnshire Groundwater Project, submission of Outline Business Case**

Summary:

This item invites the Environment and Economy Scrutiny Committee to consider a report regarding the Flood and Coastal Resilience Project - the Greater Lincolnshire Groundwater Project, submission of Outline Business Case.

This decision is due to be considered by the Executive Councillor for Economic Development, Environment and Planning between 15 - 29 April 2022. The views of the Scrutiny Committee will be reported to the Executive Councillor as part of their consideration of this item.

Actions Required:

That the Environment and Economy Scrutiny Committee: -

(1) considers the attached report and determines whether the Committee supports the recommendations to the Executive Councillor for Economic Development, Environment and Planning as set out in the report.

(2) agrees any additional comments to be passed on to the Executive Councillor for Economic Development, Environment and Planning in relation to this item.

1. Background

The Executive Councillor for Economic Development, Environment and Planning is due to consider the Flood and Coastal Resilience Project - the Greater Lincolnshire Groundwater Project, submission of Outline Business Case between 15 - 29 April 2022. The full report to the Executive Councillor for Economic Development, Environment and Planning is attached at Appendix 1 to this report.

2. Conclusion

Following consideration of the attached report, the Committee is requested to consider whether it supports the recommendations in the report and whether it wishes to make any additional comments to the Executive Councillor. Comments from the Committee will be reported to the Executive Councillor.

3. Consultation

The Committee is being consulted on the proposed decision of the Executive Councillor between 15 - 29 April 2022.

4. Appendices

These are listed below and attached at the back of the report	
Appendix 1	Report to the Executive Councillor for Economic Development, Environment and Planning on Flood and Coastal Resilience Project - the Greater Lincolnshire Groundwater Project, submission of Outline Business Case.

5. Background Papers

No background papers within the meaning of section 100D of the Local Government Act 1972 were used in the preparation of this Report.

This report was written by Matthew Harrison, Flood and Water Manager, who can be contacted on 07771 837565 or matthew.harrison@lincolnshire.gov.uk.

Open Report on behalf of Andy Gutherson - Executive Director of Place

Report to:	**Councillor C J Davie - Executive Councillor for Economic Development, Environment and Planning**
Date:	**15 - 29 April 2022**
Subject:	**Flood and Coastal Resilience Project - the Greater Lincolnshire Groundwater Project, submission of Outline Business Case**
Decision Reference:	**I022487**
Key decision?	**Yes**

Summary:

To provide an update on the Flood and Coastal Resilience Project and to seek approval to progress with the submission of the Outline Business Case for the Greater Lincolnshire Groundwater Project.

Recommendation(s):

That the Executive Councillor for Economic Development, Environment and Planning:

1) approves the submission of an Outline Business Case for the Greater Lincolnshire Groundwater Project generally in the form attached at Appendix A; and,

2) delegates to the Executive Director – Place, in consultation with the Executive Councillor for Economic Development, Environment and Planning, authority to make any final amendments to the Outline Business Case prior to submission.

Alternatives Considered:

1.	That submission of the Outline Business Case is not approved. This would result in the Greater Lincolnshire Groundwater Project being unable to progress to Full Business Case and overall project delivery.

Reasons for Recommendation:

Approval for Lincolnshire County Council to submit the Outline Business Case (OBC) on behalf of the Greater Lincolnshire Groundwater Partnership will, subject to approval of the OBC, allow the project to progress to developing a full business case, drawing down remaining funds and delivering against the actions to better understand groundwater issues across Greater Lincolnshire.

1. Background

In the 2020 Budget, the government announced a £200 million fund for a flood and coastal resilience innovation programme to help deliver the government's policy statement on flooding and coastal erosion and the Environment Agency's National Flood and Coastal Erosion Risk Management Strategy for England.

The programme is allocating £150 million to 25 local areas, which could be a county, city, town or village, or also mean a river catchment, a tidal estuary or part of the coast.

Lincolnshire County Council is leading on the development of a collaborative approach founded on the flood and water management partnership and based on the Greater Lincolnshire geography. This includes North Lincolnshire Council, North East Lincolnshire Council, North Kesteven and East Lindsey District Councils, Internal Drainage Boards, the Environment Agency and Water Companies. Within the Council a range of internal services are engaged, including Highways, Emergency Planning & Business Continuity and Countryside Services. The overall emphasis is on the management of current and future groundwater flood risk as an area much less understood than coastal, fluvial and surface water risks. The partnership has recognised there is an identifiable impact of groundwater on residents and infrastructure across the Greater Lincolnshire area, and this little-understood subject offers opportunities for innovative approaches to be taken in making a strong bid.

Following the success of an Expression of Interest in January 2021, LCC were informed of the success of the application and acceptance on to the Flood and Coastal Resilience Innovation (FCRI) programme. It confirmed that capital funding to the value of £7,551,000 will be received over the six-year period of the project timeframe (1 April 2021 to 31 March 2027) to take forward the actions and interventions identified in the EOI. The £150 million FCRI programme was re-confirmed in the Government spending review and confirmation was received that following Ministerial approval, the Environment Agency can now allocate and pay-out this funding commencing during the financial year 2021/22.

A stipulation of the project is that this has to be led by a Lead Local Flood Authority. Lincolnshire County Council, having this role, will therefore be required to administer the funds for this project and co-ordinate project actions with partners and stakeholders to deliver against the objectives set. This project will be fully funded via drawdown of the capital allocation, with only officer time from both LCC and partners required to support project delivery.

Development of an Outline Business Case

All projects have to complete an Outline Business Case (OBC) for assurance and approval by the Environment Agency's national project assurance groups. Initial allocations of funding for the supporting studies required to complete an OBC had to be claimed via submission of form FCERM7: Application for approval of studies. This was completed by members of the partnership and outlined key packages of work that will be required to lead to the development of the OBC and the associated indicative costs.

In producing an OBC this will support the development of a multi-functional Integrated Catchment Model. This model will involve using innovative methods to assess groundwater flood risk at a catchment level and will incorporate input data from partners across Greater Lincolnshire. The capability of the models will be adapted so that it is fit for purpose to be able to assess water resource opportunities and to also identify where groundwater flooding is likely to occur. Whilst the modelling work will be core to the development of the overall project other areas which will be explored include potential environmental benefits and resilience to climate change and a key focus on community engagement to better understand the risk of groundwater flooding. To support this, and in developing a robust OBC the key packages of work currently identified by the project team are as follows:

Project Team Resource

- To establish dedicated resource within the project team to manage the overall programme and undertake day to day tasks such as engagement, procurement, technical input and completion of the OBC. This dedicated resource is seen as fundamental to ensuring deliverables are produced to programme and meet the quality standards expected. This resource will entirely be externally funded for the duration of the project.
- Recruitment of a National Flood Forum Community Engagement Officer to establish effective community groups and facilitate a multi-agency approach to help the residents deliver outcomes.

Strategic Groundwater Assessment and Gap Analysis

The Strategic Groundwater Assessment has been identified as the first phase of work in assessing what data is available within the wider partnership, what methods can be used and enhanced for modelling and where there are gaps in resource, knowledge or data. The Strategic Groundwater Assessment will consist of the following tasks:

- Desktop review of the Rapid Evidence Assessment (REA) of Groundwater flooding;
- Review national mapping products for capability;
- Capability Assessment of the Greater Lincolnshire Limestone and Chalk models;
- Collection of localised data to assist with the Integrated Catchment Modelling; and
- Gap analysis – consisting of scope of works for Catchment Modelling and any other required tools

The project team are engaging with consultants who built the Greater Lincolnshire Limestone and Chalk models and will work with them moving forward to develop this further.

Confirmation has been received from the Environment Agency national team that this project has already been assessed against the criteria relating to project viability and deliverability and it is expected this next stage of project development will provide the

opportunity to further refine the scope of the project and reduce critical areas of risk and uncertainty.

Next steps

Led by officers at LCC, and supported by other partners and stakeholders, the OBC for this project has been developed over recent months in anticipation of meeting the submission deadline of end of April 2022. The OBC in its current form can be found in **Appendix A** although please note that this is still in draft and is being continuously updated by the partnership. It is recognised there are sections where further detail is needed, however the context will not fundamentally change between now and submission deadline. Support is available through the Environment Agency to review the business case and, where necessary, will make recommendations which help the project get off to the best start possible to enable the partnership to achieve the planned benefits and outcomes for the project. The Greater Lincolnshire Groundwater Project has been submitted for an Outline Business Case Health check with the national Flood and Coastal Innovation Programme Team and opportunity has been taken to meet with the OBC assurance panel all ahead of the final OBC submission. Assurance will be a key step for the project with the aim to be passed through Environment Agency assurance with a recommendation to approve. This will then allow the project team to draw down additional funding, develop a full business case and begin to deliver on the actions identified.

2. Conclusion

The Flood & Coastal Resilience Innovation Programme provides the opportunity to develop understanding of a broad range of groundwater risks and opportunities across multiple LLFA areas, leading to a range of practical actions delivered in partnership over the next six years. It is intended that these actions should incorporate multiple benefits, such that environmental and social resilience is built into the approaches developed.

The Expression of Interest form, developed in a relatively short period of time, required the rapid establishment of a partnership involving a broad range of partners from across the Greater Lincolnshire area. The successful establishment of this partnership and the active collaboration of its members indicates the recognition across the region of the climate change challenges faced by our residents, businesses and environment.

Final refinement of the Outline Business Case is ongoing in advance of the submission deadline of the end of April 2022. Subject to assessment and approval this will allow drawdown of the remaining allocated funds to support the continued development and delivery of the Greater Lincolnshire Groundwater Project for which the partnership will then be committed to delivering on the objectives set out for this project.

The Executive Councillor is recommended to approve the submission of the OBC in respect of the Greater Lincolnshire Groundwater Project generally as attached at Appendix A with a delegation to the Executive Director – Place to make final changes prior to the final submission date.

2. Legal Issues:

Equality Act 2010

Under section 149 of the Equality Act 2010, the Council must, in the exercise of its functions, have due regard to the need to:

Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Act.

Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.

Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The relevant protected characteristics are age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex; and sexual orientation.

Having due regard to the need to advance equality of opportunity involves having due regard, in particular, to the need to:

- Remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic.
- Take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it.
- Encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities.

Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to tackle prejudice, and promote understanding.

Compliance with the duties in section 149 may involve treating some persons more favourably than others.

The duty cannot be delegated and must be discharged by the decision-maker. To discharge the statutory duty the decision-maker must analyse all the relevant material with the specific statutory obligations in mind. If a risk of adverse impact is identified consideration must be given to measures to avoid that impact as part of the decision-making process.

Addressing issues regarding groundwater flooding is intended to support those communities most impacted by this form of risk. A Readiness Assessment undertaken by an external agency included assessment of impacts upon vulnerable groups within society, and the development of community engagement elements of the programme through the national Flood Forum is specifically designed to explore differential impacts on those with protected characteristics and to develop solutions accordingly.

Joint Strategic Needs Analysis (JSNA) and the Joint Health and Wellbeing Strategy (JHWS)

The Council must have regard to the Joint Strategic Needs Assessment (JSNA) and the Joint Health & Wellbeing Strategy (JHWS) in coming to a decision.

The Greater Lincolnshire Groundwater Project has most direct application with regard to the housing elements of the JSNA and the mental health (adults) priority within the Health and Wellbeing Strategy. It is intended that direct community engagement work will support appropriate intervention in this regard during the implementation of the project, and close links have been developed with public health services in the development of the Outline Business Case.

Crime and Disorder

Under section 17 of the Crime and Disorder Act 1998, the Council must exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent crime and disorder in its area (including anti-social and other behaviour adversely affecting the local environment), the misuse of drugs, alcohol and other substances in its area and re-offending in its area.

Limited direct impacts in terms of anti-social behaviour and other aspects of crime and disorder were identified during the completion of the readiness assessment, however there is potential for substantial contribution to improving community resilience in the longer term and for reducing adverse community impacts that can contribute to localised lack of inclusion or diminished sense of community belonging.

3. Conclusion

The conclusion of this decision report is that it is appropriate for Lincolnshire County Council, as Lead Local Flood Authority, to submit an Outline Business Case to the Environment Agency regarding the Greater Lincolnshire Groundwater Project and approval is sought from the Executive Councillor to do so.

4. Legal Comments:

The Council has the power to submit the Outline Business Case as recommended.

The decision is consistent with the Policy Framework and within the remit of the Executive Councillor

5. Resource Comments:

Submission of an Outline Business Case as recommended, is necessary to progress securing the full £7.551m funding for the Flood and Coastal Resilience Innovation programme. Development of the OBC has to date been funded by Defra with existing staff time contributed by the partners.

Continuing development of the project to Full Business Case and ultimately delivery, is also expected to be funded by Defra and is not forecast to require any contribution from the Council's own resources beyond Officer time which is already budgeted for in the approved revenue budget.

6. Consultation

a) Has Local Member Been Consulted?

N/A

b) Has Executive Councillor Been Consulted?

Yes

c) Scrutiny Comments

This report will be considered by the Environment & Economy Scrutiny Committee on 12 April 2022 and the comments of the Committee will be reported to the Executive Councillor.

d) Risks and Impact Analysis

An external Readiness Assesment has been carried out during the preparation of the Outline Business Case which identifies key impacts across the programme as a whiole. This is available from the author of the present report. In addition, each constituent project within the programme will undertake a detailed impact assessment as part of its delivery, which will be managed through the project delivery team.

7. Appendices

These are listed below and attached at the back of the report	
Appendix A	Greater Lincolnshire Groundwater Project - Outline Business Case

8. Background Papers

The following background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

Background Paper	Where it can be viewed
Readiness Assessment Report	LIN011_Readiness_Assessment_Report_Final_26102021.pdf.

This report was written by Matthew Harrison, Flood and Water Manager, who can be contacted on 07771 837565 or matthew.harrison@lincolnshire.gov.uk.

Please delete this page before submission
Outline Business Case Template for the Flood and Coastal Resilience Innovation Programme

This document provides a template for Outline Business Case submissions for the flood and coastal resilience innovation programme. Authors and Assurers should read this document in conjunction with the "Flood and coastal resilience innovation programme - Outline Business Case Guidance (May 2021)".

The structure and content of this document are intended to support the application process, alignment of submission with the objectives of the programme, and to set individual projects-up for success during the investment period 2021-2027, and beyond.

The flood and coastal resilience innovation programme objectives are:

- To encourage and enable local authorities, businesses and communities to test and demonstrate innovative practical actions within their areas.
- To improve the resilience of 25 areas to flooding and coastal change, reducing the costs of future damage and disruption from flooding and coastal erosion.
- To improve evidence on the costs and benefits of the innovative actions and demonstrating how different actions work together across geographical areas, and

To build, through practical experience and implementation, new evidence and learning developed to inform future approaches to, and investments in, flood and coastal erosion risk management (post 2027).

Submissions are required to meet the following Five Principles:

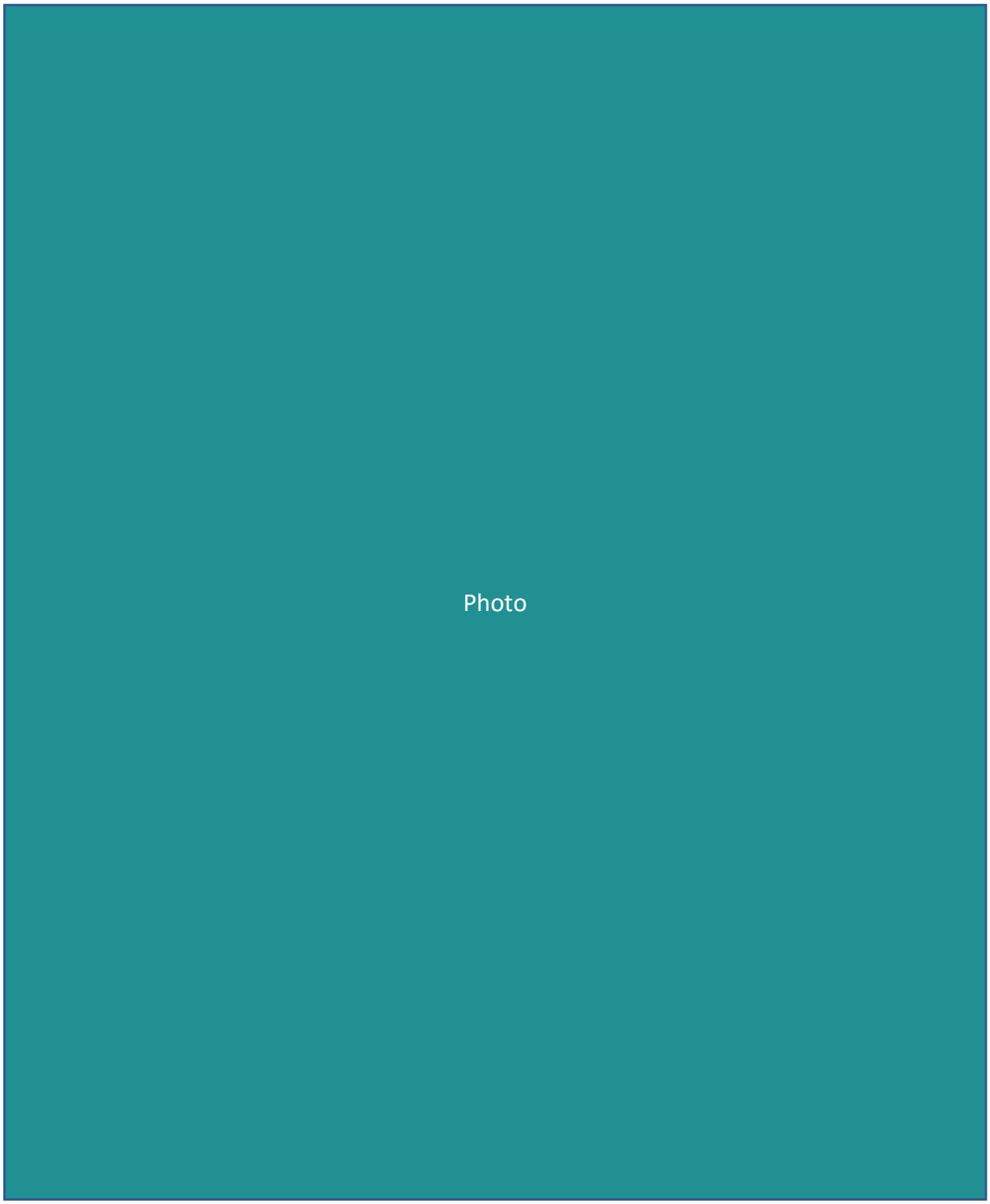
1. Deliver practical changes which increase the resilience within the project area by reducing the likelihood or consequences of flooding or coastal erosion.
2. Deliver benefits to people and their communities
3. Be consistent with existing flood and coastal erosion plans (in particular, local flood risk management strategies, flood risk management plans, catchment flood management plans and shoreline management plans).
4. Demonstrate added value by complementing and going beyond other local resilience work programmes and other funding mechanisms (for example, the Environmental Land Management scheme, flood recovery schemes, Nature for Climate Fund, the DfE's Flood Resilient Schools work).
5. Demonstrate innovation (in particular by trialing new combinations of resilience actions, filling evidence gaps on costs and benefits, broadening the range of resilience actions, and through innovative approaches to increase the uptake and delivery of resilience actions).

Greater Lincolnshire groundwater Project

Outline Business Case

Lincolnshire County Council

[date]



Issue and revision record

Revision	Date of Issue	Originator	Checker	Approver	Description

Comment sheet

Changes from EoI Submission to OBC

Summary of Submission

Project name:	G**reater Lincolnshire Groundwater Project**
Project short name:	GLGP
Project reference:	LIN011
Total Project Value:	**£8,001,000**
OBC Submission Value for Approval:	**£7,551,000**
Public Contributions (£):	**£0**
Private Contributions (£):	**£450,000**
Primary Source of Risk:	**Groundwater Flooding**
Secondary Sources of Risk:	
Milestone Full Business Case Approval	**[Insert date]**
Milestone – Readiness for service	**[Insert date]**
Project completion	**31/03/2027**

Across the Greater Lincolnshire area there is a record of groundwater causing flooding of property, assets, impacts on the highway network and 'near misses' requiring remedial works on an ad hoc basis.

The Greater Lincolnshire Groundwater Project (GLGP) is an Innovative Partnership approach to better understanding and managing groundwater flood risk and resources. The project will initially focus on 3 trial sites across the region with the intention that the delivery of the project outcomes could be implemented on a wider scale. The emphasis of the project is on integrating with wider issues around environmental land management; health and wellbeing; water as a resource; the creation of new biodiverse environments; creating resilient people and places; and sustainable water level management.

Lincolnshire County Council is leading the delivery of outcomes for this project and is supported by a consortium of partner stakeholders.

Short description of the benefits

The GLGP aims to achieve the following benefits:

- A wider awareness of the resilience measures available to risk management authorities
- Improved knowledge and understanding of current and future groundwater flooding and resource across Greater Lincolnshire

- In coordination with RMAs, ensure communities have the knowledge to increase their resilience to groundwater flooding
- Reduce flood damage within the identified trial sites
- Identified opportunities across Greater Lincolnshire to sustainably manage flood risk from groundwater
- Provide evidence base on impact and effectiveness of measures

The lessons learnt, and successful practices implemented in the place-based delivery of the project will help inform future approaches and develop a potential pipeline of future groundwater related projects.

Lead Authority	**Lincolnshire County Council**
Delivery Partners **Anglian Water, Blow Wells Working Group, East Lindsey District Council, North Kesteven District Council, Environment Agency, East Lincolnshire Countryside Wolds Service, Humber Local Resilience Forum, Lincolnshire Chalk Streams Project, Lincolnshire Chalk Streams Trust, Lincolnshire County Council, Lincolnshire Local Resilience Forum, Lincolnshire Rivers Trust, Lincolnshire Wildlife Trust, Lincolnshire Wolds Countryside Service, National Flood Forum, Natural England – Catchment Sensitive Farming, Humber Nature Partnership, Greater Lincolnshire Nature Partnership, Lincolnshire Environmental Record Centre, North East Lincolnshire Council, North Lincolnshire Council, University of Lincoln, Water Resources East, Witham 3rd Internal Drainage Board, Lindsey Marsh Drainage Board**	

Project Risk (£)[1]	**[Insert (£)]**	**[Insert (%)]**
Optimism Bias value (£)	**[Insert (£)]**	**[Insert (%)]**

[1] These risks relate to the scope of work being funded by the flood and coastal resilience programme if this is different to the whole project.

Expenditure Profile:

Costs per year (£k)	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	Total (£k)
Flood and Coastal Resilience Innovation Programme Funding	370	1238	1266	2010	2025	641	7551
Contributions	23	135	113	90	68	23	450
Total Project Expenditure	393	1373	1378	2100	2093	664	8001

Project Manager: **Matthew Harrison**
(interim while recruitment for a fulltime Project Manager takes place)
Flood and Water Manager
Matthew.Harrison@lincolnshire.gov.uk
01522 555172

Project Executive: **David Hickman**
Head of Environment
David.Hickman@lincolnshire.gov.uk
07919045257

Environment Agency Contact: **Stephanie Lynes**
Flood Risk and Coastal Management Advisor
Stephanie.Lynes@environment-agency.gov.uk
0203 0251333

Contents page

Required appendices

2A Communications and engagement plan
2B Environment report
2C Detailed description of the investment proposals and sub-projects
3A Description of investment optimisation
3B Details of costs and benefits
3C Investment and innovation risk register
4A Procurement strategy
5A Detailed expenditure profile
5B Contributions
6A Partnership agreements and governance structure
6B Project management and Quality Plan (include SHEW plan)
6C Routemap and programme
6D Innovation and learning: Detailed plans for monitoring, evaluation and dissemination

1 Executive Summary

1.1 Strategic Case

Summarise the Strategic Case for change, the alignment with the Resilience Innovation Programme and the objectives of the investment.

Across Greater Lincolnshire there is a record of groundwater causing flooding of property, assets, impacts on the highway network and 'near misses' requiring remedial work on an ad hoc basis. Nationally it is the least well understood source of flooding and LLFAs throughout England do not have the capacity to fully evaluate and understand the extent of the risks, to prioritise them in relation to fluvial or surface water flood risk, or to undertake works to manage them.

There is a need to gain a greater understanding of how widespread the groundwater issues are. Numerous homes in Grimsby alone are known to be at significant risk of flooding and there is a recent history of groundwater-related flooding across parts of Lincolnshire, but the true extent and inter-dependencies need to be better understood.

The Innovation Programme provides the opportunity to develop a greater understanding of a broad range of groundwater risks and opportunities across multiple Lead Local Flood Authorities, across Greater Lincolnshire, leading to a range of practical actions delivered through the project at trial sites. It is intended that these actions should incorporate multiple benefits, such that environmental and social resilience is a key factor to be built into the approaches developed.

The project will build on our current knowledge to understand how the predicted impacts of climate change on temperature, rainfall and sea level will have an impact on the groundwater levels of the Lincolnshire Northern Chalk and Lincolnshire Limestone catchments.

The key sequential elements to the project will be:

1. The Conducting of academic research into the risk of salinisation of groundwater flooding in the Lincolnshire Fens and undertaking of a gap analysis and subsequent revision, including output validation, of the Lincolnshire Chalk and Spilsby Sandstone and Lincolnshire Limestone groundwater models. During this process initial community engagement will be undertaken within the potential trial sites of Barton and Barrow-upon-Humber, Grimsby and Scopwick, which have been preliminary selected based on observed flooding across Greater Lincolnshire.
2. Based on the outputs of the revised models, 3 trial sites (and potential future sites) will be confirmed.
3. The development and assessment of proportionate place-based measures within the confirmed trial sites. Throughout this process local communities shall be empowered and actively encouraged to take part in the development of measures, whilst simultaneously having regard to model outputs.
4. The implementation and delivery of packages of work in collaboration with stakeholders, including local communities, within the trial sites as identified through the assessment work, specifically suited to managing groundwater both in terms of flood risk and as a resource.

5. Throughout the development and implementation of the project, progress will be monitored, lessons shall be identified, shared and implemented and performance evaluated all of which shall contribute to, in addition to the above, the development of potential pipeline groundwater related projects.

1.2 Economic case

Summarise the Economic Case and the Critical Success Factors.

The GLGP provides the opportunity to develop an understanding of a broad range of groundwater risks and opportunities, leading to a range of practical actions delivered by the Partnership. 3 trial sites will be identified following a review of current groundwater models and gap analysis, but could include Scopwick in Lincolnshire, Grimsby in North East Lincolnshire and Barton and Barrow Upon Humber in North Lincolnshire, selected based on observed records and experiences of groundwater flooding. Business as Usual, regarding groundwater flooding across these sites is limited to remedial works taking place on an ad hoc basis. All three sites have a history of groundwater flooding and have initially been selected due to observed records and experiences of groundwater flooding.

GLGP will deliver against the following Critical Success Factors:

- Ensure learning and feedback is embedded during every aspect of the project
- Understanding current and future groundwater flooding and resource across Greater Lincolnshire
- Improved community resilience to groundwater flood risk withing identified trial sites
- Identify flood risk management techniques that are sustainable, transferable, and affordable

The GLGP requires £7551k from the Flood & Coastal Resilience Innovation Programme.

1.3 Commercial case

Summarise the Commercial Case including approach to procurement.

A system of procurement (based on LCCS contract and procurement procedure rules, and in agreement with our project partners) has been established, providing a consistent approach across delivery partners. The method for tendering and scoring for outsourced work will enable value for money and improve cost estimates for similar work as the project progresses.

Existing frameworks will be used where applicable and new contracts will use a Lincolnshire Council Standard Contract. Direct awards will typically only be used when a service or product is provided by a unique supplier with no competitors and the value is below £25k. However, value for money will be demonstrated through the financial benefit of having a supplier in place faster.

It is anticipated all tendering/quotation exercises will be assessed against both price and quality factors, with the importance of each factor determined on a project-by-project basis to help achieve the best commercial outcomes. The balance of quality and price will always aim to drive value for money, ensure quality and achieve innovation and improvement where possible which will be achieved via a bespoke/tailored approach to each project within the programme.

1.4 Financial case

Summarise the Financial Case including funding sources/key contributions.

The project requires £7,551K cash through the Flood and Coastal Resilience Innovation Programme. Without FCRIP funding no additional works could take place and BAU in the 3 trial sites and wider Greater Lincolnshire area would remain.

In-kind contributions amount to £450K through partners time and resource. To date partners have provided officer time and specialist advice to develop the Expression of Interest and Outline Business Case and it is expected that this will continue to some degree throughout the project. Furthermore, volunteers will be sought to take part in certain activities, such as 'citizen scientists' assisting with the monitoring of actions on the ground. It is expected that all delivery aspects of the project will be undertaken though paid contracts with suppliers.

The assessment of costs is drawn from recent experience of project partners gained through the implementation of strands of similar work related to flood risk and environmental management projects across Greater Lincolnshire. The table below shows the yearly cost breakdown.

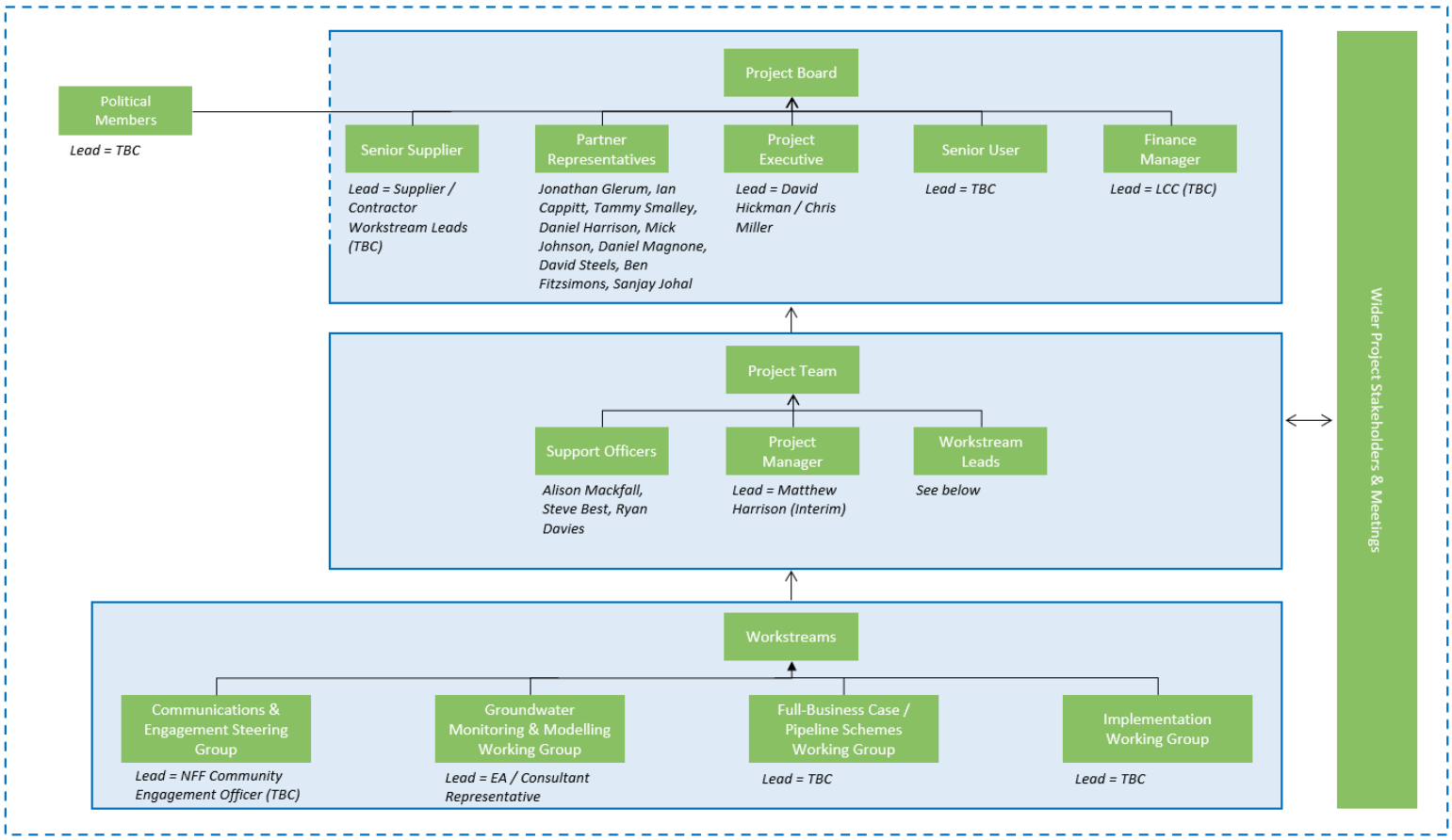
Costs per year (£K)	Year 1 (£K)	Year 2 (£K)	Year 3 (£K)	Year 4 (£K)	Year 5 (£K)	Year 6 (£K)	TOTAL (£K)
FBC development costs	61						
Construction, supervision and delivery costs	0						
Monitoring, learning, evaluation and dissemination	0						
Risk contingency							
TOTAL							

1.5 Management case

Summarise the Management Case including governance arrangements.

As the lead organisation, Lincolnshire County Council (LCC) has extensive experience of delivering projects of a similar scope and scale. Together they demonstrate a successful history of schemes that have been delivered on time, to budget and substantially align with the objectives of the GLGP.

The GLGP partners provide further experience, expertise and capacity in supporting and developing the project. The delivery of work packages will be undertaken by suppliers via contract agreements. The governance structure and terms of reference have been agreed by all partners.



The Project Board will be made up of relevant political members from Lincolnshire, North East Lincolnshire and North Lincolnshire, representatives from key partners, the project executive, the senior user, the senior supplier and an LCC Strategic Finance Manager. Over and above core membership, specialist or expert advisors can be brought into meetings as and when required. The Project Board provide strategic and policy direction to the Project Team and are responsible for scrutinising delivery of the project.

At an operational level, the Project Manager and Project Team are responsible for the on the ground delivery of the project and report to the Project Board. The Project Team will be made up of workstream leads, the Project Manager and project support officers.

Anticipated risks have been identified by the Partnership, along with mitigations based on expertise and experience from previous project learning. The risk register will be reviewed as standard in Project Board meetings. The main risks identified by the partnership include:

- Capacity and resources of partners and contractors throughout the 6 years.
- Slippage in programme due to constraints on partner and supplier resources or the exploratory nature of delivery takes longer than anticipated
- Lack of willingness or interest of stakeholders and communities to engage in the project

Learnings on costs and benefits will be gathered through monitoring by workstream leads. The Project Team will oversee the lessons learnt and change log and learnings will be reported back to the EA and to the wider programme.

Dissemination of monitoring and evaluation during and post project will be by way of:

- Social media/website
- Webinars/conferences/briefings
- Reports
- Newsletters/ published articles
- Events
- Case Studies
- LLFA political processes and relevant scrutiny committees

1.6 Recommendations

A clear statement of the recommendation(s) for approval.

We recommend that endorsement be provided for the continued development of the GLGP up to Full-Business Case, which shall identify preferred options to enhance the resiliency of proposed trial sites to groundwater, including the £7,551k from the Flood & Coastal Resilience Innovation Programme.

(Letters of approval from key partners, submitted with the Expression of Interest, remain unchanged, and all GLGP partners and LCC Executive have signed off the OBC prior to submission).

2 Strategic Case

2.1 Strategic context

Describe the strategic case in relation to the flood and coastal resilience innovation programme, and the regional and local context for the investment.

- How does this investment align with the national ambitions of the Programme and associated policies and plans?
- How does this investment align with regional and local plans and ambitions?

(See Guidance Document Aspect 1)

The new government policy statement on flooding and coastal erosion, published on 14 July 2020, sets out the government's long-term ambition to create a nation more resilient to future flood and coastal erosion risk. The press release included information about the £200m flood and coastal resilience innovation programme. Alongside the policy statement, the Environment Agency published its new National Flood and Coastal Erosion Risk Management Strategy for England, which is also focussed on improving overall resilience and provides a framework to guide the activities of those involved in flood and coastal erosion risk management.

This new flood and coastal resilience innovation programme will make a significant contribution to the implementation of this wider resilience approach.

The risks from flooding and coastal change are recognised in the UK Climate Change Risk Assessment and the National Risk Register. This flood and coastal resilience innovation programme will contribute towards delivery of the Government's 25 Year Environment Plan and Single Departmental Plan outcome 3) for floods and water: reduced risk of flooding.

Groundwater has played an important part in the physical and social shaping of Greater Lincolnshire. For centuries, it has emerged from springs, provided baseflow for chalk steams and blow wells, and been a source of drinking water, it is also a source of flooding, with the duty to manage the risk resting with the LLFA.

Across Greater Lincolnshire there is a record of groundwater causing flooding of property (S.19 investigations), assets (Water & Sewer Company sewer flooding and operational records), impacts on the highway network and 'near misses' requiring remedial works.

Currently, actions that improve the resilience to flood risk from groundwater that are eligible for Flood Defence Grant in Aid (FDGiA) or Local Levy a strategic approach is taken but focussed on each individual project.

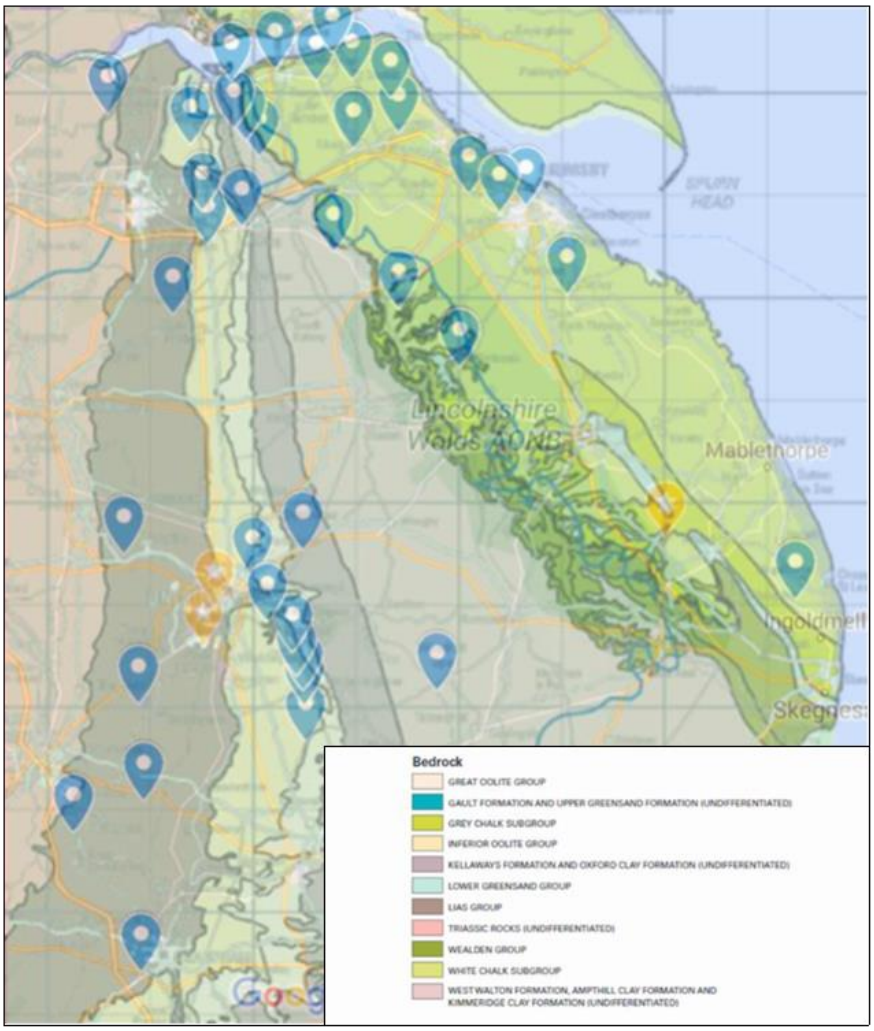
The GLGP will investigate groundwater and what management practices are required not just in flood risk management terms, but also water resources to mitigate against droughts, improve the environment and create communities resilient to multiple risks. The various practical actions, aggregated and singly, will deliver towards the goals within HM Government's 25 Year Environment Plan (2018) and the National Flood and Coastal Erosion Risk Management Strategy.

By identifying and delivering packages of work at trial sites across Greater Lincolnshire, its learning outcomes will provide the evidence base for future capital schemes to mitigate groundwater flood risk. The project will build on the foundations of other initiatives including the EA's Priority Catchment Pilots and the Catchment Based Approach (CaBA).

GLGP may well address the FCRIP key policy challenges, particularly challenge 1 and 3 as the project progresses and packages of work are established. At this stage it would be too early to confirm further details.

Across the county, local planning authorities are at varying stages of production of their local plans, and some have come together to produce joint local development frameworks, for example Central Lincolnshire and South-East Lincolnshire.

The programme will also help fulfil the National Strategy ambitions across Greater Lincolnshire to create climate resilient places, that today's growth and infrastructure is resilient in tomorrow's climate and that this is a region ready to respond and adapt to flooding.



Locations of high groundwater levels across Greater Lincolnshire during the winters of 2019/20 and 2020/21 overlaying a BGS geology map showing the chalk/limestone features of Greater Lincolnshire

2.2 Environment and other considerations

Define any place specific environmental legal obligations, issues and opportunities.
- What is the regional/local environmental context for this investment?
- What key environmental requirements will this investment need to meet?
- What are the key environmental opportunities related to this investment?

The project area is the Lincolnshire Chalk and Spilsby Sandstone and Lincolnshire Limestone in the 3 Lead Local Flood Authority areas show below. Numerous national and locally designated sites may lie at risk of groundwater flooding, for instance, the Lincolnshire Fens is likely susceptible to salinisation from groundwater flooding. In addition to this a Local Planning Authority conservation area exists within Scopwick.

A very important habitat we have in Lincolnshire is the unique blow wells. They are a type of groundwater artesian spring found only in the coastal margins of Lincolnshire which have the designation status of Local Geological Site'. Between Louth and Barton upon Humber, there are around 37 known blow wells, including Tetney Blow Wells, which has been designated as a site of Special Scientific Interest.

We currently have very little information on the full impacts on blow well habitats from abstraction activities. Demand for water in the 1960's reduced groundwater pressure in the chalk aquifer resulting in low or no flow from blow wells. Even though demand for groundwater abstraction has lessened in recent years it is still a key factor impacting on the health of blow wells and chalk steams. The importance of blow wells in the social/cultural, historical and ecological development of Lincolnshire should not be underestimated.

The project will align with / have due regard to the following environmental requirements and strategies:

The Environment Act 2021

The Local Planning Authority conservation area within Scopwick

The Greater Lincolnshire LEP's Water for Growth - Water Management Plan (2015-2040) considers the effective management of flood risk and water resources to be a critical factor in enabling future economic growth across the area. The GLGP will align with the LEP's Plan, which seeks to develop Greater Lincolnshire as a national exemplar for water management, in both flood reduction and water supply, and to act as an incentive for investors in the LEP's priority sectors. Water for Growth recognises the significant challenges facing the area from both the risk of flooding and the future availability of water for residential, commercial and natural uses.

The Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB) Management Plan - 2018-23, recognises the importance of the water resource to this nationally protected landscape, and highlights the need to protect and enhance the function and natural environment of the river and stream catchments, their landscape character and wetland habitats. Policies RSP1 - RSP7 provides the AONB Partnership's (the Lincolnshire Wolds Joint

Advisory Committee – JAC) strategic commitment to this area of work, with specific actions RSPA1 - 18 in the Management Plan aligning with elements of the GLGP.

Anglian Water's Strategic Direction Statement sets out a vision for the future, looking ahead to 2045. Outlined within this document are the long-term challenges faced across the east of England, and the outcomes agreed for customers and the environment. This includes four long term ambitions:
1. Making the east of England resilient to the risks of drought and flooding
2. Enabling sustainable growth
3. Becoming carbon neutral by 2030
4. Working with others to achieve significant improvement in ecological quality

Heritage assets within areas at risk of groundwater flooding.
The Environment Agency aims to become a net zero carbon organisation by 2030, with net zero targets also made by the RMAs. Lincolnshire County Council are working together with other public sector partners, including; Lincolnshire Waste Partnership, Greater Lincolnshire Nature Partnership, Central Lincolnshire Planning Group, Greater Lincolnshire Local Enterprise Partnership and Flood Risk and Water Management Partnership to deliver the ambitions set out in the County Council's Green Master Plan. The GLGP will work with and through existing initiatives to achieve mutual benefits.

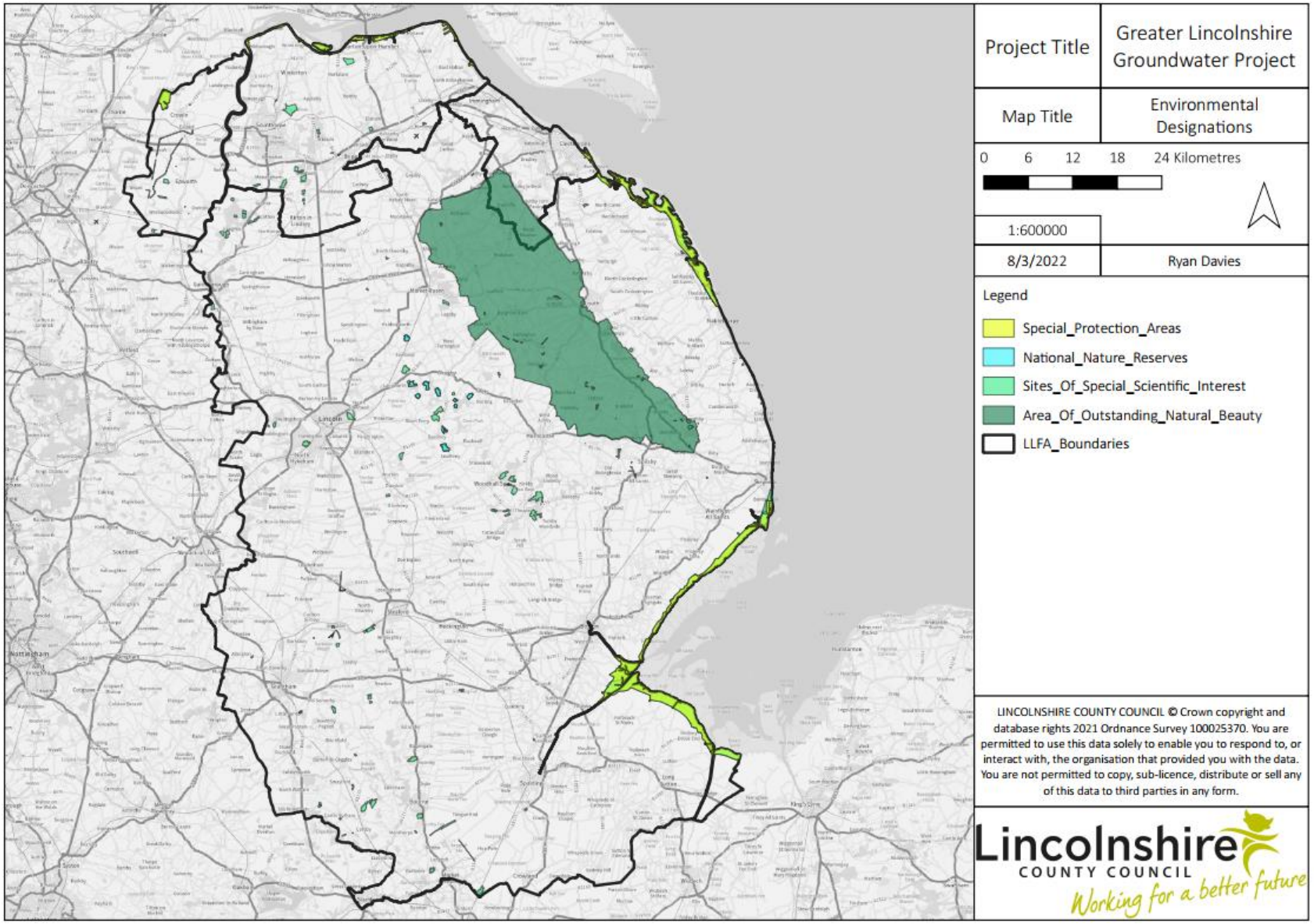
Key environmental opportunities related to the GLGP are outlined below. Further information regarding environmental opportunities is outlined in Section 3.6.3.

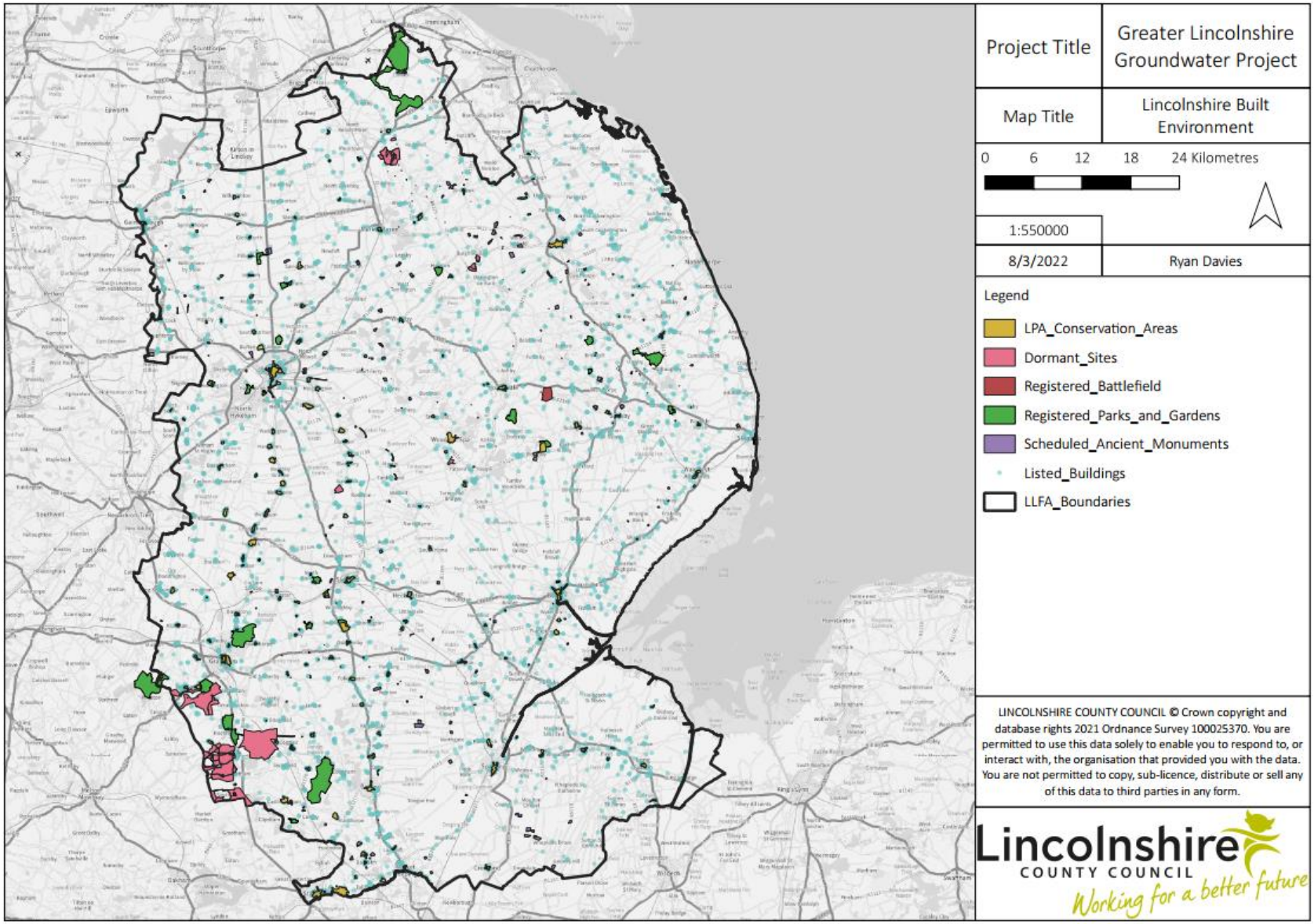
- Potential for biodiversity net gain and carbon sequestration, thereby enhancing the resilience of the natural environment to changes such as climate change, urbanisation etc.
- Potential improvements of the biological, chemical and ecological status of waterbodies across Greater Lincolnshire

At a strategic level, Defra's 25-year Environment Plan calls for a greater use of flood risk management approaches that work with natural systems. GLGP will develop nature-based solutions to manage groundwater in a sustainable way that manages flood risk whilst protecting the environment, enhances watercourses/blow wells, provides amenity benefits and delivers water resources. In doing so, deliver a significant step change in how we manage this precious resource across Greater Lincolnshire.

GLGP will work closely with Water Resources East, the agri-food sector and environmental organisations to identify and appraise opportunities to manage groundwater effectively through a range of measures that reduce flood risk, deliver water quality and water resource benefits, including keeping chalk streams at health levels.

There are many heritage assets also within areas at risk of groundwater flooding. Listed buildings can suffer major damage from long duration flooding and there is often a reluctance to fit typical Property Flood Resilience (PFR) products to heritage assets and/or they are not effective because of the porosity of the buildings' construction.


Project Title
Greater Lincolnshire Groundwater Project
Map Title
Environmental Designations
0 6 12 18 24 Kilometres
1:600000
8/3/2022
Ryan Davies
Legend
Special_Protection_Areas
National_Nature_Reserves
Sites_Of_Special_Scientific_Interest
Area_Of_Outstanding_Natural_Beauty
LLFA_Boundaries
LINCOLNSHIRE COUNTY COUNCIL © Crown copyright and database rights 2021 Ordnance Survey 100025370. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.
Lincolnshire
COUNTY COUNCIL
Working for a better future


Project Title
Greater Lincolnshire Groundwater Project
Map Title
Lincolnshire Built Environment
0 6 12 18 24 Kilometres
1:550000
8/3/2022
Ryan Davies
Legend
LPA_Conservation_Areas
Dormant_Sites
Registered_Battlefield
Registered_Parks_and_Gardens
Scheduled_Ancient_Monuments
Listed_Buildings
LLFA_Boundaries
LINCOLNSHIRE COUNTY COUNCIL © Crown copyright and database rights 2021 Ordnance Survey 100025370. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.
Lincolnshire
COUNTY COUNCIL
Working for a better future

2.3 Objectives (programme and project)

Linked to the strategic context and environmental considerations, describe the project objectives.
- What are the objectives of the investment?
- Are the objectives SMART (specific, measurable, achievable, realistic and time bound)?

The aims of the flood and coastal resilience innovation programme are to:

- Encourage local authorities, businesses and communities to test and demonstrate innovative practical resilience actions in their areas
- Improve the resilience of 25 local areas, reducing the costs of future damage and disruption from flooding and coastal erosion
- Improve evidence on the costs and benefits of the innovative resilience actions and demonstrate how different actions work together across geographical areas
- Use the evidence and learning developed to inform future approaches to, and investments in, flood and coastal erosion risk management

The project objectives, as submitted in the Expression of Interest document, have now been reviewed and expanded and are set out below:

Objective 1. Within the first two years, we will build on existing academic research and undertake a gap analysis of the Lincolnshire Limestone and Lincolnshire Chalk and Spilsby Sandstone models, including model validation, to gain a greater understanding of groundwater as both a risk and a resource across Greater Lincolnshire.

Objective 2. By 2027 we will identify and implement packages of work within the three confirmed trial sites which will enhance the resilience of local communities whilst simultaneously protecting and enhancing the environment, providing amenity benefits and delivering water resources.

Objective 3. To maximise the learning for the duration of the project we will continuously review all packages of work. We will adapt the programme to reflect the learning from this review and promote and roll out successful practices to reduce risk and improve resilience.

Objective 4. Between 2024 and project end in March 2027, we will, having regard to our newfound understanding of groundwater as both a risk and resource across Greater Lincolnshire, review lessons learnt to help inform and develop a potential pipeline of future groundwater related projects. We will, not only continue to develop understanding in this field but also sustain and further strengthen the partnership developed as part of the Flood & Coastal Resilience Innovation Programme.

2.4 Summary project description and mix of actions

Describe the project, the mix of actions and how they relate to the ambitions and objectives.
- How do the mix of actions work together to maximise resilience?
- What new evidence will be established to support a broader range of future FCERM actions?
- How will the project support an increasing uptake and delivery of future FCERM actions?

(See Guidance Document Aspect 1)

To date actions that improve the resilience to flood risk from groundwater are currently being considered or taken at a purely local level and on an opportunistic basis. This project offers the opportunity to develop plans and actions that provide broad and sustainable water management at both a strategic and operational levels, tailored to a range of geographical areas. GLGP, through desk based research and gap analysis of existing groundwater models will identify initially 3 trial sites in Greater Lincolnshire, potentially, Scopwick, Grimsby and Barton and Barrow Upon Humber and implement a package of works which, following an evaluation of lessons learnt and successes, could be implemented in other areas.

The proposed activities will improve our ability to understand and plan for groundwater flooding, whilst increasing our ability to protect communities, recover from and respond to high groundwater levels across Lincolnshire. By delivering this mix of actions we will move away from individual actions taken at a very local level to address impacts of elevated groundwater levels, for example on an individual property scale, and move to a more community or regional scale. The project outcomes will provide the evidence base for future capital schemes to mitigate groundwater flood risk.

The following proposed activities, through partnership work, new monitoring and datasets, evolving model systems and innovative thinking and delivery; will improve our ability to understand and plan for groundwater flooding:

Review existing research and undertake a gap analysis of groundwater issues across the Greater Lincolnshire area:

- **Strategic Groundwater review** into all groundwater issues across the Greater Lincolnshire area. At the same time, refine the Greater Lincolnshire catchment groundwater models to help identify opportunities for options that deliver multiple benefits from the management of groundwater.

- **Catchment Assessment** to identify and assess opportunities to sustainably manage flood risk from groundwater across Greater Lincolnshire on completion of the modelling work, whilst maximising additional benefits for water quality and water resources.

This research will help to identify 3 trial sites (and potential future sites) and to undertake an options appraisal to deliver practical solutions for managing groundwater:

- **Options appraisal** by working with Water Resources East, the agri-food sector and environmental organisations to identify and appraise opportunities to manage groundwater effectively through a range of measures that reduce flood risk, deliver water quality and water resource benefits e.g. keeping the chalk streams at healthy levels, agricultural land making appropriate use of groundwater.

Implement and deliver packages of work in the test locations as identified through the assessment work, specifically suited to managing groundwater flooding. This could include:

- **Managing groundwater risk** by delivering practical solutions that manage the risk of groundwater flooding in test locations, which could include Scopwick, Grimsby and Barton.

- **Sustainable operations delivery** to develop and deliver sustainable operations for IDBs, AW and farmers, enabling the management of groundwater through innovative techniques and transferring excess water to areas of need. This may possibly include wellfield operations, sustainable pumping regimes, water transfer and on-farm storage opportunities.

- **Harnessing natural processes** by working with natural processes to identify and deliver natural flood management options in both rural and urban setting, particularly on or near the chalk streams and limestone catchments across Greater Lincolnshire.

- **Implementation of an on-the-ground monitoring program** e.g. smarter monitoring of groundwater levels, measuring watercourse flows to monitor test sites and enhance the groundwater models, create a new network of boreholes with telemetry which can help inform groundwater flood warnings to be issued to increase community resilience.

Partners will work with stakeholders, including communities in the identified trial sites to deliver resilience measures and raise awareness of groundwater issues:

- **Community Engagement** by working with local communities in the 3 trial sites to deliver resilience measures and raise awareness of groundwater flooding issues, including flood stores, riverCare (or similar) groups, citizen science monitoring programs.

The project will have identified cost-beneficial actions; actions that increase resilience; synergies and antagonisms; combinations; and actions that are less successful. Moreover, the project will have identified opportunities across Greater Lincolnshire to sustainably manage flood risk from groundwater.

2.5 Key innovation learning and main benefits

Summary description of the key innovation learning and investment benefits.
- What are the expected learning outcomes: costs and benefits, management and governance, skills and capacities?
- What are the expected main benefits of the investment?

Until now we have not had the opportunity or resource to bring together active partners across Greater Lincolnshire to tackle the issue of flooding from groundwater. This project, in recent months, presented the circumstance whereby a multitude of partner organisations have come together to discuss how we need to work together across Greater Lincolnshire to deliver the Greater Lincolnshire Groundwater Project.

This innovative large scale collaborative approach to delivering the range of intervention activities the group outlined in Appendix 2C will not only have cost savings but also benefits from the sharing of data, resources, expertise, knowledge, support, links to the farming community and community groups and much more.

Learning outcomes, delivered through the place-based activities as detailed in Appendix 2C, include:

- Insights into a wider partnership approach to groundwater flood risk
- Sustaining engagement with stakeholders for the project duration
- Approaches to engagement and collaboration with communities to implement, monitor and evaluate resilient measures
- Further understanding of how to work collaboratively with other RMAs on groundwater projects
- Greater understanding /database of groundwater in Lincolnshire for use across RMAs in the future
- Greater understanding of existing models that can be utilised and adapted to gain a greater understanding of groundwater flood risk
- Enhance understanding of how groundwater resource can be managed
- Insight into how groundwater as a resource can be managed by specific sectors such as agriculture, water and environmental
- A greater understanding of place-based initiatives and their suitability to be implemented at other locations
- Development of an evidence base of what measures enhance resiliency to groundwater flooding (in certain circumstances) including what measures do not work

The main anticipated benefits of the GLGP are summarised below**,** further detail regarding these benefits are outlined in Section 3.6.

- Improve partners knowledge and understanding of, and identify opportunities (including cost certainty) for the sustainable management of groundwater as a resource across Greater Lincolnshire, including the identification of potential future pipeline schemes
- Enhance stakeholder awareness of groundwater (both as a risk and resource), whilst simultaneously empowering local communities and policy makers to plan and adapt

to flood risk and climate change by actively involving all those concerned within the design, implementation and maintenance of measures.

- Support an increased uptake and delivery of future FCERM actions in combination with actions from other sectors by increasing the acceptance both locally and nationally of investment regarding the integrated management of groundwater.
- Strengthen and build upon existing ways of working across both political and organisational boundaries
- Learning on how to measure resilience to groundwater
- Understanding and improving the emergency response capacity and capability to groundwater flooding amongst partners and communities
- Learning on approaches to monitoring of success of groundwater flood risk solutions

2.6 Strategic risks and learning from past projects

Describe the strategic risks and the learning captured from past projects with similarities to the main strategic risks.

- What are the key risks during Full Business Case development and delivery (up to 2027)?
- What are the key risks beyond 2027?

Based on the Readiness Assessment and project's risk register the following table summarises strategic risks to the project through the six-year programme and how learnings from past projects will help us manage them.

Key Risks	Mitigation /Past learning	To FBC	Up To 2027	Post 2027
Capacity and resources of partners /contractors throughout the 6 years	LCC and partners have delivered projects of similar scale. ToR are all in place to demonstrate levels of commitment by the Partnership through regular project board meetings. Contracted suppliers will undertake most of required works, managed by a full time Project Manager and supported with a proposed 2x project officer. Utilisation of a diverse supply chain network in accordance with LCC Procurement rules / regulations.	•	•	
Slippage in programme /scope creep/delays in delivery of actions	Regular tracking and review of resource by PM and early indications raised by partners. Forward planning and understanding of risks for each phase so that any delays are more likely to be mitigated	•	•	
Lack of access to data / data granularity for the identified trial sites, subsequently hindering refinement of groundwater models	Maximise partnership networks and engagement opportunities to obtain access to data/land	•		

Lack of willingness or interest of communities to engage in the project	Utilise engagement specialists and pre-existing communication channels	•	•	•
Increased costs associated with supplier resource	Quantify and plan project around maybe a most likely, best case and worse case spend profiles.	•	•	•
Ability to sustain implemented Measures / Works	Identification of innovative funding sources for maintenance The designing of measures / works to be proportionate / sustainable, having due regard to future funding / maintenance requirements			•
Maintaining the engagement of partners throughout the 6-year project	Provision of regular project updates, actively involving partners in the development of the project and ensuring partners are brought in as and when appropriate times	•	•	
Ability to Obtain Funding for Future Potential Pipeline Schemes	Development of proportionate and feasible business cases, which identify and draw upon a broad range of funding sources			•
Realisation of severe weather events	Established Local Resilience Forum procedures already in place.	•	•	•
Potential Withdrawal of Project Funding	N/A	•	•	
Gap analysis reveals that the groundwater models may not be fit for purpose. The work necessary to revise the models may be greater than expected. The worst-case scenario would be that an entirely new catchment model would need to be produced.	Correspondence with relevant stakeholders has revealed that the Lincolnshire Limestone model is not calibrated for groundwater flood risk assessment, instead low flows, hence revisions of the model will be necessary.	•		

2.7 Constraints and dependencies

Describe the key delivery constraints and dependencies?
- What are the project constraints such as statutory requirements and conditions relate to funding contributions?
- What external project dependencies exist such as links to other projects?

The overarching project dependencies/ constraints are:
- Timescales
- Data access and availability
- Availability of resources (partnership/consultants/volunteers)

The table below identifies further constraints/dependencies for the key proposed project activities:

Activity	Constraint/Dependency
Partnership Management	• Recruitment of project manager • Procurement of suitable Consultants

	• Capacity of partner members to invest time and resources • Ongoing partner, political and community support for the project • Robust risk management process
Strategic Groundwater review and catchment assessment	• Obtaining groundwater extraction licences • Ability to suitably expand upon existing models • Resolution of existing data / availability of observed data • Supply chain dependencies • Installation of additional boreholes / groundwater monitoring systems
Options appraisal	• Landowner take up and buy in • Model outputs that clearly project current and future groundwater resources under a range of scenarios • Site characteristics / ecological survey requirements • Levels of community engagement • Funding restrictions / limitations • Desired level of annual protection
Operations Delivery	• Dependency on landowners/farmers access to land • Planning permission • Landowner buy in • Further lockdown restrictions • Grant funding restrictions (particularly for property flood resilience measures) • Raising cost of materials and inflation
Harnessing natural processes	• Constrained by costs as these could be significant • Site feasibility • Clearly defined maintenance arrangements and funding for this maintenance • Land availability
Community Engagement	• Lack of community engagement/support at trial sites (including community buy-in) • Recruitment of Community Engagement Officer • Further lockdown restrictions
Implementation of on-the-ground monitoring program	• Landowner permission re installing monitoring equipment • Consistency in survey methods • Availability of resources

2.8 Stakeholder Engagement

Describe the stakeholder engagement completed to inform the Business Case, and the proposed involvement of stakeholders in development of the Full-Business Case.

- How has stakeholder participation and engagement influenced and shaped the investment proposals?

(See Guidance Document Aspect 2)

The GLGP was established in November 2020 with the support of members from both the Lincolnshire Joint Flood Risk & Water Management Partnership and external stakeholders. This new partnership (a number of our partners are therefore also our stakeholders) cuts across many sectors – public, private, non-governmental, communities and the three political boundaries being Lincolnshire, North East Lincolnshire and North Lincolnshire (the full list of partners is detailed in Appendix 6A).

Consultation in relation to the project has been considered from an early stage in its development. As part of the development of the Expression of Interest and Business Case,

partner workshops were undertaken so as to capture information, develop a fuller understanding of partners issues and to consider the range of proposals that could address these.

In completing the business case, a readiness assessment was undertaken, and a specific steering group established with partners invited to join to assist, inform and make recommendations for its submission. Partners with specific expertise that could inform the business case were identified and consulted with, and the wider project group were asked to make recommendations before its final submission (currently in progress to coincide with the OBC health check submission). Two consultants have been commissioned to carry out the gap analysis work as detailed in the EOI, and whilst this work is ongoing these initial findings will set the scene for much of the planned works.

Moving forward, partners will continue to be part of the project development and play an active part of the delivery of practical actions on the ground. The engagement of stakeholders and partners is key, with each bringing expertise, experience and resource to the project that will ensure its success. Regular partner meetings will continue to inform and update the project and additional subgroups created where required. The project team has worked with Icarus in developing the readiness assessment and hosting partner engagement sessions.

Wider stakeholder engagement will take place in developing the full business case through proactive communication with local communities to support the project.

Community engagement work is currently being carried out in one of the potential trial sites at Scopwick with the involvement of the Scopwick Parish Council in a multi-agency working group looking at groundwater flood risk in the village.

In confirming the trial sites, a stakeholder mapping exercise for each location will be undertaken to ensure we have identified all relevant parties. At this stage further community engagement will take place to help shape and deliver the proposed packages of work, as per the Communication and Engagement Plan (Appendix 2A) . Community engagement may include, but is not limited to:

- Let's Talk Lincolnshire (LCC' public consultation website)
- Newsletters, published articles (LCC County News, Parish/town council news)
- Dedicated website on LCC's and (potentially) partners
- Social media – using LCC's established channels to circulate updates
- Email – a dedicated mailbox has been established for all enquiries
- Meetings: discussion events / workshops/ briefings/ drop in events
- Community Champions and case studies

This will complement the work of the Community Engagement Officer, recruited by GLGP partner National Flood Forum engagement.

2.9 Monitoring and evaluation framework, and dissemination

Describe the monitoring and evaluation framework for learning, building new evidence and dissemination of project outputs to achieve maximum impact.

- How will learning be monitored and evaluated?
- How will new evidence of costs and benefits be recorded and evaluated?
- How will dissemination be achieved during and post project?

(See Guidance Document Aspect 11)

Progress will be monitored by the Board in accordance with the monitoring mechanisms outlined in the developing governance structure (and through the EA's reporting expectations); this includes but is not limited to regular Board meetings, political scrutiny and due financial diligence.

Monthly reporting will become part of the governance and project control mechanisms and aligned with LCCS reporting/accounting procedures until the end of the project and feed into the project board. Reports will describe progress against:

- Baseline
- Budget
- Expected benefits

Learnings from GLGP will be identified, captured and shared through the Board by means of summative project assessments for each work package, throughout the life of the programme and post-project. If deemed necessary by the Board, impartial assessments and peer review will be utilised to validate such learning. Sharing can be by many means, for example multi-agency meetings, publicity or professional literature.

While the objectives for the GLGP have been confirmed, not all activities to meet these objectives have been fully formed as these will be established once learning from the desk top research and gap analysis work progresses and trial sites have been identified.

The table below details the key areas for learning and how they will be monitored and evaluated:

Activity	Learning	How will learning be recorded/analysed/assessed
Desktop research and gap analysis	• Understanding current groundwater flooding and resource • Reviewing the current groundwater models • 'best practices' re adapting groundwater models • Potential to develop new approaches to modelling groundwater • More granular outputs which will inform future decision making around groundwater actions	• Baseline data analysis • Review current groundwater models • Feedback and reports from consultants • Case studies of effective groundwater management

	•	
Identify trial sites, options to manage flood risk and wider opportunities	• Best course of actions in specific/differing locations • Identify proportionate place based measures / works to reduce risk of flooding within trial sites and how these measures can be implemented in other areas • Mix of actions	• Baseline data analysis of trial site • Continued monitoring of implemented workstreams
Community Engagement	• How effective have community measures been • What groundwater flood risk measures do communities want • Best practice for working with communities at risk of flood risk	• Surveys • Interviews • workshops
Packages of work at trial sites	• Effectiveness of the place-based packages of work	• Quantative and qualitive

Once activities have been founded, defined measurement indicators for each of the different activities will be determined, in agreement with the programme strategic evaluation team, to monitor how well the project is performing.

Learnings on costs and benefits will be gathered through monitoring by workstream leads reporting to the Board in line with governance. Learnings will be reported back to the EA and to the wider programme, particularly identifying projects that are similar to GLGP – we have already engaged with other FCRIP groundwater projects.

Dissemination of monitoring and evaluation during and post project will be by way of:

- Shared learnings with other FCRIP relevant projects i.e. GRACE
- Social media/website
- Webinars/conferences/briefings
- Reports
- Newsletters/ published articles
- Events
- Case Studies
- LLFA political processes and relevant scrutiny committees

3 Economic Case and Benefits Framework

3.1 Description of the Business as Usual baseline

Describe the Business as Usual baseline.

- What is the current practice including existing asset management, operation and maintenance?
- What are the current baseline costs (maintenance and operations)?
- What are the positive and negative impacts of current practice?

The Business as Usual (BaU) baseline is defined as: the continuation of current arrangements, as if the proposal under consideration were not to be implemented. BaU does not mean doing nothing, because continuing with current arrangements will have consequences and require action resulting in costs (based on HM Treasury Green Book).

Actions that improve the resilience to flood risk from groundwater are currently being considered or taken at a purely local level and on an opportunistic basis across Greater Lincolnshire. Where these actions are eligible for Flood Defence Grant in Aid (FDGiA) or Local Levy a strategic approach is taken but focussed on each individual project.

Business as Usual in the 3 potential trial sites is detailed below:

Trial Site	Standard works	Bespoke works	Costs (£k)
Grimsby	Diversion of groundwater into the sewer network to mitigate against the worst of the impacts. Yearly maintenance is carried out within the allotments to manage silt and vegetation growth to ensure it is flowing as effectively as possible. Underpasses are pumped out at a near constant rate due to ground water filling the wetwell chambers.	At the Salting's allotments, a series of channels have been excavated to try and drain the waterlogged area into the combined sewer network. This has limited success due to the levels, but it helps to keep the water level outside of houses, although the sub-floor spaces are almost permanently waterlogged causing issues with damp and black mould. A footpath through Ainslie Street Park had to be raised by half a metre in order to open access back up to the park, as it had been submerged for over a year at the cost of approximately £75k. In other areas of the town, springs have been diverted into the sewer network to prevent properties from flooding.	NELCC maintenance costs pa £15-20k
Scopwick	Repairing / relining of the public sewer system Over pumping of the sewer system into Scopwick Beck		Since 2011, Anglian Water costs relating to ground water have totalled to over £2M.

Barton and Barrow Upon Humber	TBC	TBC	TBC

3.2 Summary description of the investment proposal

Briefly describe the investment proposal.
- What is the proposed investment (project and sub-projects)?

The table below summarises the planned activities up until submission of the Full Business Case. Additional activities and more long-term activities are yet to be confirmed and will be reviewed once initial learnings have taken place. Actual costs associated with each action are still TBC at this stage (overall expenditure costs are detailed further in Appendix 5A).

Activity	Description	Tasks (short term)
Project Management	Establish an effective partnership involving all stakeholders and beneficiaries, making use of inter-agency skills to deliver the agreed outcomes.	• Recruitment of 1 x Project Manager, 1 x National Flood Forum Community Engagement Officer • Assess the need / desire to recruit 2 x project support officers • Subject to the above assessment, consider commencement of recruitment of 2 x project support officers
Strategic Groundwater review	Undertake a strategic review of groundwater, as both a risk and resource, across Greater Lincolnshire, focusing particularly on the three trial sites of Barrow and Barton-upon-Humber, Grimsby and Scopwick.	• Capability assessment of the existing Lincolnshire Limestone and Lincolnshire Chalk and Spilsby Sandstone groundwater models to understand how they can be adapted to meet the requirements of the proposed integrated catchment model. This work has been started by consultants Wood and Atkin to review what further input data would be needed and what further parameters can be incorporated into the modelling.
		• Gap analysis undertaken by consultants Wood and Atkins to produce a scope of works for what further data is needed, scoping for borehole installation sites and the integrated catchment modelling.
		Atkins Consultant • Identify areas of concern • Identify areas based on model results and "on the ground" knowledge (known areas of GW flooding) • Review model calibration for groundwater flooding events in those areas • Identify tasks to improve model calibration where needed • Plan sub model approach • Identify likely refinement to improve high GW level and high flow calibration • Consider need for refinement tasks such as higher resolution model grid, high resolution topography, detailed drainage and networks

		• Consider approach to return period analysis, event modelling and need for linking with hydraulic models. **Woods Consultant:** • Share and review previous recommendations for enhanced monitoring locations alongside incidents and Drift geology understanding • Review UKCP18 rainfall, potential evaporation and sea level rise projections for climate change. Run multiple projections through the regional model to inform expansion and frequency of future wet spots • Develop scope and costs of higher resolution shorter time step linked model incorporating Lidar-based drainage and better representation of shallow geological connections focussed on Grimsby
Catchment Assessment	Having regard to the findings of the gap analysis, refine the existing groundwater models within Lincolnshire.	• Refinement of Lincolnshire Limestone and Lincolnshire Chalk and Spilsby Sandstone models • The development of appropriate scenarios (1000+) to gain greater understanding of potential changes in groundwater. Scenarios will have regard to at least the following factors, reductions / increases in abstraction, climate change, input from a weather generator • Running of model using the developed scenarios • Validation of model outputs using observed data
Groundwater Research	The undertaking of research to gain a greater understanding of the risk of salinisation from groundwater flooding in the Lincolnshire Fens	• Spatially quantify the salinity across the catchment • Assess groundwater seasonal changes over 24 months • Quantify the connectivity of the groundwater system to surface water, seawater and the rate of groundwater recharge • Predict the risk of a drying climate, rising sea-levels and increased irrigation to the salinisation of soils from groundwater.
Pipeline Schemes	Identification of future potential pipeline groundwater schemes	• Having regard to our newfound understanding of groundwater as both a risk and resource across Greater Lincolnshire, we will review lessons learnt to help inform and develop a potential pipeline of future groundwater related projects.
Catchment Assessment	Identify and assess opportunities to sustainably manage flood risk from groundwater across Greater Lincolnshire on completion of the modelling work, whilst maximising additional benefits for water quality and water resources.	• Identify and confirm the 3 trial sites and further list of future pipeline sites
Managing groundwater flood risk	Delivery of proportionate place-based solutions that manage the risk of groundwater flooding in test locations, including Barrow and Barton-upon-Humber, Grimsby and Scopwick.	• Work with Water Resources East, the agri-food sector and environmental organisations to identify and appraise opportunities to manage groundwater effectively through a range of measures that reduce flood risk, deliver water quality and water resource benefits e.g., keeping the chalk streams at healthy levels, agricultural land making appropriate use of groundwater.

		• Develop and deliver sustainable operations for IDBs, AW and farmers, enabling the management of groundwater through innovative techniques and transferring excess water to areas of need. This may possibly include wellfield operations, sustainable pumping regimes, water transfer and on-farm storage opportunities. • Work with natural processes to identify and deliver natural flood management options in both rural and urban setting, particularly on or near the chalk streams and limestone catchments across Greater Lincolnshire.
Options appraisal	Having regard to the outputs of the catchment assessment model outputs, the identification of proportionate place-based measures / works within trial sites of Barrow and Barton-upon-Humber, Grimsby and Scopwick.	• Confirm project trial sites • Optioneering and assessment of options. For example, we would like to explore the opportunity to convert abandoned allotments in Grimsby into wetland habitats – the assessment and gap analysis work will provide further information and potential benefits to implementing this. • Confirmation of options and production of Full Business Case
Community Engagement	To develop a community-led approach to flood resilience by proactively engaging and empowering individuals and groups to gain a greater understanding and ownership of groundwater flood risk and to develop and implement sustainable solutions through working in partnership, and where opportunities exist to integrate with wider issues around environmental land management; health and wellbeing; water as a resource; the creation of new biodiverse environments; creating resilient people and places; and sustainable water level management.	• Develop communications plan through the comms and engagement steering group. Share with the wider partnership. • Regular review of stakeholder groups • Establish a system of recording Stakeholder interaction • Once the trial sites have been confirmed, undertake stakeholder analysis for each site • Establish a community engagement plan for each trial site • Readiness Assessment to understand local concerns regarding flood risk • Work with local communities to gain a greater understanding of flood risk, focusing particularly on groundwater flooding • Raise awareness of groundwater, groundwater flood risk and the Greater Lincolnshire Groundwater Project within agreed trial sites • Act as a conduit for local communities, enabling them to voice their opinions, ideas, and / or concerns during the scoping, design, implementation and evaluation of potential measures / works • Empower local communities to take ownership of and implement sustainable solutions to groundwater flooding
Monitoring program	Implementation of telemetric groundwater monitoring sensors across Greater Lincolnshire, focusing particularly within the three sites of Barrow and Barton-upon-Humber, Grimsby and Scopwick.	• Engagement of suitable contractor and obtaining of all necessary approvals / consents • Installation of groundwater monitoring sensors • Monitoring of groundwater monitoring sensors and usage of data gathered to inform evaluation of model outputs

Long term actions are still to be determined and will be reviewed following initial works and learnings.

3.3 Description of how the proposed solution was optimised

Briefly describe how the proposal presented in Section 3.2 has been optimised.

- What stakeholder and community engagement has been undertaken?
- How has the investment been optimised in terms of value, scale, location, timing, carbon, equality analysis etc?

(See Guidance Document Aspect 3)

GLGP investment optimisation to date, has been undertaken through engagement with the project Partners, a number of whom also represent Stakeholders. The Partnership is made up of different organisations, including, 3 Lead Local Flood Authorities, businesses, IDB's, 2 Local Resilience Forums and academic institutions. As such, the proposal incorporates the opinions, expertise and skills from a wealth of organisations and the combination of measures will reflect this. Engagement has occurred through meetings of the full partnership, partnership steering groups and technical works undertaken.

This partnership collaboration has led to a focus on 3 potential trial sites located in each of the three local authority boundaries that the partnership covers. Further pipeline sites will also be identified, through partnership collaboration that may be utilised as the project progresses.

To date, initial rapport building, and community engagement has been undertaken within the village of Scopwick by the National Flood Forum. This community engagement has built upon work previously initiated by the Scopwick Groundwater Task and Finish Group and has enabled the GLGP to gain a greater understanding of the communities concerns regarding groundwater / flood risk.

Further engagement and technical works (including but not limited to carbon assessments, calculation of cost-benefit ratios for proposed measures / works) are required to further optimise our approach for the Full Business Case and longer-term activities. For example, work is currently being carried out to review all groundwater issues across the Greater Lincolnshire area and how the current catchment groundwater models can be refined to improve the understanding and subsequently management of groundwater. This work will identify our trial sites and place based packages of work to be undertaken to ensure the realisation of the projects ambitions.

Due to the phasing and reliance of work packages optimisation cannot occur for later activities until earlier works have been completed.

3.4 Description of: Invest less and invest more

At a programme level there may be the opportunity/need to scale-up or down individual projects to best achieve the programme objectives and investment commitments. Please describe how the proposal in Section 3.2 could be scaled up or down in costs, and the impact these would have on potential benefits arising from the project. Indicatively a reduction or increase of expenditure of 20% should be considered.

(See Guidance Document Aspect 3)

3.4.1 Invest less

The below table outlines the impact of scaling down the project:

Action	Impact
Community engagement	Project adopts a top-down communication approach rather than a collaborative approach.
Reduced number of trial sites (2 not 3)	The 3 trial sites have been selected due to their location and varying groundwater flood risks – reducing this to 2 would not seem sufficient in exploring a mix of resilient opportunities.
Reduce the on the ground monitoring programme including reducing the number of new boreholes	This would result in lower groundwater level monitoring certainty and potentially unnecessary flood warnings or missed opportunities to warn. Less data would be collected.
Reduce the number of groundwater models reviewed (2 to 1)	Reduces the learning opportunities for integrated water management, and for the delivery of practical solutions on the ground that enable benefits to flood risk management, water resources and the environment.
Reduce the number of practical solutions that are delivered during the project	Missed opportunity to put learnings into practice and monitor their benefits. Reduces the number of practical actions communities can put in place to build local resilience to groundwater flooding
Reduce the no of stakeholders the project engages with	Reduces the understanding and learning of the broad range of groundwater risks and opportunities.
Reduce the scope to only look at management of flood risk (not water resources, environmental improvements)	Project will not integrate with wider issues around environmental, health and wellbeing, water as a resource, sustainable water level management.

3.4.2 Invest more

The below table highlights the impacts of investing more in specific activities proposed under GLGP:

Action	Impact
Community Engagement	Increased resource for community engagement will result in less 'top-down', more collaborative working and embedding of resilience.
Increase number of trial sites (5 not 3)	Increased community engagement, and investigation into varying groundwater issues. However, increasing the number of sites may not achieve any greater insights.
Increase the on-the-ground monitoring programme including increasing the number of new boreholes	More groundwater monitoring across more communities and increased amount of evidence collected.

Increasing the number of practical solutions that are delivered during the project	Additional communities will benefit from additional resilience measures.
Increase the no of stakeholders the project engages with	More collaborative working, increased awareness of issues and improved knowledge of local environment.

3.5 Investment costs

Briefly summarise the total present value (discounted) costs.
- What are the present value costs and the timeframe of the assessment?

Whole project costs are presented in the following table. These costs are in line with those estimated in the Expression of Interest and exclude Partner in-kind contributions and optimism bias. They are discounted using the standard 3.5% HM Treasury rate.

The below table shows the project costs.

Costs per year (£K)	Year 1 (£KPV)	Year 2 (£KPV)	Year 3 (£KPV)	Year 4 (£KPV)	Year 5 (£KPV)	Year 6 (£KPV)	TOTAL (£KPV)

As individual activities are developed there will be greater refinement and certainty of the costs based on feasibility, procurement and delivery options.

3.6 Investment benefits framework including learning and innovation

Describe the Benefits
- What are the learning benefits the project is expected to deliver?
- What are the benefits of the project in terms of 'value at risk'?
- What are the benefits of the project in terms of 'value potential'?

(See Guidance Document Aspect 4)

3.6.1 Learning benefits

Table 1 Benefits Framework: Learning Benefits

Ref	Benefits Category	Description	Approach to capturing change
1.1	Learning on cost	• Reduction of uncertainty and greater cost certainty of integrated water management solutions that will help protect local community infrastructure, including roads, drainage networks and communications infrastructure from groundwater flooding • Greater cost certainty for adapting existing groundwater models	Qualitative - Using available funding in the most cost-effective and proportionate manner Quantitative – Managing incomings, outgoings, invoices

			and making sure they align with FCERM 3 Form submissions. Cross-referencing the quotes with realised costs Economic justification for similar projects within the future.
1.2	Learning on benefits	• Greater understanding of groundwater as both a risk and resource across Greater Lincolnshire • Identification of potential pipeline schemes in Greater Lincolnshire • Effectiveness of solutions to managing groundwater and potential synergies of solutions • Appreciation of how-to better work with communities to manage groundwater • Better understanding of how groundwater interacts with the natural environment • Learning about how groundwater level data can be obtained and used via innovative means	Qualitative – Understanding what, when and where solutions to groundwater can be / should be implemented, ensuring the most appropriate use of available resources. Quantitative – Levels of community engagement. Properties protected. Increased groundwater data. Number of groundwater schemes / biodiversity net gain increase.
1.3	Learning on management and governance (project level)	• Learning on how to make effective decisions with changing stakeholders throughout the development / delivery of the project • Partnership collaboration and coordination in managing groundwater flood risk over the long-term programme (including across political boundaries) • How to collectively and effectively manage project risk over the next six years • Capacity and capability of project partners to deliver project objectives	Qualitative – Regular partnership updates on current and completed activities and learning Quantitative – Realisation of the state of project objectives. Release of funding associated with risks. Programme forecasting and reporting

1.4	Learning on skills, tools (methods and mechanisms) and capacity needed to implement actions and combinations of actions	• Understanding and improving the emergency response capacity and capability to groundwater flooding amongst partners and communities • Learn how to effectively engage with local communities to enhance preparedness to groundwater • Learning on approaches to monitoring of success of groundwater flood risk solutions • Learning on how to measure resilience to groundwater • Learning the resources required to deliver engagement / integrated water management solutions	Qualitative – Community feedback / surveys Training and exercising scenarios Quantitative – People, time, resources required to deliver actions
1.5	Learning on management and governance (wider lessons learned)	• Potential options that could be feasible for assisting in the understanding and mitigation of groundwater flooding • Transferable learning for similar communities and environments elsewhere on a local, regional and national scale. • Co-creation of practical solutions with local communities	Qualitative – Success in transferability of lessons learnt Quantitative – Number of times lessons are disseminated. Number of similar communities benefiting from the lessons identified.

3.6.2 Value at Risk

Despite being a potential significant source of localised flood risk, particularly within the unconfined chalk aquifers of southern England, the assessment and mitigation of groundwater flood risk has only recently begun in earnest since the widespread groundwater flooding experienced across much of the chalk aquifers of southern England during the autumn of 2000/2001 and winter of 2003. These events resulted in prolonged and extensive damages and followed an unusual 30-year groundwater flood free period (Cobby et al. 2009; Environment Agency 2001; Marsh 2007).

As the characteristic feature of groundwater flooding events is its relatively long duration when compared with other sources of flooding and when considering the above and the fact that the impacts of groundwater can occur before water levels reach the ground surface, for instance the flooding of basements or critical infrastructure, the accurate calculation of value at risk for groundwater flooding is more complex, under researched and underfunded in comparison to other local sources of flood risk.

As outlined in other sections of the Outline Business Case, a key component of the GLGP is the reviewing and subsequent revision of the Lincolnshire Chalk and Spilsby Sandstone and Lincolnshire Limestone groundwater models. This work will enable the GLGP to ascertain, amongst other aspects, the number of properties at risk of flooding from groundwater across Greater Lincolnshire, potentially focusing on the 3 proposed trial sites of Barton and Barrow-upon-Humber, Grimsby and Scopwick. As such a detailed economic analysis, including options appraisal, has therefore not been undertaken at this moment in time.

However, this is not to say that indicative value at risk benefits / Estimated Annual Damages (EAD) cannot be provided. For instance, in 2010 a preliminary assessment of flood mitigation options for

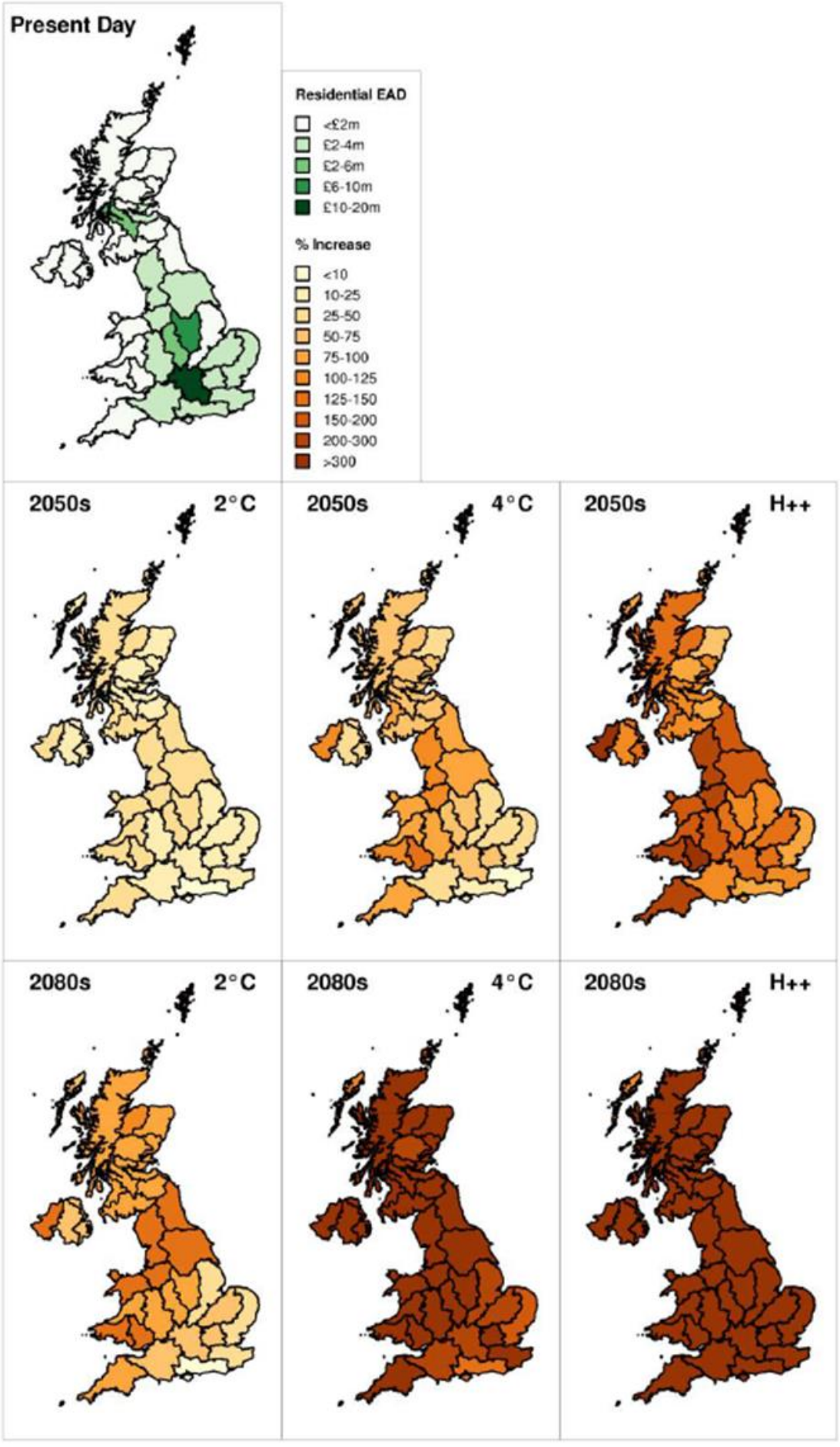
Westoby Lane and areas adjacent to Midby Drain in Barrow-upon-Humber, North Lincolnshire was commissioned. A hydrological groundwater model was constructed and identified 56 properties as being at risk of a 1% annual exceedance groundwater flood event. 12 flood alleviation options were proposed with 6 being taken forward for further economic analysis using a timescale of 100 years. Damages were discounted over this timescale in line with Treasury Green Book Guidance.

A summary of the economic analysis is provided below:

- Direct damages ranged from 0.19 to 92 (£k)
- Indirect damages ranged from 0.17 to 50 (£k)
- Present value damages ranged from 77 to 5,421 (£k)
- Present value benefits ranged from 2,539 to 5,683 (£k)
- Benefit cost ratios ranged from 16.87 to 3.82

In addition to the above, the Third UK Climate Change Risk Assessment published in July 2021 provides EAD for three types of groundwater flooding: Clearwater flooding (from chalk and limestone aquifers); Clearwater flooding (from other aquifers); and flooding from Permeable Superficial Deposits (PSD). Analysis for the whole of England suggests that up to approximately 360,000 residential and 170,000 non-residential properties could be at risk of groundwater flooding. Regarding EAD, the analysis indicates that groundwater flooding is a small proportion ranging from £54m to £95m. For a more localised scale, the outputs of the Second UK Climate Change Risk Assessment are provided below, which estimates that:

- The ‘present day’ EAD for residential properties across Greater Lincolnshire is <£2m
- The EAD for residential properties across Greater Lincolnshire in 2080, under a 4°C temperature rise, may increase by 150-200%


Present Day
Residential EAD
<£2m
£2-4m
£2-6m
£6-10m
£10-20m
% Increase
<10
10-25
25-50
50-75
75-100
100-125
125-150
150-200
200-300
>300
2050s 2°C
2050s 4°C
2050s H++
2080s 2°C
2080s 4°C
2080s H++

Although the above values cannot directly provide economic justification for undertaking resilience activities within all the proposed trial sites (please note that the proposed trial sites may change following validation of the revised groundwater model outputs), they do nonetheless support observed impacts of groundwater flooding across Greater Lincolnshire, and hence strengthen the rationale for continued development of the GLGP. It should be noted however, that these values relate solely to residential / non-residential properties and do not consider all the costs associated with groundwater flooding, for instance flooding of agricultural land, disruption of transport infrastructure etc, and thus are likely an underestimation of value at risk.

To support the economic justification of the OBC, work is currently on-going to undertake an outline economic case based on existing model outputs, various assumptions, and current Multi-Coloured Handbook approaches, although it should be noted that any outputs derived from this analysis will be subject to significant uncertainties as currently the Lincolnshire Chalk and Spilsby Sandstone and Lincolnshire Limestone models are calibrated for low flows and not indicating groundwater flood risk.

Unfortunately, due to delays in obtaining model licences and contractor availability, it is not possible to provide outputs of this economic analysis as part of OBC submission. What follows is a summary of the approach that shall be taken, including assumptions that shall be made.

- The analysis will quantify the expected annual damage and 50-year present value damage to residential and non-residential buildings and agricultural land within the 3 proposed trial sites of Barton and Barrow-upon-Humber, Grimsby and Scopwick.
- The following sources of information will be utilised as part of the analysis:
    - The National Receptor Dataset (2014) which has been cleaned to remove upper floor properties and those not representing habitable dwellings and commercial buildings, excluding critical infrastructure. On site verification has not been conducted as part of this outline assessment
    - Ordinance Survey MasterMap to identify parcels of land classified as agricultural land
    - Crop Map of England 2020 has been used in conjunction with Ordinance Survey MasterMap to identify areas of crop that may be damaged by groundwater flooding, for instance cereal crops are more likely to be impacted by groundwater flooding than land used for grazing
    - Outputs from the Lincolnshire Chalk and Spilsby Sandstone and Lincolnshire Limestone models
- The Multi-Coloured Handbook simplified benefit:cost appraisal tool shall be utilised to gain an initial understanding of scheme feasibility.
- Assumptions include:
    - Existing model outputs provide information regarding return periods. If return periods do not form part of model outputs, then the assumption is that, based on expert groundwater modelling judgement, indicative return periods can be inferred.
    - The quantification of indirect damages for groundwater flooding is uncertain. FCDPAG3 guidance states that a partial measure of disruption resulting from flooding can be given by the cost of renting an equivalent home to that which was flooded together with the cost of accelerating the drying out process. Multi-Coloured Handbook values for the likelihood and duration of seeking alternative accommodation and the duration of humidifier use shall be utilised having regard to costs associated with the use of dehumidifiers and the average rental price for Lincolnshire, North East Lincolnshire and North Lincolnshire, values of which shall be derived from the Residential Rental Price Index
    - Advice regarding the intangible benefits of flooding such as increased stress, loss of memorabilia etc., is outlined in DEFRA research project FD2005 “The Appraisal of Human-Related Intangible Impacts of Flooding” which stated that the willingness to pay

to avoid the health impacts associated with flooding were about £150 - £200 per household per year. More recent research has suggested that the intangible costs of flooding may be of the same magnitude of direct costs or approximately 40% of direct costs (Lantz et al. 2012; Alfieri, Feyen and Di Baldassarre 2016). Here intangible damages shall be calculated as 40% of direct damages.

- The estimate of benefits of GLGP shall assume that: (a) agricultural land more susceptible to impacts of groundwater flooding shall be protected up to groundwater flood events with a 4% annul chance; (b) agricultural land less susceptible to impacts of groundwater flooding may not receive any benefits; and (c) residential and non-residential properties shall be protected up to groundwater flood events of between a 1% and 2% annual chance.
- A value of 0.10m shall be utilised to account for thresholds of residential properties and 0.00m for commercial properties. These values were chosen following guidance provided by the GRACE project

Once greater clarity has been obtained regarding groundwater flood risk and all trial sites confirmed, an detailed economic assessment, including option appraisal and calculation of cost-benefit ratios will be made as part of the Full Business Case. This will likely require innovation in of itself, as traditional Multi-Coloured Handbook approaches to estimating benefits do not provide an appropriate valuation of resilience-focused benefits, and likely do not adequately reflect the specifics of groundwater flooding outlined above. To resolve this challenge, the GLGP may, subject to resource availability, develop and trial an alternative approach to calculating value at risk and resilience benefits by working with experts in the field of groundwater and economics.

As part of the GLGP, the University of Lincoln will be conducting research to determine the risk of salinisation from groundwater flooding within the Lincolnshire Fens. This research will help the GLGP understand the broad range of issues associated with groundwater flooding, thereby enabling a more comprehensive integrated water management solution to be developed. Subject to resource availability and timescales, an economic assessment of this risk may be undertaken.

Notwithstanding the above, the GLGP has, based on flooding realised within the proposed trial sites, been able to identify value at risk benefits (Table 2), although it should be noted that the full extent of these risks is currently uncertain. The standard of protection that will be delivered by the GLGP has yet to be determined, but will nevertheless be place specific, having regard to the principles of strategic investment pathways.

Table 2 Benefits Framework: Value at Risk Benefits

Ref	FCERM_AG AST Category	Sub-category	Description	Approach to capturing change
Value at Risk				
2.1.1	Economic	Residential property	Reduction in damage from internal / external flooding. (Loss, repair, asset replacement)	Number of properties, location, value, depth, duration, frequency
2.1.2		Non-residential property	Reduction in damage from internal / external flooding. (Loss, repair, asset replacement) Business profit loss	Number of properties, location, value, depth, duration, frequency
		Emergency costs	Emergency services costs avoided	Number of callouts related to groundwater

			Local authority emergency response costs reduced	flooding and associated costs
		Infrastructure	Reduction in loss of critical infrastructure functionality. Damages avoided due to reductions in repair or replacement of assets. Disruption avoided / minimised to operations, services and revenues	Retained functionality to critical infrastructure. Previous whole lifecycle asset costs.
		Transport	Reduction in road / rail closures and material damage Reduced disruptions to services, operations and revenues Damages avoided in terms of repair or replacement of assets	Highway's authority data. Retained functionality of transport infrastructure. Previous whole lifecycle asset costs.
		Agriculture	Damages avoided to flooding of land / crops – costs to business	Engagement and ongoing liaison with farmers
		Land use	Damages avoided to public green spaces Reduction of waterlogged land	Number of complaints regarding waterlogged public space / land.
		Indirect effects on businesses	Reduced disruption due to flooding of businesses – impacts on local supply chain Reduction in staff absences due to groundwater flooding / high groundwater related health or property complications.	Reduction in enforced closure to business / staff absenteeism
2.2.1	Environmental	Regulating services	Reduction in economic, environmental and political impacts of soil erosion Reduction in risk of salinisation of groundwater resources	Increase / decrease of health status of watercourses in line with Water Framework Directive
2.2.2		Biodiversity	Reduction in potential impacts on species including protected species	Increase / decrease of health status of watercourses in line with Water Framework Directive Changes within land use
		Change in status under WFD	Deterioration of waterbodies avoided through reduced sewer	Reduction in reported combined sewer overflows

			overflows into watercourses Reductions of surface water flows / agricultural land runoff	Increase / decrease of health status of watercourses in line with Water Framework Directive
		Historic environment	Damages avoided to repair historic sites and assets. Disruption minimised to operations, revenues and service provided. Reduced risk of repeated wetting and drying of buried archaeology	Number of reported flood events / concerns raised regarding waterlogged land
		Hazard	Reduction in the likelihood of secondary hazards e.g., landslips contaminated water supply	Number of recorded landslips.
2.3.1	Social (individual and family)	Way of life	Negative impacts of long duration flooding avoided where use of toilets, showers etc are restricted	Uplift to direct damage, numbers of people and feedback on benefit
		Health and well-being	Reduced contact with contaminated flood water Reduced disruption to health and wellbeing caused by flooding and possible future flooding	Uplift to direct damage, numbers of people and feedback on benefit
		Fears and aspirations	Reduced feeling of isolation, helplessness Reduced disruption to health and wellbeing caused by flooding and possible future flooding	Uplift to direct damage, numbers of people and feedback on benefit
2.4.1	Social (Community)	Community	Negative impacts avoided for services and facilities	Community engagement and feedback
		Political systems	Reduction in required investigations and resource expenditure	Reduction of complaints / concerns raised
		Fears and aspirations	Negative impacts avoided. Reduction in the disruption to health and wellbeing communities are facing due to groundwater flooding	Community engagement and feedback

[Note: Insert sub-categories and additional rows as necessary] Refer to the OBC Guidance Document for example sub-categories.

3.6.3 Value Potential

Table 3 Benefits Framework: Value Potential

Ref	FCERM_AG AST Category	Sub-category	Description	Approach to capturing change
Value Potential				
3.1.1	Economic	Residential and non-residential property	Increased attractiveness as a place to live with benefits for property values. Potentially creating a more desirable work location.	Community survey. Correspondence with elected members / Parish / Town Councils
3.1.2		Emergency costs	Enhanced preparedness of local communities, businesses, Category 1 / 2 responders due to greater understanding of groundwater flooding and associated responses	Community surveys. Correspondence with elected members / Parish / Town Councils. Discussions with Category 1 / 2 responders and after-action reports
		Infrastructure and Transport	Reliability of infrastructure improved	Highway's, Water & Sewerage providers, telecoms, gas, electric, rail reported issues / operational responses
		Agriculture	Increased confidence in sustainability of business Improvements to variations of land usage (e.g., more diverse crop types / rotations)	Surveys with beneficiaries via National Farmers Union, National Flood Forum
		Land use	Improvements to variations of future land uses	Changes in land use classification
		Indirect effects on businesses	Potential benefits from enabling economy growth and resilience to future perturbations	Economic reports / updates via the Greater Lincolnshire

			Potential increases in desire to invest	Local Enterprise Partnership
3.2.1	Environmental	Biodiversity	Potential for biodiversity net gain	Environmental surveys and increased environmentally minded visitations
		Change in status under WFD	Healthier waterbodies	Environmental surveys. Standard water quality checks
		Regulating services	Improved soil health Biodiversity net gain Potential carbon capture and storage via wetlands Increases in usable green spaces	Environmental surveys Community surveys
3.2.2		Landscape	Improved condition of habitat Increased amount of natural habitat Increases in usable green spaces	Changes in health status of watercourses in line with Water Framework Directive Changes within land use Community surveys
3.3.1	Social (individual and family)	Way of life	Increased sense of place	Community surveys
3.3.2		Skills and competencies	Greater understanding of groundwater and its importance for the natural environment Increased confidence / capabilities of local communities to engage and lead on projects relating to groundwater / flooding	Community surveys
		Recreation	Greater enjoyment of the natural environment / outdoor space	Reports of improved health and wellbeing Community surveys
		Political systems/inclusion/engagement	Increased confidence / capabilities of local communities to engage	Community surveys

			and lead on projects relating to groundwater / flooding	
		Health and well-being	Increase in mental well-being of those previously at risk Potential increases in physical wellbeing	Community survey
		Fears and aspirations	More positive mental health from greater community and environmental connection Households are better able to plan for uncertainties associated with groundwater / groundwater flooding, taking control of decisions and how they react.	Community survey
3.4.1	Social (Community)	Community	Public realm enhancements improving sense of place Communities taking ownership and help to shape their own resilience to groundwater flooding	Community survey
		Political systems/inclusion/engagement	Increased ability / engagement / willingness to engage in other aspects / policy concerns	Community surveys
		Fears and aspirations	Communities are better able to plan for uncertainties associated with groundwater / groundwater flooding, taking control of decisions and how they react.	Community surveys
3.5.1	Knowledge and Skills	Technology	More optimism about innovative solutions for other flood-related issues	Community survey
3.5.2		Holistic flood risk management	Confidence to deliver holistic flood risk	Community survey

			management in high groundwater areas	

[Note: Insert sub-categories and additional rows as necessary] Refer to the OBC Guidance Document for example sub-categories.

3.7 Comparison of costs and benefits

Describe the economic justification for the investment.
- What are the costs and the benefits (quantitative)?
- What is the benefit cost ratio?
- What are the additional qualitative benefits?
- How sensitive is the justification?

(See Guidance Document Aspect 4)

Table 4: Economic appraisal (quantitative)

Options	PVc £k	PVb £k	BCR
Proposed Solution	Total project costs £8001	Direct building and agricultural damages and indirect/intangible damages avoided in 3 trial sites XXX	

The comparison of costs and benefits in Table 4 above suggests that all project costs (£7.5M PV) can be attributed to delivering avoided damages in the 3 trial sites (£XXX PV). Although this suggests a benefit:cost ratio of., this is not an appropriate comparison for the following reasons:

- Costs for many activities will lead to benefits that are transferable to improve resilience in other locations both within Greater Lincolnshire and beyond.
- Because of the innovative nature of the project, some costs may not lead to useful outcomes and so cannot be attributed to avoiding damage. These could be termed innovation costs.

In both these cases, it is not possible at this stage to estimate the costs or benefits required to give a more accurate economic appraisal in Table 4.

3.8 Sensitivity of the benefits to the level of investment

Describe the 'do less' and 'do more' options and the impact on the benefits arising from the project. The purpose of this is to understand the sensitivity of the benefits to the level of investment and the optimal selection of the combination of actions. Indicatively the sensitivity should consider +/- 20% change the level of investment.Describe the economic justification for the investment.

(See Guidance Document Aspect 3)

Table 5: Do Less

Options	PVc £k
Do Less	
Description of the reduction in benefits	
• Less exploration of the variation in social, environmental and economic contexts for groundwater resilience • Fewer houses protected • Fewer communities get improved resilience	

Table 6: Do More

Options	PVc £k
Do More	
Description of the increase in benefits	
• Less 'top-down' communication and more innovative delivery and embedding of resilience • More exploration of the variation in social, environmental and economic contexts for groundwater resilience • Better groundwater monitoring and investigation into innovative groundwater monitoring technologies • More approaches or refinement of approaches to modelling and mapping • More houses protected • More communities get improved resilience • Improved evaluation of groundwater resilience • Greater collaboration with the other Resilience Innovation projects which are also refining aspects of evaluating resilience.	

3.9 Critical Success Factors

Critical Success Factors (CSFs) are outcomes that are crucial (not desirable) to the successful delivery of the investment. Describe the critical success factors for the project.

- What outcomes of the investment are crucial to meeting the objectives of the flood and coastal resilience innovation programme?
- What outcomes of the investment are crucial at project and local level?

Table 7 Critical Success Factor

Ref	Critical Success Factor	Measurement criteria
1	Ensure learning and feedback is embedded during every aspect of the project	• Learning log, reporting on change, success/challenges • Feedback – stakeholders and communities, National EA team / other FCRIP projects
2	Understanding current and future groundwater flooding and resource across Greater Lincolnshire.	• Identification of pipeline sites • Review /revise current groundwater models
3	Improved community resilience to groundwater flood risk within identified trial sites	• Reduction in flood damage in communities involved with the project • Better response infrastructure • Community feedback and evaluation

4	Identify flood risk management techniques that are sustainable, transferable and affordable.	• Quantative (future costs/cost benefit ratio) and qualitive • No of homes with reduced risk (reduce risk banding) • Environmental net gain/ positive carbon impact • Outcomes worth promoting, report/studies

4 Commercial Case

4.1 Summary of procurement strategy and timescales

Describe the procurement strategy and timescales.

- How will the selected procurement process demonstrate value for money?
- What supplier engagement – market testing - has taken place and how has this influenced and shaped the procurement strategy?
- What are the key tender evaluation criteria and how has innovation been addressed?
- Is this compliant with your organisations procurement procedures?
- What is the planned tender (and approval) timescale?

(See Guidance Document Aspect 5)

A system of procurement has been established and agreed by the partnership providing a consistent approach across delivery partners.

As partnership lead, Lincolnshire County Council will be responsible for leading on all procurement and adhere to its Contract and Procurement Procedure Rules that detail spending requirements of the Council and form part of the larger Council Constitution. For any spend in excess of the Find a Tender Service (FTS), (formerly OJEU) procurement thresholds, the requirements of the Public Contracts Regulations 2015 (PCRs) will be strictly adhered too

The method for tendering and scoring for outsourced work will enable value for money and improve cost estimates for similar work as the project progresses. Tenders and quotes are obtained through the Council's e-procurement system (ProContract) and therefore the processes are fully auditable. Suppliers invited to respond will be given an adequate period in which to prepare and submit a Tender, consistent with the urgency and complexity of the contract requirement. A minimum of at least four weeks will be allowed for straightforward and simple requirements. If more complex procurement are required, a longer period may be more appropriate. The PCRs lays down minimum specific time periods for submission of documents which will be followed.

Value for money is a prime consideration which will be balanced against the risks associated with driving innovation. It is anticipated all tendering/quotation exercises will be assessed against both price and quality factors, with the importance of each factor determined on a activity-by-activity basis to help achieve the best commercial outcomes. The balance of quality and price will always aim to drive value for money, ensure quality and achieve innovation and improvement where possible which will be achieved via a bespoke/tailored approach to each project within the programme.

To date procurement has taken place to establish contracts with Wood and Atkins to provide a capability assessment of the Lincolnshire Chalk and Spilsby Sandstone, and Lincolnshire Limestone Groundwater models.

4.2 Contractual terms and risk allocation

Describe the form of contract, or contracts, and how risks will be shared.
- What form of contractual arrangement is proposed?
- How will key risks be managed and shared during and post delivery?

Procurement for services will be undertook by Lincolnshire County Council as the lead Partner, and on behalf of the Partners.

Contracts will be procured for the following:
- The supply of goods;
- Execution of works;
- The delivery of services;

Existing procurement frameworks will be used where applicable.
Contracts for GLGP will adhere to the Lincolnshire Council Standard Contract and Procurement Procedure Rules

Direct awards will typically only be used when a service or product is provided by a unique supplier with no competitors and the value is below £25k. However, one of its advantages is the reduced time taken to procure a service, allowing the project to commence on time. Value for money will be demonstrated through the financial benefit of having a supplier in place faster.

Where bespoke contracting arrangements are required (non-framework awards), contracts will be produced by Legal Lincs (the Council's legal department). As a public sector organisation, these contracts strive for a fair balance of risk and reward for all parties to the contract and offer protection to the public purse through suitable and proportionate performance management frameworks. A range of escalating sanctions will be in place to help all parties understand any consequences from a failure to deliver on their contractual obligations and contracts will also detail any monitoring and reporting requirements to help ensure performance remains on track.

Describe any commercial issues related to innovation and how these are addressed in the procurement strategy
- How are Intellectual property rights addressed in the contract to ensure public availability and use of the learning, evidence and project outputs?
- How are the innovation and performance risks addressed during delivery and post delivery?

4.3 Innovation and commercial issues

The following risks and issues related to innovation projects summarise our proposed mitigation:

- Not allowing sufficient time: Innovation typically requires time, and excessive pressure to deliver results can be counter-productive and lead to fewer innovative

outcomes. Sufficient time and budget is being integrated into sub-project programming to manage this risk.

- Experimenting too late: The project will need to test ideas in order to refine them. The project plan and route map will allow sufficient time for experimentation to incorporate findings in the early stages of development.
- Not meeting the requirements of the target audience: Stakeholder and community engagement will ensure innovation will match with stakeholder and community needs and preferences.

Project progress meetings led by Project Manager will monitor and assess risks. There will be a standard agenda item to review the risk register.

Intellectual Property Rights (IPR) clauses will be checked for their appropriateness. New contracts will use a Lincolnshire Council Standard Contract that specifically addresses IPR. IPR of technologies created or developed for GLGP will be owned by the party developing them. To enable transferring learning and benefits, third parties grant rights to Lincolnshire County Council to prepare reports containing high level evaluation and explanation of the technologies and the outcome of services, as agreed between the parties, and to share these reports with others.

5 Financial Case

5.1 Summary of Project Cost and Whole Life Cost

Summarise the Whole Life Cost of the project (and separately provide a more detailed cost breakdown in Appendix 5A including a breakdown of cost per resilience action).

Table 8: Project Cost

Cost heading	Cash Cost (k)
Costs up to OBC	
Costs up to OBC	£203,414
Sub-Total (A)	£203,414
Full-Business Case Development Cost	
Staff costs	£110,000
External consultant costs	£477,000
Environmental	£120,000
Other[2]	£0
Contingency/risk allowance 5%	£258,055
Sub-total (B)	£965,055
Construction, supervision and delivery costs of resilience actions	
Construction	£2,162,533
Supervision	£k
Land purchase and compensation	£k
Other	£k
Contingency/risk allowance	£2,260,956
Sub-total (C)	£4,423,489
Monitoring, learning, evaluation and dissemination	
Monitoring	£1,105,609
Evaluation, learning and dissemination	£k
Other	£k
Contingency/risk allowance	£1,130,478
Sub-total (D)	£2,211,745
Inflation	
Inflation allowance	£108,402
Sub-total (E)	£108,402
Total Project Value	
Total Project Value for approval (A+B+C+D+E)	**£8,001,000**

Table 9: Whole Life Cost

Cost heading	Cash Cost
Total Project Value from table above (F)	**£8001k**
Post-project cost	
Future operation, monitoring and maintenance costs	£k

[2] Add further rows as necessary for 'Other'.

Future capital replacement costs	£k
Optimism bias for future costs	£k
Sub-total (G)	£8001k
Total Whole-Life Cost	
Total Whole-Life Cost (F+G)	**£8001k**

5.2 Financial risks and optimism bias

Describe how the costs have been derived and how the risk contingencies and optimism bias estimated.

- How have the risk contingencies and optimism bias been derived?
- How have post-project costs and optimism bias been derived?

Project costs have been estimated by Partners and are based on experience of delivering similar work. Optimism bias has been kept at 60% for OBC due to uncertainty that still exists. Following the gap analysis and assessment of the groundwater models this uncertainty will reduce and by FBC there will be further clarity regarding whole life project costs.

Post project funding has not been included, as currently we are unable to identify what future requirements might be. These will be re-examined during the development of the FBC.

Funding options for maintaining the actions after the initial 6 year funding period include (but are not limited to) self-funding, partnership funding, grant funding (for example for capital replacement costs), commercial sources, community funding/volunteers, maintenance by a willing landowner.

5.3 Funding sources and contributions

Describe all funding sources and contributions.
Appendix 5B Contributions

(See Guidance Document Aspect 6)

Table 10: Funding sources and contributions

Source of funding	£k	Comments
Resilience Innovation Fund	£7,551	This includes optimism bias at 40%
Contribution 1	£450 over 6 years from 25 Partners	Work in kind. Committed staff time from all Partners equivalent of £3k per annum.
Total funding	£8,001	

5.4 Expenditure and Funding Profile (2021-2027)

Complete the expenditure profile for the project (2021-2027)

Table 11: Expenditure Profile (2021-2027)

Costs per year (£k)	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	Total (£k)
Full-Business Case Development Cost							
Construction, supervision and delivery costs of resilience actions							
Monitoring, learning, evaluation and dissemination							
Total							8001

Table 12: Funding Profile (2021-2027)

Costs per year (£k)	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	Total (£k)
Funding Allocation (Defra)							7,551
Funding Allocation (Contributions)							450
Total							8001

5.5 Future funding and financing

Describe how future maintenance, operation, monitoring and asset costs will be secured.

- How will future costs be secured after the project implementation?

(See Guidance Document Aspect 6)

Funding options for maintaining the actions after the initial 6 year funding period include (but are not limited to) self-funding, partnership funding, grant funding (for example for capital replacement costs), commercial sources, community funding/volunteers, maintenance by a willing landowner.

Opportunities for financial contributions from partners – and commitment to those contributions – will be sought during the development phase(s) of the project, as will

opportunities for commercial funding, for example from beneficiaries of the practical actions. It is expected that in-kind contributions will be made by funding and non-funding partners alike. For example, to date partners have provided officer time and specialist advice to develop the Expression of Interest and OBC and it is expected that this will continue throughout the programme. Furthermore, volunteers will be sought to take part in certain activities, such as 'citizen scientists' assisting with the monitoring of actions on the ground.

In addition, some of the non-Governmental organisation partners are expert at fundraising by alternative means. These partners include the Lincolnshire Chalk Streams trust, Lincolnshire Rivers Trust, and the Lincolnshire Wildlife Trust.

6 Management Case

6.1 Governance and partnership arrangements

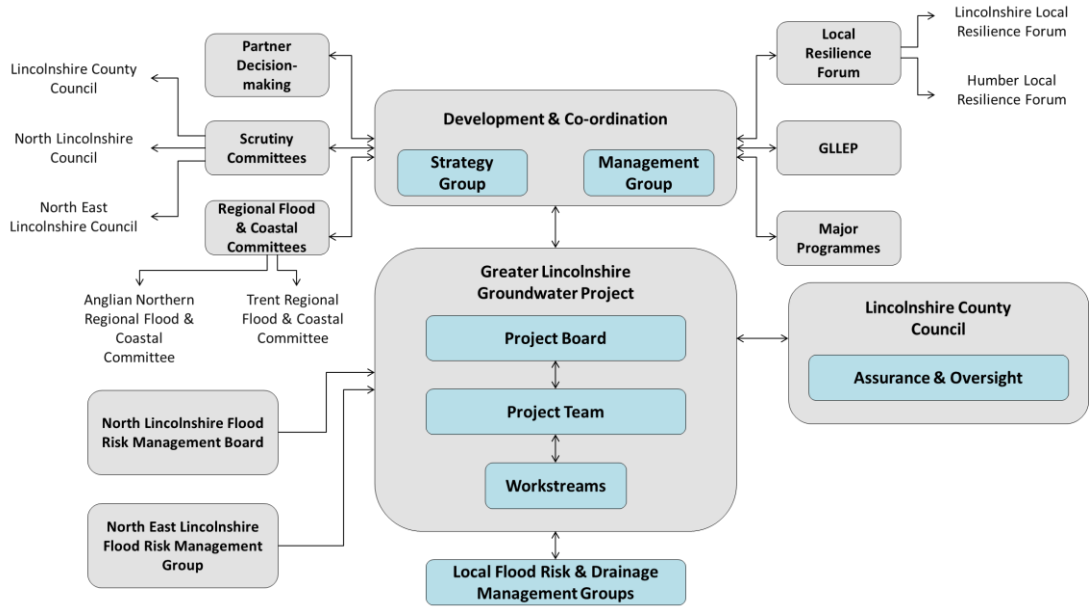
"Put simply, governance is concerned with the way in which decisions are taken and implemented, and decision-makers are held to account" (FRS17186, 2021)

Briefly describe the governance and partnership arrangements proposed for delivery.

- Who are the partners and contributors (financial, knowledge, technology)?
- What is the relationship with wider stakeholders and the local community?
- What are the management arrangements, and are these set-out in a Memorandum of Understanding (MoU), or Terms of Reference(ToR) or similar?
- What leadership commitments are in place to realise the investment ambitions?

(See Guidance Document Aspect 7)

The GLGP has established a partnership making use of stakeholder inter-agency skills and expertise to deliver the agreed outcomes of the project. The partners will form a Project Board, which will operate in accordance with the agreed governance structure. The partnership aligns with, and will work within a wider flood risk and water management structure across Greater Lincolnshire, as illustrated below:



The Project Board will be made up of relevant political members from Lincolnshire, North East Lincolnshire and North Lincolnshire County Councils, representatives from key partners, LCC's project executive, senior users, senior suppliers and an LCC Strategic Finance Manager (see governance structure).

The terms of reference and governance structure (see appendix 6A) have been produced to facilitate collaborative, joined up working across all partners whilst ensuring clear mechanisms are implemented to report and monitor progress against delivering the agreed project objectives.

It is anticipated all delivery activities will be carried out by contracted suppliers, for example, GLGP partner NNF have been contracted to employ a Community Engagement Officer for the purpose of the project and Wood and Atkins have been contracted to review existing groundwater models and complete gap analysis work.

Project progress will be reported to the Board by the Project Manager in accordance with the monitoring mechanisms outlined in the governance structure; this includes but is not limited to regular Board meetings, political scrutiny and due financial diligence.

Evidence about the costs and benefits of the resilience actions will be gathered through monitoring by the project manager, and will form part of the regular reporting to the Board. Learnings will be discussed at monthly project progress meetings and collated and reported by the Project Manager including back to the EA.

Learning from the overall project will be identified, captured and shared through the Board by means of summative project assessments throughout the life of the programme. If deemed necessary by the Board, impartial assessments and peer review will be utilised to validate such learning. Sharing can be by many means, for example multi-agency meetings, publicity or professional literature.

6.2 Project management, roles and responsibilities

Briefly describe the project management arrangements for the investment.
- What of the project roles and responsibilities?
- What Quality Plan arrangements are in place to manage the investment and deliver innovation?
- What Safety, Health, Environment and Well-being (SHEW) arrangements and are in place?

(See Guidance Document Aspect 8)

Roles and responsibilities for the project are outlined in the project terms of reference, including the project board, project team and workstreams.

Project management roles and responsibilities include:

- Project Board: responsible for the overall direction of the project
- Project Executive: overall control of the project,
- Project Manager: manages the project on a day-to-day basis on behalf of the project board, coordinating the activities of the Project Team and reporting progress of delivery, risks and issues, interdependences and budgets.

The Project Team will comprise of a full time Project Manager (recruitment for which is currently underway), 2 project support officers and workstream leads. They will be responsible for:

- Provide a key linkage between the Greater Lincolnshire Groundwater Project and the national Environment Agency (EA) team;
- Co-ordinating workstreams and ensuring that all undertaken work aligns with the strategic direction set by the Project Board (PB)

- Liaise with individual workstreams to manage and report upon project delivery, timescales, costs, quality, risks
- Monitoring progress and reporting to the Project Board
- Managing risks and issues and reporting them to the Project Board where required
- Managing lessons learnt and change controls
- Responsible for overseeing and distributing lessons reports;
- Oversee an integrated programme of delivery across Greater Lincolnshire;
- Work alongside the PB to determine the projects evaluation criteria. All criteria must be consistent with criteria developed by the EA.

6.3 Skills and capacity

Describe the technical knowledge, skills and expertise in place to drive and manage innovation; and the capabilities and resource commitments in place to deliver the proposed resilience measures.

- What knowledge, skills and expertise you have in place?
- What knowledge, skills and expertise remain to be acquired and how will this be done?

(See Guidance Document Aspect 8)

All project partners have extensive experience of leading and delivering complex asset management and community engagement projects. The partnership is made up of representatives from a number of different organisations, providing access to a wide range of varying skills, knowledge and expertise.

The majority of GLGP activities will be delivered by contractors. The Lead Local Flood Authorities will lead the bulk of the work, with support from Anglian Water and relevant Drainage Boards leading on any monitoring, instrumentation and technology to deliver smart catchment monitoring, and the Lincolnshire Chalk Steams project, Lincolnshire Wildlife Trust and Lincolnshire Rivers Trust leading on environmental baseline and monitoring work.

Further specialist skills will be accessed via contract agreements with suppliers, for example, the GLGP currently hold contracts with Wood and Atkins to provide the capability assessment and gap analysis work on the groundwater models. The large number of partners that make up the GLGP mean that where additional skills and capacity are identified the partnership can respond in sourcing specialist contractors.

6.4 Programme

Describe the overall route-map for delivery including a detailed programme to Full-Business Case, and the outline programme to 2027 for implementation and completion of the project.

- What are the key milestones?
- What is the critical path and what time allowances are included for risk?
- What are the key dependencies with stakeholders and the local community?
- When are the key evaluation and learning points?

(See Guidance Document Aspect 9)

The overall route-map for delivery including a detailed programme to Full-Business Case, and the outline programme to 2027 for implementation and completion of the project is outlined below and in Appendix 6C. It is currently anticipated that the Full-Business Case

shall be submitted for approval by end of April 2024, with the following being key milestones:

- May 2022 – Confirmation of evaluation questions for GLGP
- June 2022 – Recruitment of a suitable Project Manager to co-ordinate delivery of the GLGP
- July 2022 – Commencement of research by University of Lincoln regarding the risk of salinisation from groundwater flooding in the Lincolnshire Fens
- August 2022 – Completion of Phase 1 (Scoping) - Review of groundwater models
- November 2022 – Completion of Phase 2 (Pre-modelling) – Review of groundwater models
- December 2022 – Installation of additional groundwater monitoring sensors across Greater Lincolnshire
- January 2023 – Completion of initial rapport building and community engagement within the identified trial sites of Barton and Barrow-upon-Humber, Grimsby and Scopwick
- March 2023 – Completion of Phase 3 (Groundwater Modelling) - Review of groundwater models
- July 2023 – Commencing the identification of potential future groundwater schemes
- January 2024 – Partnership approval of Full-Business Case
- March 2024 – LCC Executive approval of Full-Business Case.

Notwithstanding the above, it is important to note that the timescales outlined are potentially overestimates as uncertainty, due to contractor availability, still exists regarding the work required to review, revise and validate the Lincolnshire Chalk and Spilsby Sandstone and Lincolnshire Limestone groundwater models. The GLGP is currently in the process of obtaining greater clarity regarding timescales. Once this has been obtained the programme will be reviewed with the aim of bringing forward the target date for Full-Business Case completion, if, upon guidance of groundwater modelling experts, such an ambition is appropriate.

Referencing the above comment regarding uncertainty, the GLGP has currently assigned risk allocations to the following activities:

Reference	Activity	Risk Allocation (Months)	Likelihood of Realisation
3	Recruitment of Project Manager	3	Medium
4	Approval of Outline Business Case	1	Medium
5	Indicator Data Collection & Confirmation of Evaluation Questions	1	Low
9	Recruitment of Project Officers (If Necessary)	3	Low
14	Procurement of Suitable Contractor for Groundwater Monitoring Sensor Installation	1	Low
15	Installation of Groundwater Monitoring Sensors	3	Low
19	Production of Full-Business Case	2	Medium

20	Community Involvement / Empowerment During Optioneering Process	2	Medium
26	Partnership Approval of Full-Business Case	1	Low
31	Assurance of Full Business Case	1	Low
32	Procurement of Suitable Contractor and Resources to Implement Measures / Work Identified	2	Medium
33	Implementation of Proportionate Place Based Measures	2	Uncertain

For ease of representation the critical path of the project has been displayed within a separate Gantt Chat (n = 60 months).

As outlined previously within the Outline Business Case, the key dependency of the project is the reviewing, revising and validation of the Lincolnshire Chalk and Spilsby Sandstone and Lincolnshire Limestone groundwater models. Without which the identification of proportionate, place-based measures will be severely compromised due to a relatively limited understanding of groundwater flood risk across Greater Lincolnshire. This is because existing groundwater models have been designed to predict / demonstrate low flows within groundwater and hence are not currently suited for assessing groundwater flood risk.

In addition to the above, another key dependency will be the engagement and empowerment of stakeholders and local communities, and as such engagement is programmed to commence in earnest during the revision of the groundwater models and will continue throughout the development of the Full-Business Case (including optioneering).

Evaluation of progress, and the identification, dissemination and integration of lessons identified will be undertaken by the Project Manager, with support from the Project Team, as often as deemed necessary. For the avoidance of doubt this process will align with FCRIP reporting requirements and the governance arrangements of the Joint Lincolnshire Flood Risk and Management Partnership alongside governance arrangements of North East Lincolnshire Council and North Lincolnshire Council. It is likely that key evaluation and learning points will be identified following the completion of the following activities:

- January 2023 – Completion of initial rapport building and community engagement within the identified trial sites of Barton and Barrow-upon-Humber, Grimsby and Scopwick
- March 2023 – Completion of Phase 3 (Groundwater Modelling) - Review of groundwater models
- April 2024 – Submission of Full Business Case
- February 2025 – Completion of research by University of Lincoln regarding the risk of salinisation from groundwater flooding in the Lincolnshire Fens
- July 2024 – October 2026 – During and following implementation and monitoring of proportionate place-based measures
- March 2027 – Identification of potential future groundwater schemes

6.5 Communications, stakeholder and community engagement

Describe the Communications and Engagement Plan going forward.

- How will communications be managed?
- How will stakeholders be engaged going forward?
- How will the community be engaged going forward?

(See Guidance Document Aspect 2)

A Communication steering group has been established which will develop best practice and hold and develop the communication and engagement plan. The Communication and Engagement Plan will be revisited and updated on a regular basis, and when new workstreams are established.

The overriding aim of our communication and engagement is to ensure that all relevant stakeholder's and communities play a key role in the design, implementation, maintenance and embedding of the project's outputs. A stakeholder mapping exercise was undertaken through the Theories of Change engagement to identify partners and stakeholders in the development of the project. Stakeholder mapping will be used again in identifying the 3 trial sites. Detailed Stakeholder and Community plans will then be developed for each trial site to encourage and enable involvement, provide consistency and help manage goals and expectations.

It is anticipated that GLGP will use the EA's web platform Engagement HQ to host digital communications with communities and stakeholders, and the wider public. This will provide consistency in messaging across our trial sites and allow partners/workstream leads access to digital tools for engagement activities. The Community and Engagement steering group will work with GLGP partners to ensure assurance sign off before information is uploaded to Engagement HQ. Partners will signpost enquiries to this website.

Communication plans will be adapted and evolve over time as the project processes. Plans will be evaluated and may change dependant on review on effective communication channels.

Future key areas for engagement with stakeholders and communities will include:

- Mapping of stakeholder and communities for individual trial sites and producing stakeholder and community engagement plans for each.
- Exploring different community engagement approaches to ensure inclusivity and maximise active involvement
- Regular review of stakeholder and community plans, objectives and success criteria
- Branding and engagement materials, key messaging and effective communication channels
- Coordinate engagement between the trial sites, any future pipeline sites and other flood resilience projects and activities.

The Project Manager, in liasion with the Communication and Engagement steering group will manage internal Partnership communications. The monthly partnership steering group meeting will provide project updates and allow partners the opportunity to discuss any

concerns, opportunities, and share lessons learnt. Further communication channels, including TEAMS channels, sharing of reports and learnings, a dedicated partner pages on the Engagement HQ website will provide the opportunity for partners to work collaboratively.

6.6 Risk and change management

Describe the approach to the assessment and management of risk and uncertainty.

- What are the key delivery risks (time, money, reputation) and how will these be managed?
- What are the key delivery uncertainties associated with the innovation and implementation?
- How will these uncertainties be managed?
- How will future changes be agreed and communicated?

(See Guidance Document Aspect 10)

Table 13 Key risks to fulfilling the investment objectives:

Ref	Key Risks	H/M/L	Owner	Counter Measures and approach
1	Capacity and resources of partners/ contractors throughout the 6 years	M	Lincolnshire County Council	Contracted suppliers will undertake most of required works, managed by a full time Project Manager and supported with a proposed 2x project officer.
2	Maintaining the engagement of partners throughout the 6-year project	M	Lincolnshire County Council	Provision of regular project updates, actively involving partners in the development of the project and ensuring partners are brought in as and when appropriate times
3	Slippage in programme /scope creep/delays in delivery of actions	M	Lincolnshire County Council	Regular tracking and review of the programme by PM and early indications raised by partners. Forward planning and understanding of risks for each phase so that any delays are more likely to be mitigated. Reporting by exception if required to the Project Board
4	Increased costs associated with supplier resource	M	Lincolnshire County Council	Quantify and plan project around maybe a most likely, best case and worse case spend profiles.
5	Ability to sustain implemented Measures / Works	L	Lincolnshire County Council	Identification of innovative funding sources for maintenance The designing of measures / works to be proportionate / sustainable, having due regard to future funding / maintenance requirements

6.7 Contract management

Describe the key contract management proposals.
- Who will be responsible for day-to-day contract management?
- How will interfaces and dependencies between individual contracts be managed?

GLGP partners all have experience of managing the delivery of operational contract and performance management for large programmes.

The Project Manager, with support from the Project Team will be responsible for day to-day contract management, scheduling in regular reviews of contract progression and outputs. This activity will be supported by the procurement team at LCC, in line with LCC's Standard Contract and Procurement Procedure Rules.

The Project Team will identify and assess any third-party dependencies, with input from the wider GLGP partners. Resources will be prioritised, responsibilities allocated, and strategies put in place to monitor progress. The route map will be developed following the initial desk-based research and gap analysis to take account of interfaces and communicated to the partners to pre-empt activities and solutions to minimise risk.

6.8 Assurance

Describe the assurance plan for the business case.
- What checks have and will be applied?
- Have partners approved the Business Case?

Useful references and existing industry guidance:
- "A Guide to Integrated Assurance", Association for Project Management, 2014

The outline business case has been produced by lead partner Lincolnshire County Council in collaboration with the GLGP partners, by way of feedback and review. It has been approved by the GLGP partners and signed off by the Project Executive prior to submission.

The business case has also been approved by the LCC's internal executive board. The draft OBC was submitted with papers to the Senior Management Team for review and approval and sign off was provided by the Service Director and lead member for flooding.

6.9 Innovation and learning: monitoring, evaluation and dissemination

Describe the proposals for monitoring, evaluation and dissemination of innovation and learning.
- What are the proposals and arrangement for sharing and exchange with the Programme?
- What are the proposed arrangements for monitoring the innovation and learning?
- How will the evidence be recorded and the evaluation be managed?
- What is are the arrangements and plan for dissemination through the life of the project?

(See Guidance Document Aspect 11)

Proposals for monitoring, evaluation and dissemination are detailed in Section 2.9 and Appendix 6D.

6.10 Contingency plans

Describe the options available if the proposal is unaffordable, fails to win community support and/or other necessary approvals.

- Is a scaled down investment proposal possible?
- Can the phasing of the work be amended?
- Can the location of the proposals be adjusted?
- Are alternative and/or additional contributions (financial, knowledge, technology) available?

A scaled-down investment proposal was presented in Section 3.4.1, with suggested reduced benefits.

Phasing of GLGP is sequential:

1. The Conducting of academic research into the risk of salinisation of groundwater flooding in the Lincolnshire Fens and undertaking of a gap analysis and subsequent revision, including output validation, of the Lincolnshire Chalk and Spilsby Sandstone and Lincolnshire Limestone groundwater models. During this process initial community engagement will be undertaken within the potential trial sites of Barton and Barrow-upon-Humber, Grimsby and Scopwick, which have been preliminary selected based on observed flooding across Greater Lincolnshire.
2. Based on the outputs of the revised models, 3 trial sites (and potential future sites) will be confirmed.
3. The development and assessment of proportionate place-based measures within the confirmed trial sites. Throughout this process local communities shall be empowered and actively encouraged to take part in the development of measures, whilst simultaneously having regard to model outputs.
4. The implementation and delivery of packages of work in collaboration with stakeholders, including local communities, within the trial sites as identified through the assessment work, specifically suited to managing groundwater both in terms of flood risk and as a resource.
5. Throughout the development and implementation of the project, progress will be monitored, lessons shall be identified, shared and implemented and performance evaluated all of which shall contribute to, in addition to the above, the development of potential pipeline groundwater related projects.

If necessary, the 3 trial locations could be changed, although these were identified by the Partners and the desk-based analysis. Other pipeline sites will be identified during this phase.

Open Report on behalf of Andy Gutherson - Executive Director - Place

Report to:	**Environment and Economy Scrutiny Committee**
Date:	**12 April 2022**
Subject:	**Lincolnshire Minerals and Waste Local Plan: Issues and Options for Updating the Plan**

Summary:

This item invites the Environment and Economy Scrutiny Committee to consider a report regarding the Lincolnshire Minerals and Waste Local Plan: Issues and Options for Updating the Plan.

This decision is due to be considered by the Executive on 4 May 2022. The views of the Scrutiny Committee will be reported to the Executive as part of their consideration of this item.

Actions Required:

That the Environment and Economy Scrutiny Committee: -

(1) considers the attached report and determines whether the Committee supports the recommendations to the Executive as set out in the report.

(2) agrees any additional comments to be passed on to the Executive in relation to this item.

1. Background

The Executive are due to consider the Lincolnshire Minerals and Waste Local Plan: Issues and Options for Updating the Plan on 4 May 2022. The full report to the Executive is attached at Appendix 1 to this report.

2. Conclusion

Following consideration of the attached report, the Committee is requested to consider whether it supports the recommendations in the report and whether it wishes to make

any additional comments to the Executive. Comments from the Committee will be reported to the Executive.

3. Consultation

The Committee is being consulted on the proposed decision of the Executive on 4 May 2022.

4. Appendices

These are listed below and attached at the back of the report	
Appendix 1	Report to the Executive on Lincolnshire Minerals and Waste Local Plan: Issues and Options for Updating the Plan.

5. Background Papers

No background papers within the meaning of section 100D of the Local Government Act 1972 were used in the preparation of this Report.

This report was written by Adrian Winkley, Minerals & Waste Policy and Compliance Manager – Planning, who can be contacted on 07867 139608, or adrian.winkley@lincolnshire.gov.uk.

Open Report on behalf of Andy Gutherson, Executive Director - Place

Report to:	**Executive**
Date:	**04 May 2022**
Subject:	**Lincolnshire Minerals and Waste Local Plan: Issues and Options for Updating the Plan**
Decision Reference:	**I025460**
Key decision?	**No**

Summary:

The adopted Lincolnshire Minerals and Waste Local Plan, which covers the period to 2031, is being updated to ensure that its policies remain relevant and effective. This is being carried out in accordance with the programme set out in the Lincolnshire Minerals and Waste Development Scheme approved by the full County Council in 2021. The document attached to this report as Appendix A, the Issues and Options document, represents the first stage of this process. Subject to the approval of the Executive, this will be published for public consultation.

The Issues and Options document proposes to roll the new plan period forward to 2040 and sets out the key issues (topics) that need to be considered in the updating of the plan. Potential options for improving the plan are set out in the document and interested parties are invited to comment and, where appropriate, put forward alternatives or additions.

The plan will need to make sufficient provision for a steady and adequate supply of aggregate minerals (sand and gravel, and crushed rock) during the plan period. It is proposed to do this by allocating additional sites in the new plan. To facilitate this approach, it is proposed to carry out a "Call for Sites" exercise that would run alongside the consultation on the Issues and Options document. Interested parties would then be able to nominate sites for potential allocation. A Proposed Site Selection Methodology (Appendix B) has been prepared which sets out how the nominated sites would be assessed and selected for allocation. This would be included in the consultation.

Although no specific needs for new waste management facilities have been identified for the new plan period, it is important that the plan provides a suitable policy framework to guide and assess any future waste management proposals. It is therefore proposed to continue with the existing criteria-based approach and to set out a spatial strategy which

focusses on the main urban areas, albeit in a simpler format.

Recommendation(s):

That the Executive:-

(1) Subject to any amendments made pursuant to paragraph 2 below, approves the Issues and Options document attached at Appendix A and the Proposed Site Selection Methodology attached at Appendix B for public consultation for a period of at least six weeks commencing in June 2022;

(2) Authorises the Head of Planning to make any non-material amendments to the said Issues and Options document and the said Proposed Site Selection Methodology that are necessary to meet the County Council's accessibility requirements for publication on its website; and

(3) Approves the carrying out of a "Call for Sites" process alongside the consultation.

Alternatives Considered:

Not to proceed with the consultation on the basis of the documents at Appendix A and B.

Not to conduct a "Call for Sites".

Reasons for Recommendation:

The Issues and Options document and the Proposed Site Selection Methodology represent the first stage in the updating of the Lincolnshire Minerals and Waste Local Plan. This is the formative stage at which no firm decisions have been taken on the content of the new plan. It would therefore allow the public and other stakeholders an opportunity to express views and influence the future content of the new plan at an early stage in its preparation.

Approving the Issues and Options document and the Proposed Site Selection Methodology for consultation would also allow the updating of the plan to proceed in accordance with the programme approved by the full County Council in 2021.

Conducting a "Call for Sites" will help the Council to address projected shortfalls in capacity consequent on the extension of the period of the Lincolnshire Minerals and Waste Local Plan to 2040.

1. Background

1.1 The County Council is the Mineral and Waste Planning Authority for the county of Lincolnshire and is responsible for the production, monitoring, review and updating of a Minerals and Waste Local Plan. The current plan, the Lincolnshire Minerals and Waste Local Plan (LMWLP), was produced in two parts: the Core Strategy and Development Management Policies (CSDMP) document adopted on 1 June 2016 and the Site Locations document (SLD) adopted on 15 December 2017.

1.2 The first part of the plan, the CSDMP, sets out the key principles to guide the future winning and working of minerals and the form of waste management development in the county up to 2031. The second part, the SLD identifies specific sites and areas for mineral extraction and for the location of waste facilities.

1.3 The LMWLP forms part of the statutory development plan for the county, which in effect means that all planning applications for minerals and waste development must be determined in accordance with the LMWLP unless material considerations indicate otherwise.

1.4 The LMWLP was reviewed last year (LMWLP Review) under regulation 10A of the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended), to establish whether the policies remained relevant and effective. This found that the following policies were not fully effective and should be updated:

- Policy M1 (Recycled and secondary aggregates)
- Policy M4 (Proposals for sand and gravel extraction)
- Policy M5 (Limestone)
- Policy M11 (Safeguarding of Mineral Resources)
- Policy M13 (Associated Industrial Development)
- Policy W1 (Future requirements for new waste facilities)
- Policy W3 (Spatial strategy for new waste facilities)
- Policy W4 (Locational criteria for new waste facilities in and around main urban areas
- Policy W6 (Landfill)
- Policy W7 (Small scale waste facilities)
- Policy SL3 (Waste site and area allocations)

1.5 In addition, the LMWLP Review concluded that the other policies would benefit from being updated to:

- improve the clarity and focus of the policies,
- ensure greater consistency between the policies,
- allow any subsequent changes to legislation/national policy to be incorporated into the updated plan,
- ensure account is taken of any new social, economic, and environmental priorities, and

- enable greater public involvement in the process.

1.6 On 19 February 2021, the County Council approved the findings of the LMWLP Review and authorised the updating of the LMWLP, to be prepared as one document. At the same meeting the County Council approved a new Lincolnshire Minerals and Waste Development Scheme 2021 (LMWDS) setting out the programme of work involved in updating the plan. This work will be undertaken under the Town and Country Planning (Local Planning) (England) Regulations 2012 (and other legislation) and involve the following stages:

- Consultation on an Issues and Options document, including a call for sites exercise under Regulation 18 (Spring 2022)
- Consultation on a Preferred Approach (Draft) of the new LMWLP also under Regulation 18 (Spring 2023)
- Publication of the proposed submission version of the new LMWLP under Regulation 19 (Spring 2024)
- Submission to the Secretary of State (Summer 2024)
- Examination Hearing (Autumn 2024)
- Adoption (Winter 2024/2025)

1.7 Under Regulation 18 (the first two stages listed above), the County Council is required to notify certain bodies and persons of the subject of the local plan and invite them to make representations about what the plan should contain. Technically this can be done in a single stage, but if a plan is to be updated in full (as in this case) it is common practice to split this into two stages:

i. consultation on a "high-level" Issues and Options Document – allowing consultation at the formative stage of the plan, and
ii. consultation on a Preferred Approach (Draft) – allowing consultation on detailed policies prior to the preparation of the proposed submission version of the plan under Regulation 19.

1.8 The document attached to this report as Appendix A (Issues and Options) has been prepared for the first stage of consultation. It identifies key issues (i.e., topics) that need to be considered in the updating of the LMWLP. For each issue, interested parties that take part in the consultation will be asked whether they support the suggested option to improve the plan and, if not, they are invited to put forward an alternative. Interested parties may also propose additional topics.

1.9 To meet the requirements of the National Planning Policy Framework, the new plan will need to be rolled forward to cover a period of at least 15 years from its forecast date of adoption. It is therefore proposed that it will cover the period to the end of 2040, slightly longer than 15 years to allow for limited slippage in the programme. Accordingly, it will need to make sufficient provision for both minerals (in particular, a steady and adequate supply of aggregate minerals) and waste management during this period.

1.10 For aggregate minerals, this would involve making provision for a shortfall of 22.90mt of sand and gravel and 3.84mt of limestone based on the provision rates set out in the latest Lincolnshire Local Aggregate Assessment (2021). It is proposed that this shortfall would partially be met by carrying forward sites already allocated in the adopted LMWLP, except where evidence emerges that there has been a significant change in circumstances since a site was allocated. The remaining shortfall would then be met, where possible, from further site allocations in the new LMWLP. A "Call for Sites" exercise would therefore be carried out during the consultation period to allow landowners and other interested parties an opportunity to nominate potential sites for allocation in the new LMWLP.

1.11 The new LMWLP will also need to allow sufficient opportunities to meet any identified needs of the area for waste management. In this respect, an updated Lincolnshire Waste Needs Assessment published in 2021 demonstrates that there are no capacity gaps up to 2045, which goes beyond the proposed plan period. Despite this apparent lack of need, waste proposals will inevitably come forward during the new period. This is because new demands will arise from:

- the closure of existing sites,
- the emergence of new technologies to help move the management of waste up the waste hierarchy (which ranks different waste management methods, with prevention and re-use at the top and disposal at the bottom) in accordance with the National Planning Policy for Waste (NPPW),
- changes in cross boundary movements, and
- the need to promote the proximity principle in accordance with the NPPW (i.e., waste should generally be managed as near as possible to its place of production).

1.12 As a consequence of the above, it will still be necessary for the new LMWLP to provide a suitable policy framework to guide and assess any future waste management proposals that may come forward during the plan period. To achieve this, it is proposed to continue with the existing criteria-based approach and set out a spatial strategy which focusses on the main urban areas, albeit in a simpler format to address issues identified in the LMWLP Review. As most of the county's waste is produced in these urban areas, this approach is in line with the proximity principle.

1.13 The Issues and Options document considers the rationale behind the proposed approach for aggregates and waste and provides an opportunity for interested parties to make comment.

1.14 Other issues covered by the document, together with options for potential changes, include:

a) Historic building stone – no significant changes proposed.
b) Silica sand – no significant changes proposed.

c) Hydrocarbons (oil and gas) – no significant changes proposed, other than to give greater clarity to the restoration requirements.
d) Underground gas and carbon storage – proposes that the policy should be expanded to include specific reference to carbon storage.
e) Other minerals – minerals not covered by strategic policies of the adopted LMWLP are still not considered to be of national or local significance, so no changes are proposed.
f) Associated industrial development – considers whether the current requirement to have close links with the associated mineral development should be relaxed and, if so, to what extent.
g) Agricultural irrigation reservoirs – no significant changes proposed.
h) Borrow pits - no significant changes proposed.
i) Safeguarding mineral resources – considers that the current policy is too onerous, and options are considered for making it more focussed and less of a burden for planning authorities and developers.
j) Safeguarding existing mineral sites, mineral allocations and associated infrastructure – indicates that the existing policy may need to be changed to remain consistent with changes to the existing policy on the safeguarding of mineral resources.
k) Low level non-nuclear radioactive waste – considers that a specific policy on this matter would not be needed in the new LMWLP.
l) Landfill – consideration is given to amending the existing policy with respect to the use of inert waste in the restoration of quarries, but only in specific circumstances.
m) Safeguarding waste management sites – considers that the safeguarding of waste management sites should continue but proposes to end the need for the district councils to consult the county council on applications in proximity to waste management facilities.
n) Restoration and after-use - no significant changes proposed.
o) Development management policies – proposes to deal with the issues of sustainability and climate change principally through a strategic policy (rather than development management policies). There are no changes proposed for the other development management policies.
p) Other issues – an opportunity is provided for interested parties to raise issues not identified in the document and to put forward solutions.

1.15 In addition to the Issues and Options Document, it is proposed to consult on a Proposed Site Selection Methodology, which is attached to this report as Appendix B. This sets out how sites nominated by interested parties through the "Call for Sites" Exercise would be assessed for potential allocation in the new LMWLP. Under this methodology, sites subject to significant constraints would be discounted at an early stage except where the proponent is able to provide sufficient information that the working of a site would not have unacceptable impacts. The remainder would then be assessed against 47 criteria falling into three broad groups:

- constraints (i.e., impacts on the environment/amenity),

- deliverability (i.e., the likelihood that a site would be able to deliver the mineral specified during the plan period), and
- opportunities (e.g., through restoration to beneficial after-uses).

Each site would then be assigned to one of five bands, Band A being the best and Band E the worst. Where only some of the sites within a band are required, the sites would be ranked using further criteria.

1.16 The updating of the LMWLP will be subject to a sustainability appraisal as required by the Planning and Compulsory Purchase Act 2004. Its role is to promote sustainable development by assessing the extent to which the emerging plan, when judged against reasonable alternatives, will help to achieve relevant environmental, economic, and social objectives. The process provides an opportunity to consider ways by which the plan can contribute to improvements in these factors, as well as a means of identifying and mitigating any potential adverse effects from the plan. By doing so, it can help make sure that the proposals in the plan are appropriate given the reasonable alternatives.

1.17 The sustainability appraisal will be undertaken by an independent consultant. The first stage of this process, the Scoping Report, is in preparation. This will set out the context, objectives, and approach of the assessment. The Scoping Report would be published alongside the Issues and Options document.

1.18 It is proposed that the consultation will commence in June (to allow sufficient time to organise the consultation) and would run for a period of at least 6 weeks. This consultation would be carried out in accordance with the Council's adopted Statement of Community Involvement (2019), which sets out how the Council will engage and consult the public and stakeholders.

2. Legal Issues:

Equality Act 2010

Under section 149 of the Equality Act 2010, the Council must, in the exercise of its functions, have due regard to the need to:

- Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Act.

- Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it.

- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The relevant protected characteristics are age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex; and sexual orientation.

Having due regard to the need to advance equality of opportunity involves having due regard, in particular, to the need to:

- Remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic.
- Take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it.
- Encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities.

Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to tackle prejudice, and promote understanding.

Compliance with the duties in section 149 may involve treating some persons more favourably than others.

The duty cannot be delegated and must be discharged by the decision-maker. To discharge the statutory duty the decision-maker must analyse all the relevant material with the specific statutory obligations in mind. If a risk of adverse impact is identified consideration must be given to measures to avoid that impact as part of the decision-making process.

An Equality Impact Analysis has been carried out and is attached to this report as Appendix C. No positive or adverse impacts have been identified.

The updating of the LMWLP, will be carried out in several stages in accordance with the programme set out in the Lincolnshire Minerals and Waste Development Scheme (2021). Each stage will be subject to public consultation in accordance with the adopted Statement of Community Involvement (2019). This seeks to ensure that all sections of the community with an interest in a particular area will be engaged. In particular, it requires effort to be made to identify and engage under-represented and seldom heard groups in Lincolnshire, including those with the following protected characteristics: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation. The SCI recognises that within a sparsely populated county such as Lincolnshire it is important to ensure the involvement of groups including rural communities suffering from isolation. Challenges encountered by the above groups range from accessibility to venues, language barriers, social differences and types of media being used. Specific organisations aimed at targeting these groups, would be identified with assistance from the Council's Community Engagement Team for consultation purposes. Appropriate locations and a

variety of media would also be employed.

The Issues and Options document includes a specific question relating to protected characteristics. Any comments received will be reviewed at the end of the consultation period.

Joint Strategic Needs Assessment (JSNA) and the Joint Health and Wellbeing Strategy (JHWS)

The Council must have regard to the Joint Strategic Needs Assessment (JSNA) and the Joint Health and Wellbeing Strategy (JHWS) in coming to a decision.

It is considered that the Issues and Options document will contribute to the aims of the JSNA and JHWS by providing an opportunity for the public and other stakeholders to influence the development of policies relating to the environmental impacts of mineral/waste development (and how these would be mitigated) and the beneficial reclamation/after-uses of such sites.

Crime and Disorder

Under section 17 of the Crime and Disorder Act 1998, the Council must exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent crime and disorder in its area (including anti-social and other behaviour adversely affecting the local environment), the misuse of drugs, alcohol and other substances in its area and re-offending in its area.

This obligation has been considered but is not thought to be directly affected by the proposals in this report.

3. Conclusion

3.1 The Issues and Options document is a "high-level" consultation document seeking views on what the new LMWLP should contain. It highlights the key issues which have been identified and invites stakeholders to put forward any other issues which they think need to be included. In addition, it seeks views on options for improving the existing plan.

3.2 The consultation would also provide an opportunity for stakeholders to comment on the Proposed Site Selection Methodology that would be used to assess sites nominated for allocation in the new plan for future aggregate extraction. This will help to ensure that the methodology is as transparent and objective as possible.

3.3 Although the updating of the LMWLP is primarily governed by statutory requirements, the consultations will accord with the "Gunning Principles". These require that:

- proposals are still at a formative stage (a final decision has not yet been made, or predetermined, by the decision makers),
- there is sufficient information to allow 'intelligent consideration' (the information provided must relate to the consultation and must be available, accessible, and easily interpretable for consultees to provide an informed response) ,
- there is adequate time for consideration and response (there must be sufficient opportunity for consultees to participate in the consultation, although there is no set timeframe for consultation as the length of time given for consultees to respond can vary depending on the subject and extent of impact of the consultation), and that
- 'conscientious consideration' must be given to the consultation responses before a decision is made (decision-makers should be able to provide evidence that they took consultation responses into account).

3.4 The process for the consultation on the Issues and Options document and the Proposed Site Selection Methodology will be designed to meet the first three principles. The final principle will be met in the lead up to the approval of the next stage of plan preparation – the Preferred Options Draft Plan. In addition, the public and other stakeholders will be given a further opportunity to comment at the Preferred Options stage, at which time the proposed policies will be available.

3.5 The Executive is responsible for the preparation of the new LMWLP, including the approval of documents for consultation under Regulation 18. The Executive is therefore being asked to approve the Issues and Options document for public consultation for a period of at least 6 weeks. It is proposed to start this consultation during June to allow sufficient time for the consultation web page to be set up, and for any minor amendments to be made to the documents to ensure that they meet the County Council's accessibility requirements.

4. Legal Comments:

The legal provisions that underpin the development of the Plan are explained in the Report.

The decision is consistent with the Policy Framework and within the remit of the Executive

5. Resource Comments:

The Council authorised the updating of the LMWLP in February 2021. The recommended actions in this report are the first stage in this process, the cost of which will be met from within the Place directorate's approved revenue budget.

6. Consultation

a) Has Local Member Been Consulted?

n/a

b) Has Executive Councillor Been Consulted?

Yes

c) Scrutiny Comments

This item will be reported to the Environment and Economy Scrutiny Committee on 12 April and the comments of the Committee will be reported to the Executive.

d) Risks and Impact Analysis

See, main body of the Report and Appendix C.

7. Appendices

These are listed below and attached at the back of the report	
Appendix A	Lincolnshire Minerals and Waste Local Plan: Issues and Options for updating the plan
Appendix B	Lincolnshire Minerals and Waste Local Plan: Proposed Site Selection Methodology
Appendix C	Equality Impact Analysis

8. Background Papers

The following background papers as defined in the Local Government Act 1972 were relied upon in the writing of this report.

Document title	Where the document can be viewed
Core Strategy and Development Management Policies (2016)	https://www.lincolnshire.gov.uk/directory-record/61697/minerals-and-waste-local-plan-core-strategy-and-development-management-policies

Site Locations document (2017)	https://www.lincolnshire.gov.uk/downloads/file/2274/adopted-site-locations-pdfa
Review of the Lincolnshire Minerals and Waste Local Plan (2021)	https://www.lincolnshire.gov.uk/downloads/file/5053/review-of-the-lmwlp-19-2-21-accessible-version-
Lincolnshire Local Aggregate Assessment (2021)	https://www.lincolnshire.gov.uk/downloads/file/6308/lincolnshire-local-aggregate-assessment-2020-data-8-11
Lincolnshire Waste Needs Assessment (2021)	https://www.lincolnshire.gov.uk/downloads/file/6039/overview-report
Lincolnshire Minerals and Waste Local Development Scheme (2021)	https://www.lincolnshire.gov.uk/downloads/file/5049/lincolnshire-minerals-and-waste-development-scheme-19-1-21-accessible-v-
Lincolnshire Statement of Community Involvement (2019)	https://www.lincolnshire.gov.uk/downloads/file/2333/statement-of-community-involvement-pdfa
National Planning Policy Framework	https://www.gov.uk/government/publications/national-planning-policy-framework--2
National Policy for Waste	https://www.gov.uk/government/publications/national-planning-policy-for-waste
Planning Practice Guidance	https://www.gov.uk/government/collections/planning-practice-guidance

This report was written by Adrian Winkley, Minerals & Waste Policy and Compliance Manager – Planning, who can be contacted on 07867 139608, or adrian.winkley@lincolnshire.gov.uk.

Lincolnshire Minerals and Waste Local Plan

Issues and Options for Updating the Plan

[Date to be inserted]

This document can be provided in another language or format. For all enquiries, please contact the county council on telephone number 01522 782070

Contents

Tables

Figures

1. Introduction

1.1 Minerals are fundamental to our daily lives. They form the basic building blocks for construction materials and are used in countless industrial processes and consumer products. Lincolnshire is an important producer of minerals and is currently the largest producer of sand and gravel in the East Midlands. Limestone, chalk, and hydrocarbons are also extracted in the county.

1.2 Waste management facilities are essential to ensure the wastes generated by households, businesses and industry are dealt with in the most efficient and sustainable ways possible. Lincolnshire has a substantial network of waste management facilities which deal with a variety of different waste streams and employ many different processes and technologies.

1.3 Lincolnshire County Council is the minerals and waste planning authority for the county, which means it is responsible for preparing a minerals and waste local plan that makes provision for the raw materials and essential infrastructure that is required to underpin sustainable development across the county.

What is the Lincolnshire Minerals and Waste Local Plan?

1.4 The Lincolnshire Minerals and Waste Local Plan (LMWLP) is part of the statutory development plan for Lincolnshire and sits alongside other local plans produced by Lincolnshire's district councils that cover matters such as the delivery of housing and employment. It comprises two separate documents: a Core Strategy and Development Management Policies (CSDMP) document adopted in 2016, and a Site Locations document (SLD) adopted in 2017.

1.5 The CSDMP sets out the key principles to guide the future winning and working of minerals and the form of waste management development in the county up to 2031. It also sets out the development management policies against which planning applications for minerals and waste development will be considered.

1.6 The SLD includes specific proposals and policies for the provision of land for mineral and waste development.

Why does the Lincolnshire Minerals and Waste Local Plan need updating?

1.7 The performance of the LMWLP is subject to regular monitoring and the results are published each year in the county council's Authority Monitoring Reports (AMRs). The council is also required to undertake a more in-depth review of the LMWLP every five years in order to assess whether the policies in the plan are performing effectively or need updating.

1.8 Both parts of the LMWLP (the CSDMP and SLD) were reviewed during 2020, and a detailed report setting out the conclusions of this review was published in February 2021. This is referred to in this document as the LMWLP Review and is available to view on the county council's website.

1.9 The LMWLP Review highlighted issues with a number of policies in the LMWLP and concluded that, rather than taking a piecemeal approach seeking to update individual policies, the most appropriate course of action would be to update the LMWLP in its entirety.

1.10 In response to the conclusions of the LMWLP Review, the county council has commenced work on a new, updated LMWLP. The new plan, once completed, will eventually replace the existing adopted CSDMP and SLD.

1.11 In line with national policy and legislation, it is proposed to produce the new LMWLP as a single document, which will include both strategic and criteria-based policies, along with site allocations where required.

How will the new Lincolnshire Minerals and Waste Local Plan be prepared?

1.12 The timetable for the production of the new LMWLP is set out in the county council's Minerals and Waste Development Scheme (LMWDS), which is available on the council's website. The new LMWLP will go through several stages of public consultation and a formal examination process in order to ensure the views of communities, stakeholders and other interested parties are taken into account during the formulation of the plan, and that it meets all necessary legal and procedural requirements.

1.13 Table 1 below sets out the key milestones for the preparation of the new LMWLP as set out in the current LMWDS. These may be subject to change and the LMWDS updated as work progresses on the new plan.

Table 1: Timetable for preparation of the new Lincolnshire Minerals and Waste Local Plan

Stage of plan production	Target
Consultation on Issues and Options, including a call for sites	Spring 2022
Consultation on the Preferred Approach (Draft of the new LMWLP)	Spring 2023
Publication of the Proposed Submission version of the new LMWLP	Spring 2024
Submission of LMWLP to Secretary of State	Summer 2024
Examination hearings	Autumn 2024
Adoption	Winter 2024/2025

1.14 Details of the methods of consultation and publicity utilised at each key stage of plan preparation are set out in the Statement of Community Involvement (SCI). The SCI is also available on the county council's website.

1.15 The SCI sets out how particular effort will be made to identify and engage underrepresented and seldom heard groups in Lincolnshire, including those with the following protected characteristics: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation. Within a sparsely populated county such as Lincolnshire, it is also important to ensure the involvement of groups, including rural communities suffering from isolation.

Question 1

Do you have any comments on how the updating of the LMWLP could have positive or negative impacts on people with a protected characteristic or on any other groups?

If you have identified any negative impacts, please set out your suggestions on how these could be mitigated.

Issues and Options consultation and 'call for sites'

1.16 This Issues and Options consultation document is the first stage in the preparation of the new LMWLP. Building on the conclusions and recommendations of the review of the current LWMLP, it sets out the main issues affecting how we plan for minerals and waste in Lincolnshire and explores reasonable options to address them in the new LMWLP. This document is arranged around these key issues and sets out questions seeking your views on the options suggested and, where appropriate, invites alternative solutions to be put forward for consideration.

1.17 In parallel with this Issues and Options document, the county council is carrying out a 'call for sites' where it is inviting landowners, site operators and their agents to put forward any sites that they wish to be considered for allocation in the new LMWLP for the future winning and working of aggregate minerals. A "Proposed Site Selection Methodology for Updating the Plan" has been produced, which is available on the county council's website. This sets out how it is proposed to assess any nominated sites.

1.18 This Issues and Options consultation and accompanying call for sites is supported by a Sustainability Appraisal Scoping Report. This scoping report sets out objectives and a framework for how the LMWLP will be subject to Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) to ensure the integration of social,

environmental, and economic considerations into the preparation of the plan. Comments are being invited on the SA scoping report as part of this consultation.

Question 2

Do you have any comments in relation to the Sustainability Appraisal Scoping Report for the new LMWLP?

1.19 This Issues and Options consultation is also supported by a number of other background documents, including a Local Aggregates Assessment (2021) and Waste Needs Assessment (2021), which set out the evidence base to inform the required provision for minerals and waste development within the LMWLP. These background documents are referred to in more detail in the relevant chapters of this document.

1.20 The background documents and technical appraisals supporting the new LMWLP will be updated and added to throughout the plan process.

How to get involved

1.21 We are seeking views on the content of the new LMWLP from local communities, stakeholders, and any other interested parties. It is important that you let us know your views at this early stage of plan preparation so that we can use them to inform the approach of the new LMWLP going forward.

1.22 This Issues and Options document, along with its supporting papers and technical appraisals is available to view and download from the county council's website: www.lincolnshire.gov.uk/planning/minerals-waste

1.23 You can submit responses to the questions posed throughout this document or raise any other issues by completing the response form which is available to download from the above website. Site nomination forms are also available for those landowners, operators and agents that wish to make site submissions.

1.24 All response forms and site nomination forms should be submitted by e-mail to: mineralsandwaste@lincolnshire.gov.uk

1.25 If you are unable to respond by e-mail, response forms and site submission forms can be submitted by post to the following address:

Minerals and Waste Planning Policy Team
Planning Services
Lincolnshire County Council
County Offices
Newland
Lincoln
LN1 1YL

1.26 ***[Details of the consultation period to be inserted].***

How we will use your information

1.27 Lincolnshire County Council will use the information that you supply to inform the preparation of the Lincolnshire Minerals and Waste Local Plan (LMWLP) in accordance with the Planning and Compulsory Purchase Act 2004 (as amended) and the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended). Please note that consultation responses received in relation to the LMWLP and associated documents may be made publicly available and therefore no comments can be treated as anonymous or confidential. Your information is kept only for as long as necessary. To find out more information on how your data is processed and your rights, please see the privacy notice directory which can be accessed via our website (www.lincolnshire.gov.uk/privacy) or made available on request.

What happens next?

1.27 At the end of this Issues and Options consultation, all comments and site submissions received will be reviewed by the county council and will be used to help determine which options should be taken forward to the next stage of the new LMWLP. In line with the above timetable, a 'preferred approach' for the new LMWLP will then be drafted and subject to a further round of public consultation. A decision will then be made on the content of the final draft plan (the "publication draft") to be submitted for examination to the Secretary of State.

2. Legislative and policy context

2.1 The Planning and Compulsory Purchase Act 2004 (as amended) and the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended) set out the legislative framework for the preparation of local plans. Within this context, national policies and strategies provide guidance on the content of local plans, including how we should plan for minerals and waste development.

2.2 The LMWLP must therefore be consistent with the relevant legislation, national policies, and any other relevant plans and programmes. This chapter identifies some of the key principles that underpin how we are required to plan for minerals and waste development. Further context in relation to specific issues and options is also provided in the relevant sections of this document.

Sustainable development and climate change

2.3 Sustainable development sits at the heart of the planning system. The government's National Planning Policy Framework (NPPF) 2021 sets out (paragraph 7) that the purpose of the planning system is to contribute to the achievement of sustainable development, which is summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs. It goes on to explain (paragraph 8) that achieving sustainable development requires economic, social, and environmental objectives to be pursued in mutually supportive ways.

2.4 To this end, the NPPF is based upon a presumption in favour of sustainable development. Amongst other things, this states in subparagraph 11a that all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects.

2.5 The need to mitigate and adapt to climate change is a fundamental component of sustainable development and one of the core principles of the NPPF. Paragraph 20d of the NPPF states that strategic policies in local plans should, amongst other matters, make sufficient provision for planning measures to address climate change mitigation and adaptation.

2.6 Paragraph 153 of the NPPF states plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. This is set within the context of the government's binding commitments to reduce greenhouse gas emissions as set out in the Climate Change Act 2008. Further information and guidance is set out in the government's online Planning Practice Guidance (PPG).

Minerals context

2.7 The NPPF and PPG set out national policy and guidance on the sustainable use of minerals. Paragraph 209 of the NPPF states it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation.

2.8 The NPPF requires Lincolnshire County Council as mineral planning authority to make appropriate provision, through policies in its minerals and waste local plan, for the extraction of mineral resources of local and national importance, whilst taking account of the contribution that can be made by substitute or secondary and recycled materials. Policies are also required to:

- safeguard mineral resources from being sterilised by non-mineral development
- protect sites involved in the transport, handling and processing of minerals and other specified activities
- ensure that mineral operations do not have unacceptable adverse impacts on the natural and historic environment or human health
- ensure timely and high-quality restoration and aftercare of mineral sites.

The Managed Aggregate Supply System (MASS)

2.9 In relation to aggregate minerals specifically, the NPPF requires the county council to plan for a steady and adequate supply of aggregates. This is achieved through the Managed Aggregate Supply System (MASS), which as detailed in the PPG, requires minerals planning authorities which have adequate resources of aggregates to make an appropriate contribution to national as well as local supply. The PPG explains that MASS works through national, sub-national and local partners working together to deliver a steady and adequate supply of aggregates.

2.10 The main tool used by the county council in this process is an annual Local Aggregate Assessment (LAA) which is used to assess demand for and supply of aggregates in Lincolnshire, and to inform and monitor the level of provision in the minerals and waste local plan. The county council are also part of the East Midlands Aggregate Working Party (EMAWP) which produces and monitors data on aggregates in the East Midlands and facilitates co-operation between neighbouring authorities and other organisations in relation to aggregate provision.

Waste context

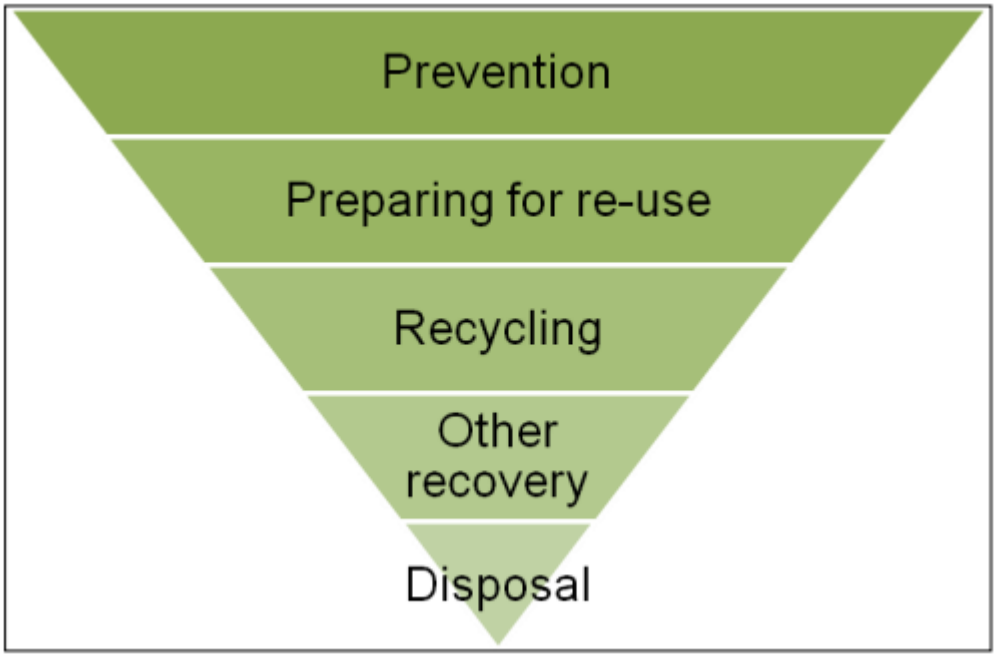
2.11 National policy on planning for waste management is set out in the National Planning Policy for Waste (NPPW) 2014. Additional guidance is also set out in the PPG. The NPPW (paragraph 3) requires waste planning authorities such as Lincolnshire County Council to prepare local plans which identify sufficient

opportunities to meet the identified needs of their area for the management of waste streams.

The waste hierarchy

2.12 The waste hierarchy underpins the NPPW as a key mechanism to deliver sustainable waste management development and is a requirement of the Waste (England and Wales) Regulations 2011. The waste hierarchy ranks different waste management methods, with prevention and re-use at the top, and disposal at the bottom (Figure 1). In preparing the minerals and waste local plan, the county council is required to drive waste management up the waste hierarchy, whilst recognising the need for a mix of types and scale of facilities.

Figure 1: The waste hierarchy



Source: National Planning Policy for Waste (2014) (contains public sector information licensed under the Open Government Licence v3.0)

The proximity principle

2.13 The NPPW (paragraph 4) also requires waste planning authorities to plan for the disposal of waste and the recovery of mixed municipal waste (from households) in line with the 'proximity principle'. The principles of self-sufficiency and proximity are set out in the Waste (England and Wales) Regulations 2011 and require these wastes to be managed in one of the nearest appropriate installations, by the most appropriate technologies, in order to ensure a high level of protection for the environment and human health. The PPG provides further guidance on implementing the principles of self-sufficiency and proximity.

The circular economy

2.14 As set out in the Waste Management Plan for England (WMP) 2021, the government's overall approach in relation to resources and waste is to move away from the current linear economic model of 'take, make, use, throw", towards a more circular economy which keeps resources in use for longer, and in turn minimises waste, reduces its impact on the environment, and reduces carbon emissions.

2.15 This circular economy approach is embedded in the government's Resources and Waste Strategy for England (RWS) 2018, which works towards a number of goals in the government's 25 Year Environment Plan. The RWS sets out ambitious commitments, milestones and targets which will have a significant impact on waste generation and the way that it is managed and planned for in the coming years. Key measures proposed in the RWS include targets for increased recycling and reductions in waste being sent to landfill, along with the introduction of deposit return schemes, enhanced separation and collection of waste, and extended producer responsibility for packaging waste.

2.16 The Environment Act 2021 provides a legal framework for implementing many of the commitments set out in the RWS and the 25 Year Environment Plan.

Other relevant plans, strategies, and programmes

2.17 In addition to national policy and legislation, the LMWLP is produced within the context of many other plans and strategies at national, subnational, and local level, prepared by both statutory and non-statutory organisations. The LMWLP should therefore give due consideration to any plans and strategies that are relevant to the content and scope of the plan, and will refer to these where relevant during the plan-making process.

2.18 There are seven districts within Lincolnshire: Boston Borough, City of Lincoln, East Lindsey, North Kesteven, South Holland, South Kesteven and West Lindsey. As part of the two-tier system of local government in Lincolnshire, these district councils are responsible, either individually or in partnership, for the production of local plans for their respective administrative areas covering matters such as the delivery of housing and employment. It is therefore essential that there is consistency between the policies and allocations in the LMWLP and those set out in the emerging and adopted local plans of the districts.

2.19 The LMWLP is one of several different plans and strategies that Lincolnshire County Council is responsible for or has a key role in producing. The LMWLP therefore needs to be consistent with and support the aims and delivery of these other plans and strategies. Examples of relevant documents include the county council's Corporate Plan, Green Masterplan, Local Transport Plan, Flood Risk and Water Management Strategy, and the Waste Strategy for Lincolnshire.

Duty to co-operate

2.20 Planning for mineral extraction and the provision of waste management infrastructure are both strategic matters which require cross-boundary co-operation between different minerals and waste planning authorities, between the county and district councils, and with other organisations such as the Environment Agency. The county council has a legal duty to co-operate on an ongoing basis with relevant organisations and is required to document this as part of the plan-making process.

3. Setting the duration and the overall context for the new plan

Duration

3.1 The adopted LMWLP covers the period up to the end of 2031. This will need to be rolled forward in the new LMWLP so that it covers a period of at least 15 years from the date the plan is adopted, as required by paragraph 22 of the NPPF.

3.2 The programme for the updating of the LMWLP, as set out in Lincolnshire Minerals and Waste Local Development Scheme, anticipates that the new plan will be adopted in winter 2024/2025, which means that the plan would, at the very least, need to cover the period up to winter 2039/2040.

3.3 In order to give some flexibility and allow for potential slippage in the programme, it is proposed that the new LMWLP will cover the period up to the end of 2040.

Question 3

Do you agree that the new LMWLP should cover the period up to the end of 2040?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know how far ahead you think the plan should look and your reasons why.

Spatial portrait

3.4 To help inform the updating of the LMWLP we are developing a "spatial portrait" of Lincolnshire. This will set out the principal physical, economic, social and environmental characteristics of the county and how these are likely to change over the plan period.

Administrative boundaries and neighbours

3.5 Lincolnshire is within the East Midlands region, bounded by the Yorkshire and Humber region to the north and the East of England region to the south. Nottinghamshire, Leicestershire, Rutland, Northamptonshire, City of Peterborough, Cambridgeshire, Norfolk, North-East Lincolnshire and North Lincolnshire border the county, along with 80km of North Sea coastline to the east.

3.6 There are seven districts in Lincolnshire: Boston, City of Lincoln, East Lindsey, North Kesteven, South Holland, South Kesteven and West Lindsey.

Population and settlement character

3.7 Lincolnshire is a predominantly rural shire covering an area of 5,921km^2 with a population of 766,333 dispersed across the county (mid-2020 estimate, Office for National Statistics (ONS)). This is projected to rise to about 842,700 by the end of 2040, an increase of 10% (based on the average of the ONS mid-year projections for the years 2038 and 2043). It is the fourth largest county in England, but with a low population density (129 per sq. km). This provides fundamental difficulties concerning the provision of a comprehensive and modern infrastructure network.

3.8 The settlement pattern is made up of the Principal Urban Area of Lincoln; the Sub-Regional Centres of Boston, Grantham and Spalding; the main towns of Bourne, Gainsborough, Louth, Skegness, Sleaford and Stamford; and several market towns, smaller villages and hamlets.

Transport

3.9 The highway network in Lincolnshire is extensive, totalling over 9,000km of road; however, the county is not well served by major highways as there are no motorways in Lincolnshire and only around 75km of dual carriageway. The A1 trunk road runs down the western boundary of the county and the A46, A57, A52, A15, A16, A17 routes link settlements throughout Lincolnshire. Accessibility is an issue throughout Lincolnshire, but more so in the more rural isolated parts of the county with particular problems in travelling east-west.

3.10 Local rail services operate within the county and connect the main towns and villages to the surrounding regions. The East Coast Mainline runs along the western side of the county, through Grantham to London.

3.11 There are ports at Boston and Sutton Bridge, with the larger ports of Grimsby and Immingham located just outside the county. The River Trent runs along some of the county's western border and has established routes for waterway traffic.

Land-use and economy

3.12 Farming is still a major industry in Lincolnshire, as is manufacturing. The food industry is concentrated in the south of the county. Tourism is significant along the coast, in and around the Lincolnshire Wolds and in the historic settlements.

3.13 Lincolnshire contains substantial areas of Best and Most Versatile Agricultural Land (Grades 1, 2 and Subgrade 3A) with a particularly high concentration of the highest grades (Grade 1 and Grade 2) in the south-east of the county. As a result, Lincolnshire is one of the most important counties for food production in England.

3.14 The RAF have a strong presence in Lincolnshire with a number of operational airfields. In addition, the Battle of Britain Memorial Flight and the Red Arrows are based in the county.

Water resources and flood risk

3.15 Lincolnshire is one of the driest counties in the country and is prone to drought. Furthermore, climate change has the potential to increase the frequency of both droughts and flooding. However, the importance of water management in Lincolnshire and the county's established expertise in managing flood risk, provides an opportunity to explore innovative approaches to address these matters.

Geology

3.16 As described in the Geology of Lincolnshire (Lincolnshire Naturalists' Union, 1976), the rocks that outcrop in Lincolnshire are sedimentary in origin. In general, the rock strata are flat or dip gently eastwards. Consequently, a west-east traverse reveals outcrops in order of oldest (Triassic) to youngest (Cretaceous). The present topography reflects the different resistances offered by these rocks to the sculptural forces of nature.

3.17 The limestone and ironstone deposits from the middle Jurassic forms one of the most striking landscape features of the county, the Lincoln Cliff which stretches from the north of the county southwards through Lincoln to Grantham where it broadens out to form the South Lincolnshire Uplands. Similarly, the rocks of the Cretaceous period, including sandstone, ironstone, and chalk outcrop in the Lincolnshire Wolds in the north-east of the county.

3.18 During the glacial periods, boulder clay and extensive sand and gravel deposits formed. When the ice receded, on the low ground it abandoned most of its transported material so that large tracts of land, the Fens, and Marshlands, were built up. Original glacial drift remains largely undisturbed but further accumulations by river and marine deposits have taken place, including the older river gravels of the earlier drainage system and the newer river gravels associated with existing streams. The most recent drift deposits formations in the county comprise the areas of blown sand in the north.

Natural Environment

3.19 The countryside and its associated natural environment have long been recognised as one of Lincolnshire's principal assets. In addition to nationally designated areas such as the Lincolnshire Wolds AONB, the Wash and Gibraltar Point, the county's whole character and distinctiveness is framed by its essentially open, rural and tranquil image. The coastal area of Lincolnshire is a defining feature of the county; it has a variety of land-uses linked to agriculture, settlements and tourism, and plays an important role in terms of the natural environment.

3.20 There are five Special Areas of Conservation (SACs) in Lincolnshire: Baston Fen, Grimsthorpe, part of the Humber Estuary, the Coast (Saltfleetby–Theddlethorpe Dunes and Gibraltar Point) and part of the Wash (and North Norfolk Coast). The Wash is the largest estuarine system in the UK. Gibraltar Point, Saltfleetby-Theddlethorpe Dunes, the Humber Estuary and the Wash (and North Norfolk Coast) are also Special Protection Areas (SPA) and Ramsar sites.

3.21 The county has a large number of sites that have been nationally designated as Sites of Special Scientific Interest (some of which are National Nature Reserves). In addition, local sites have been selected at a local level for their wildlife or geological value with the aim of protecting biodiversity and geodiversity.

Historic Environment

3.22 Lincolnshire is a county rich in historic assets. The county is interspersed with conservation areas; has a Civil War battlefield at Winceby, near Horncastle; and is home to a varied archaeological heritage, including remains of national and international importance. Lincolnshire has many pleasant and appealing market towns and villages, vernacular cottages, farm buildings and great country houses. Many of these buildings are recognised as significant and are protected as listed buildings. The historic centre of Lincoln is one of the county's greatest attractions.

3.23 Lincolnshire's wealth of very important archaeological remains include the flint tools of the early "Palaeolithic" inhabitants, the prehistoric burial mounds of the Wolds, the waterlogged landscapes of the Witham and Trent Valleys. Structures include medieval castles and monasteries, the industrial buildings of Lincolnshire's major towns, and the agri-industrial buildings in the countryside.

3.24 There are a large number of nationally important and legally protected Scheduled Monuments, as well as many thousands of locally important archaeological sites covering periods from pre-history to the recently modern period. Lincolnshire retains important examples of the nation's air-warfare heritage dating from the Second World War.

3.25 Historic landscapes are an important part of Lincolnshire's physical and cultural resource. They contain innumerable visible traces of human interaction with nature over several millennia. They contribute to the identity of the county, provide settings for everyday life, attract tourism and business, and are a source of enjoyment and inspiration.

Question 4

Do you think any other factors need to be taken into account in the Spatial Portrait that may have implications for the winning and working of minerals or the management of waste?

If so, please provide details.

4. Spatial vision and strategic objectives

Spatial vision

4.1 A spatial vision is required in order to shape the overall direction of the new LMWLP and set out a positive framework for the delivery of sustainable minerals and waste development over the plan period. The spatial vision must recognise the balance that must be struck in Lincolnshire between making provision for minerals and waste developments to meet future requirements, whilst at the same time ensuring that such developments seek social, environmental and economic gains.

4.2 Using the current adopted LMWLP as a starting point and taking into account the relevant legislative and policy context, a draft spatial vision for the new plan is set out below, which aims to refine and improve the clarity of that included in the current plan:

> "Over the plan period to the end of 2040 Lincolnshire County Council will provide a strategic planning framework which ensures the provision of sufficient minerals and waste infrastructure to support sustainable economic growth, whilst conserving and enhancing the natural, built and historic environment, protecting the health and amenity of local communities, and taking positive action to mitigate and adapt to climate change."

Question 5

Do you agree with the above draft spatial vision for Lincolnshire's new Minerals and Waste Local Plan?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what changes you consider are needed to the spatial vision.

Strategic objectives

4.3 To assist in the delivery of the spatial vision and in delivering sustainable development, the identification of strategic objectives provides a framework for the development of policies that will be included in the new LMWLP.

4.4 Using the current adopted LMWLP as a starting point and taking into account the relevant legislative and policy context, a set of draft strategic objectives for the new

plan is set out below, which aim to refine and improve the clarity of those included in the current plan:

1. Facilitate the sustainable use of minerals by ensuring the efficient use of primary minerals, ensuring that minerals are supplied from appropriately located and environmentally acceptable sources, encouraging the use of sustainable modes of transport whilst minimising transportation by road, and encouraging the production and use of good quality secondary and recycled aggregates.

2. Facilitate the sustainable management of waste by encouraging the movement of waste up the waste hierarchy, supporting the minimisation of waste generation and the need for disposal in line with the circular economy, and ensuring waste management facilities are appropriately located to ensure waste is managed as near as possible to where it is produced, sustainable modes of transport are encouraged, and transportation by road minimised.

3. Provide for a steady and adequate supply of minerals to contribute to local and national requirements and support sustainable economic growth.

4. Provide for sufficient waste management capacity to meet future requirements and enable Lincolnshire to be net self-sufficient in terms of managing the amount of waste predicted to arise in the County.

5. Ensure minerals and waste developments incorporate measures which actively contribute to the need to mitigate climate change through a reduction in greenhouse gas emissions and provide opportunities for adaptation to the effects of climate change such as flood risk management and habitat resilience.

6. Safeguard important mineral resources, minerals sites and associated infrastructure, and waste management facilities from incompatible development where appropriate.

7. Minimise the impacts of minerals and waste development on communities and human health in relation to matters such as noise, dust, vibration, odour, light pollution, traffic, access, and visual impact.

8. Ensure minerals and waste developments conserve and enhance Lincolnshire's unique natural, built and historic environment, having particular regard to the increased protection afforded to the Lincolnshire Wolds Area of Outstanding Natural Beauty.

9. Ensure the restoration of temporary mineral and waste sites at the earliest opportunity and the delivery of high quality after-uses which best meet local circumstances and achieve an appropriate balance of priorities including landscape scale nature conservation and biodiversity net gain, climate change adaptation, public access and recreation, preservation of soils and the best and most versatile agricultural land, and aviation safety.

Question 6

Do you agree with the draft strategic objectives?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what changes you consider are needed to the strategic objectives.

5. Providing for minerals

Introduction

5.1 Lincolnshire contains a wide variety of mineral resources and is a major minerals producer. Both aggregate and non-aggregate minerals are produced within the county.

5.2 Lincolnshire's primary aggregates are derived from sand and gravel, limestone or chalk and are used in the construction industry. Non-aggregate minerals being worked in Lincolnshire include building stone (limestone) and hydrocarbons (oil and gas), but in the past included clay and ironstone. There are also silica sand and coal resources within the county.

National considerations for minerals

5.3 Paragraph 209 of the NPPF states that it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy, and goods that the country needs. It goes on to state that since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation. To meet these aims, paragraph 210 states, amongst other things, that mineral planning authorities should include policies for the extraction and safeguarding of mineral resources of local and national importance in their local plans.

5.4 In addition, the NPPF states within paragraph 211 that in considering proposals for mineral extraction, minerals planning authorities should as far as is practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks, the Broads, Areas of Outstanding Natural Beauty and World Heritage Sites, scheduled monuments and conservation areas.

Aggregates

National considerations for aggregate

5.5 Paragraph 213 of the NPPF states that mineral planning authorities should plan for a steady and adequate supply of aggregates by:

a. preparing an annual Local Aggregate Assessment (LAA) to forecast future demand, based on a rolling average of 10 years' sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources);
b. participating in the operation of an Aggregate Working Party and taking the advice of that party into account when preparing their Local Aggregate Assessment;

c. making provision for the land-won and other elements of their Local Aggregate Assessment in their mineral plans, taking account of the advice of the Aggregate Working Parties and the National Aggregate Co-ordinating Group as appropriate. Such provision should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate;
d. taking account of any published National and Sub National Guidelines on future provision which should be used as a guideline when planning for the future demand for and supply of aggregates;
e. using landbanks of aggregate minerals reserves principally as an indicator of the security of aggregate minerals supply, and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans;
f. maintaining landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised;
g. ensuring that large landbanks bound up in very few sites do not stifle competition; and
h. calculating and maintaining separate landbanks for any aggregate materials of a specific type or quality which have a distinct and separate market.

5.6 The PPG provides clarification on the term "landbanks" (paragraph 083 of the minerals section). In particular, it states that the length of the aggregate landbank is the sum in tonnes of all permitted reserves for which planning permissions are extant, divided by the annual rate of future demand based on the latest annual Local Aggregate Assessment. In calculating landbanks, the term permitted reserves includes current non-working sites but excludes those sites where mineral working cannot take place until there has been a review of the planning conditions.

5.7 The PPG also states that aggregate landbanks are an essential component of planning decision-making and are the basis on which the level of provision of new areas for aggregate extraction should be calculated when preparing local mineral plans (paragraph 082 of the minerals section).

Issue 1: Sand and gravel

Background

5.8 Sand and gravel resources are the most important of the county's aggregate minerals. Over the ten-year period 2011-2020, sales from Lincolnshire averaged 2.18 million tonnes (mt) per annum. This represents around a third of sand and gravel sales in the East Midlands making it the largest producer in the region. These resources are used primarily in the construction industry as building sand or in the manufacture of concrete.

Establishing the shortfall in sand and gravel provision

5.9 The latest LAA (reporting 2020 data), which should be read in conjunction with this document, sets the annual provision rate for sand and gravel. After considering all relevant factors, the LAA has based this rate on the average of the sales data for the ten-year period 2011 to 2020. As previously stated, this amounts to 2.18mt per annum. In accordance with the PPG, this figure has been used in Table 2 for calculating the proposed total level of provision that will need to be made in the new plan for the years 2021 to 2040. The table also sets out the shortfall between this total provision and the level of permitted reserves at the end of 2020. This shortfall will need to be met during the new plan period to 2040.

Table 2: Shortfall in sand and gravel provision for Lincolnshire 2021-2040 (inclusive)

LAA annual provision rate (mt)	Proposed provision 2021 to 2040 (mt)	Permitted reserves at 31.12.20 (mt)	Shortfall (mt)
2.18	43.60	20.70	22.90

Question 7

Do you agree with the proposed method for calculating the shortfall in sand and gravel provision that will need to be met during the plan period?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

5.10 Whilst deposits of sand and gravel occur across large parts of the county, historically production has mostly been concentrated in three "centres of production" with the active quarries clustered around:

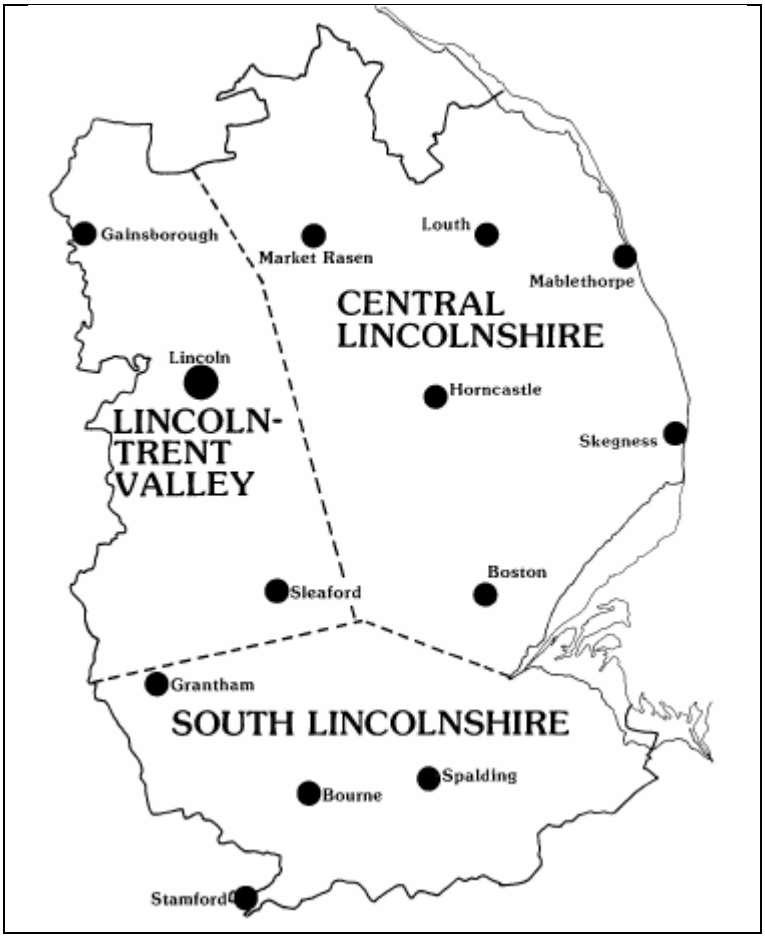
- Whisby, Swinderby and Norton Disney in the Trent Valley
- Woodhall Spa, Tattershall and Kirkby on Bain in the Bain Valley
- Baston, Langtoft and West Deeping in South Lincolnshire

5.11 The cost of transporting high bulk, low value materials such as aggregate means that, in general, sand and gravel quarries normally only serve relatively local markets. Therefore, given the large area covered by the county, together with the uneven distribution of active sand and gravel quarries, the county has historically been

subdivided into three parts (known as “production areas”) reflecting the markets served by the respective centres of production (Figure 2). These are known as:

- the Trent Valley Production Area
- the Central Lincolnshire Production Area
- the South Lincolnshire Production Area

Figure 2: Sand and gravel production areas



5.12 The adopted LMWLP splits the total provision required for that plan period between the three production areas. Going forward, it is proposed to continue this approach in the new LMWLP for the following reasons:

- the production areas still broadly reflect the markets served
- it assists in spreading the burden of provision and dispersing the effects of mineral working (thereby avoiding an over concentration of works in a single centre of production)
- it will facilitate any future comparative studies on aggregate sales and distribution.

5.13 Table 3 splits the proposed total provision of sand and gravel between the three production areas based on the annual provision rates set out in the LAA (2020 Data). These annual provision rates are based on the ten-year average sales for the period 2011 to 2020 for each of the production areas. In addition, the table sets out the shortfall between the required provision during the new plan period and the level of permitted reserves for each production area at the end of 2020. These shortfalls will need to be met during the plan period.

Table 3: Shortfall in sand and gravel provision for each production area 2021-2040 (inclusive)

Production area	LAA annual provision rate (mt)	Proposed provision 2021 to 2040 (mt)	Permitted reserves at 31.12.20 (mt)	Shortfall (mt)
Lincoln Trent Valley	1.04	20.80	10.37	10.43
Central Lincolnshire	0.35	7.00	5.42	1.58
South Lincolnshire	0.79	15.80	4.91	10.89

Question 8

Do you agree that the overall sand and gravel provision made in the plan should continue to be split between the three production areas?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Question 9.

Do you agree with the proposed method for calculating the shortfall in sand and gravel provision for each production area that will need to be met during the plan period?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Spatial strategy

5.14 The NPPF states that provision for land won aggregates in mineral plans should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate. Specific sites will generally be where viable mineral resources are known to exist, where landowners are supportive of mineral development taking place and where the council considers that any planning applications which are made are likely to be acceptable in planning terms. Preferred areas are areas of known resources where planning permission might reasonably be expected. Areas of search will be broader areas where knowledge of mineral resources may be less certain but within which planning permission could be granted to meet any shortfall in supply.

5.15 The approach that was taken in the adopted LMWLP was to allocate specific sites in the SLD to meet the identified shortfalls in sand and gravel provision. These sites all accord with the spatial strategy set out in Policy M2 of the CSDMP, which seeks to secure the county's future supplies of sand and gravel from extensions to existing operational sites (i.e. Active Mining Sites under the Planning and Compensation Act 1991 or Environment Act 1995) wherever possible, and where this will not have unacceptable impacts on local communities or the environment.

5.16 It is proposed to continue with this approach in the new LMWLP for the following reasons:

a. it avoids a proliferation of sites and ensures that future extraction is confined to areas where disturbance to the local environment has already taken place;
b. it permits the council to exercise greater control over the release of reserves as a new quarry would invariably require the release of substantial reserves to justify expenditure in new plant and equipment; and
c. it potentially provides an opportunity for higher overall standards of restoration.

Furthermore, the LMWLP Review, has found that this approach has been delivering a sufficient supply of sand and gravel in each production area to meet the level of demand.

Question 10

Do you agree that the spatial strategy should continue to secure the county's future supplies of sand and gravel from extensions to existing operational sites (Active Mining Sites) wherever possible, and where this will not have unacceptable impacts on local communities or the environment?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

5.17 The Spatial Strategy recognises that it will not always be possible to extend existing workings where, for example, the deposit in adjacent land is unviable or where environmental factors preclude further working. Therefore, where new sites are required to replace sites that will become exhausted during the plan period, the CSDMP has designated three areas of search, one in each production area and located:

- west of Lincoln and north-south of Gainsborough for the Lincoln Trent Valley Production Area
- around Tattershall Thorpe for the Central Lincolnshire Production Area and
- around West Deeping and Langtoft for the South Lincolnshire Production Area

5.18 These areas of search include the most viable sand and gravel resource based on an assessment carried out by the British Geological Survey (BGS) in 2010**.** They do, however, exclude some areas shown as having a high-grade resource. In particular, a large area of sub-alluvial sand and gravel covering the Witham Valley has not been included because this has not been subject to any industry interest and is known to contain extensive archaeological features. Similarly, the sub-alluvial deposit in the South Lincolnshire area has been excluded.

5.19 Although the NPPF recognises that areas of search can be used to identify broad areas of land with the potential to meet shortfalls in sand and gravel provision, site specific allocations are preferable as they give more certainty on where and how shortfalls would be met. Therefore, provided the council can secure sufficient sites which are acceptable through the call for sites exercise, it is proposed that the areas of search will not be carried forward in the new LMWLP. All sites put forward for allocation in the new LMWLP, whether they be extensions to existing workings or new quarries, will need to be accompanied by evidence demonstrating that they contain viable deposits of sand and gravel. Areas of Search would therefore add little value to the site selection process.

Question 11

Provided the council can secure the shortfalls in sand and gravel provision through the allocation of sites, do you agree that the areas of search should not be carried forward in the new LMWLP?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

5.20 It is proposed that the sites already allocated in the SLD, and which have not already secured planning permission, will be carried forward as allocations in the new LMWLP - except where evidence emerges that there has been a significant change in circumstances since a site was allocated, for example a site is no longer being promoted by a mineral operator.

Question 12

Do you agree that where there have been no significant change in circumstances, sites allocated in the SLD that have not already secured planning permission should be carried forward as allocations in the new LMWLP?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

5.21 Any remaining shortfalls in the sand and gravel provision in the new LMWLP would then be met by the allocation of additional sites, subject to acceptable sites being promoted through the associated call for sites exercise. These would be selected in accordance with the Proposed Site Selection Methodology for Updating the Plan (which is included in the consultation).

Question 13

Do you agree that the remaining shortfalls in sand and gravel provision should be met by the allocation of additional sites in the new LMWLP, subject to acceptable sites being promoted through the associated call for sites exercise?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Landbanks

5.22 To help ensure that the provision made in the adopted LMWLP gives rise to a steady and adequate supply of sand and gravel throughout the plan period, Policy M3 seeks to maintain a landbank of permitted reserves of at least seven years in each production area based on the council's latest LAA. This includes a requirement for the "preservation of productive capacity".

5.23 Although the LMWLP Review found that the landbank has consistently exceeded the minimum of seven years, the LAA (2020 Data) has identified an issue with the policy regarding the inclusion of the requirement to preserve productive capacity. In practice, the council already goes further than most mineral planning authorities in maintaining productive capacity by subdividing the county into three production areas, with a requirement to maintain a seven-year landbank in each of these areas. However, providing a detailed analysis of productive capacities for each production area would require the use of data on individual quarries, which is either unavailable or is commercially sensitive. It is therefore proposed to remove this term from the policy. Instead, the council's approach for dealing with productive capacity would be set out in the explanatory text which supports the policy.

Question 14

Do you agree that the term "productive capacity" should be removed from the landbank policy?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Non-allocated sites

5.24 Policy M4 of the adopted LMWLP recognises that sites that are not allocated in the SLD should be granted planning permission in limited circumstances. These circumstances are where the proposals would accord with the spatial strategy and are required to meet:

1) a proven need that cannot be met from existing permitted reserves; or
2) a specific shortfall in the landbank of the relevant production area.

5.25 The LMWLP Review found that these criteria are not relevant to most applications relating to non-allocated sites. In practice, these applications normally relate to small extensions to existing workings that would allow the more efficient working of the deposit and/or would allow a higher standard of restoration, which the council normally finds acceptable.

Question 15

Do you agree that the new LMWLP should give greater flexibility for the council to grant planning permission for non-allocated sites that form small extensions to active sand and gravel workings, where it can be demonstrated that this would allow the reserves to be worked more efficiently and/or would lead to an overall improvement in the restoration?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 2: Crushed rock

Background

5.26 The principal source of crushed rock aggregate produced in Lincolnshire is the Lincolnshire Limestone. Generally, this aggregate is of relatively low strength with poor resistance to frost damage. It is therefore normally only suitable for use as constructional fill or for sub-base material.

5.27 The Lincolnshire Limestone outcrop runs north to south through Lincoln and Grantham, and forms the prominent escarpment of the Lincoln Edge. It is currently worked for aggregates at a number of small to medium-sized quarries, that are fairly evenly distributed along the outcrop between Lincoln and Stamford.

5.28 Chalk is also extracted for aggregate purposes but is only suitable for even less demanding applications than Lincolnshire Limestone. Until the 90s chalk was classified as a secondary aggregate in the national aggregate monitoring surveys due to these limitations. Although it has since been reclassified as a primary aggregate, its limitations were still recognised when it was excluded from the county's sub-regional apportionment of crushed rock aggregate in 2010.

5.29 There are currently only two operational chalk quarries in the county, one located within the Lincolnshire Wolds AONB and the other immediately adjacent to the AONB. There has been little data available in recent years on chalk sales, but only relatively small amounts are extracted.

5.30 The council is seeking the progressive reduction of mineral production within the Lincolnshire Wolds AONB to help conserve the landscape and scenic beauty of this area in line with the NPPF. As a result, it is proposed to continue to meet the county's crushed rock provision through Lincolnshire Limestone.

Question 16

Do you agree that the county's crushed rock provision during the plan period should be met from Lincolnshire Limestone?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

5.31 The latest LAA (reporting 2020 data), sets the annual provision rate for crushed rock aggregate. After considering all relevant factors, the LAA has based this rate on the average of the sales data for Lincolnshire Limestone for the three-year period 2018 to 2020. The use of a shorter period (compared with the ten-year average used for sand and gravel) reflects a recent upturn in sales, which averages 1.3mt per annum. In accordance with the PPG, this figure has been used in Table 4 for calculating the proposed total level of provision that will need to be made in the new plan for the years 2021 to 2040. The table also sets out the shortfall between this total provision and the level of permitted reserves at the end of 2020. This shortfall will need to be met during the new plan period to 2040.

Table 4: Shortfall in crushed rock (Lincolnshire Limestone) provision for Lincolnshire 2021-2040 (inclusive)

LAA annual provision rate (mt)	Proposed provision 2021 to 2040 (mt)	Permitted reserves at 31.12.20 (mt)	Shortfall (mt)
1.30	26.0	22.16	3.84

Question 17

Do you agree with the proposed method for calculating the shortfall in crushed rock (Lincolnshire Limestone) provision that will need to be met during the plan period?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Spatial strategy

5.32 When the adopted LMWLP was being prepared it was found that the county had sufficient permitted reserves of Lincolnshire Limestone to meet the forecast requirement for limestone aggregate during that plan period. As result the plan did not need to make provision for a shortfall. It does, however, include a restrictive criteria-based policy which allow extensions to existing limestone workings or the development of new sites provided they meet a proven need that cannot be met by existing sites and/or sources and accord with all relevant Development Management Policies and Restoration Policies set out in the plan.

5.33 As set out in Table 4 above, the new LMWLP will need to make provision for a shortfall of 3.84mt of limestone for crushed rock aggregate. In common with the approach taken on sand and gravel, it is proposed to secure this shortfall from extensions to existing operational sites (Active Mining Sites) wherever possible, and where this will not have unacceptable impacts on local communities or the environment. Under this approach, new quarries would normally only be allowed where they are to replace sites that will become worked out during the plan period.

Question 18

Do you agree that the spatial strategy should aim to secure the county's future supplies of crushed rock (Lincolnshire Limestone) from extensions to existing operational sites (Active Mining Sites) wherever possible, and where this will not have unacceptable impacts on local communities or the environment?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

5.34 Provision for this shortfall could be made in a number of ways in the new LMWLP, as set out in the NPPF (i.e. through specific sites allocations, preferred areas, areas of search, or locational criteria). In this case it is proposed to primarily take a site-specific approach, provided that acceptable sites are put forward through the associated call for sites exercise. Such sites would be selected in accordance with the Proposed Site Selection Methodology for Updating the Plan (which is included in the consultation). This approach should provide more certainty on how and where this provision would be met during the life of the plan.

5.35 The allocation of specific sites will need to take into account the fact that most limestone quarries also produce limited quantities of non-aggregate material such as agricultural lime. This will therefore need to be accommodated in the total amount of reserve allocated.

Question 19

Do you agree that the shortfall in crushed rock aggregate provision (Lincolnshire Limestone) should be secured by the allocation of sites in the new LMWLP, subject to acceptable sites being promoted through the associated call for sites exercise?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

5.36 In addition, it is proposed that the new LMWLP would include a criteria-based policy allowing small extensions to existing workings where these will not have unacceptable impacts on local communities or the environment. This would help ensure that existing operations could continue within the plan period, maintaining jobs and competition in the sector.

Question 20

Do you agree that the new LMWLP should include a criteria-based policy to allow small extensions to existing limestone workings (Active Mining Sites) to maintain jobs and competition where this will not have unacceptable impacts on local communities or the environment?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Landbank

5.37 The adopted LMWLP does not include a specific policy on maintaining a landbank of crushed rock. This is because at the time of adoption the level of permitted reserves were so high that the maintenance of a landbank of at least ten years throughout the plan period was not considered to be an issue. This will not, however, be the case for the new LMWLP where a shortfall has been identified in the level of provision for the proposed plan period.

5.38 To help ensure that the provision made in the new LMWLP gives rise to a steady and adequate supply of crushed rock throughout the plan period, it is proposed to include a policy to maintain a landbank of permitted reserves of at least ten years based on the council's latest LAA. This approach is considered to be in conformity with the NPPF.

Question 21

Do you agree that the new LMWLP should include a policy seeking to maintain a landbank of permitted reserves for crushed rock of at least ten years based on the council's latest LAA?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 3: Allocation of new sites for the winning and working of aggregate (sand and gravel, and crushed rock)

Background

5.39 It is proposed that any additional reserves that are needed to meet the shortfalls in aggregate provision during the plan period will be secured through new site allocations in the new LMWLP. The council is therefore undertaking a call for sites exercise during the consultation period to give landowners and other interested parties an opportunity to nominate potential mineral sites for allocation in the new LMWLP.

Options

5.40 The Proposed Site Selection Methodology for Updating the Plan has been developed to ensure that the sites that are selected accord with the emerging policies of the LMWLP and promote a sustainable pattern of development, as required by the government's National Planning Policy Framework.

Question 22

Do you agree with the approach set out in the Proposed Site Selection Methodology for Updating the Plan?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Non-aggregates

Issue 4: Historic building stone

Background

5.41 Historically, Lincolnshire has produced and used a wide range of indigenous stones for building purposes. As a result, parts of the county have developed their own unique and locally distinctive character reflecting the locally available building materials. English Heritage (now Historic England) published the Lincolnshire Strategic Stone Study in July 2013 which provides a detailed analysis of building stone types within the county.

5.42 Specific building stone is needed for repairing historic structures across the county and for maintaining local distinctiveness with appropriate new buildings. Stone selected for the repair of historic buildings and structures must closely match the original stone to avoid differences in appearance. Building Stone therefore has an important role to play in the conservation, management, and enhancement of the historic environment, and in tackling heritage at risk. Lincolnshire building stone also has an important role beyond the county, with relatively small quantities being exported for use in the repair of important historic buildings such as the Palace of Westminster.

5.43 The only building stone resource that is currently exploited in the county is limestone from the Lincolnshire Limestone Formation. There are three “historic” limestone quarries in the county that exclusively produce building stone. Two of these are located in the adjoining parishes of Wilsford and Heydour and produce Ancaster Stone. The third is located in Holywell, near Stamford, and produces Clipsham Stone.

5.44 These quarries are significantly smaller than aggregate quarries in terms of scale of operation and produce much lower levels of noise, dust, and vehicle movements. As a result, they are less likely to have significant impacts on communities and the environment.

5.45 Historically, some of the large aggregate quarries in the county have intermittently produced limited quantities of building stone, and in more recent years a few former aggregate quarries have reopened as “building stone quarries”. However, in practice these can produce substantial quantities of aggregate.

National considerations

5.46 Paragraph 211 of the NPPF states, amongst other things, that in considering proposals for mineral extraction, mineral planning authorities should:

a) consider how to meet any demand for the extraction of building stone needed for the repair of heritage assets, taking account of the need to protect designated sites; and

b) recognise the small-scale nature and impact of building and roofing stone quarries, and the need for a flexible approach to the duration of planning permissions reflecting the intermittent or low rate of working at many sites.

Existing approach

5.47 The council has made provision for historic building stone quarries through Policy M7 of the LMWLP. This states that proposals for the small-scale extraction of building stone will be permitted where it can be demonstrated that:

1. there is a specific need for the stone; and
2. the stone cannot be obtained from permitted reserves at existing sites; and
3. the proposals accord with all relevant Development Management Policies and Restoration Policies set out in the Plan.

5.48 The aim of this policy is to ensure that proposals demonstrate a specific need for the stone which cannot be met from existing quarries, as well as reflecting the government's view that such quarries should be small scale and of low impact. The council does, however, recognise in the supporting text to the policy that building stone quarries often contain beds of varying quality. As a result, a quarry that produces stone for use in conservation projects may also need to produce stone for other building stone markets, such as new build, to be economically viable.

5.49 The supporting text to the policy also makes it clear that larger scale proposals for the extraction of building stone that are considered to be primarily a means to extract aggregate, will be assessed against the council's aggregate policy for limestone (Policy M5).

Outcome of the LMWLP Review

5.50 No planning applications were received for building stone over the review period 2016 – 2019, so it has not been possible to assess the performance of Policy M7.

Options

5.51 As no issues have been identified with Policy M7, no changes are proposed.

Question 23

Do you agree that no significant changes are required to the council's current approach to the provision of historic building stone?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 5: Silica sand

5.52 Silica sands are valued for a combination of chemical and physical properties. These include a high silica content in the form of quartz and, more importantly, very low levels of deleterious impurities. These properties have made it an essential raw material for many industrial applications including: glass making, foundry casting, ceramics and filtration. Workable deposits of silica sand are, however, sparsely distributed making them a valuable resource recognized by the government as an essential raw material of national importance.

5.53 The most extensive windblown deposits of silica sand are located in the north of the county where they extend across the county boundary into North Lincolnshire. These are not worked in Lincolnshire but are worked extensively in North Lincolnshire around the Messingham area.

National considerations

5.54 Paragraph 214 of the NPPF states that minerals planning authorities should plan for a steady and adequate supply of industrial minerals by, amongst other things:

- co-operating with neighbouring and more distant authorities to ensure an adequate provision of industrial minerals to support their likely use in industrial and manufacturing processes

- maintaining a stock of permitted reserves to support the level of actual and proposed investment required for new or existing plant, and the maintenance and improvement of existing plant and equipment

5.55 Footnote 74 of the NPPF states that these reserves should be at least 10 years for individual silica sand sites, and at least 15 years for silica sand sites where significant new capital is required.

Existing approach

5.56 Policy M8 of the CSDMP states that planning permission will be granted for silica sand extraction where required to provide a stock of permitted reserves of at least 10 years for an individual silica sand site (or 15 years where significant new capital is required), provided that proposals accord with all relevant Development Management Policies and Restoration Policies set out in the plan.

Outcome of the LMWLP

5.57 No planning applications were received for silica sand over the review period to assess the performance of Policy M8. However, with no relevant changes in the NPPF over this period, there is no evidence to indicate that this policy needs to be updated.

Options

5.58 Although silica sand is not being worked in the county at present, given the importance of this mineral, it is possible that applications will be made during the proposed plan period. It is therefore proposed to retain the current policy approach.

Question 24

Do you agree that no significant changes are required to the council's current approach to silica sand?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 6: Hydrocarbons (oil and gas)

Background

5.59 Oil and gas resources can be broadly split into two categories: conventional and unconventional. "Conventional" is used to describe oil and gas resources ('hydrocarbons') located in relatively porous rock formations such as limestone and sandstone. The extraction methods generally involve drilling a borehole down to the porous rock where the hydrocarbons are located in a reservoir. These resources are then pumped out of the ground using beam pumps (known as 'nodding donkeys') or electric pumps.

5.60 Lincolnshire has a long history associated with the production of conventional oil and gas going back to the 1940s, and large parts of the county are licensed for production. Welton oilfield is the second largest on-shore field in the UK after Wytch Farm in Dorset. It started oil production in 1984 and has a predicted total production of 16.7 million bbl (barrels) of oil. In addition, the county has extensive oil fields around Gainsborough, Corringham and Scampton. Gas has previously been produced from the Saltfleetby field to the east of the county on a significant scale. At the beginning of 2021 there were 37 permitted oil and gas sites across the county.

5.61 "Unconventional" oil and gas resources require methods for extraction which are not normally necessary in the conventional extraction of hydrocarbons. Such resources are generally obtained from less porous rock formations that were previously considered too impermeable ('tight') to allow economic recovery. Technological advancements over the last decade have, however, made them economically viable. Examples of unconventional hydrocarbons include Coal Bed Methane (CBM) and Shale Gas. Methods involved in the extraction of unconventional hydrocarbons can include hydraulic fracturing.

5.62 The British Geological Survey (BGS) in association with the former Department of Energy and Climate Change (DECC) completed a study in 2013 which estimated the resource (gas-in-place) of shale gas associated with the 'Bowland Shale' in Central Britain. The study area included the northern half of Lincolnshire and identified an area referred to as the 'Gainsborough Trough' as being prospective for shale gas. This area lies to the south and east of Gainsborough and extends into adjoining Nottinghamshire and North Lincolnshire. To date, however, no Shale Gas development has taken place in Lincolnshire. Until exploratory wells are sought and drilled, and the location and extent of any resource determined, the prospect for economic recovery in Lincolnshire is unknown.

5.63 There are several bodies responsible for regulating oil and gas development in the county, but the principal ones are:

(a) The North Sea Transition Authority (NSTA) – which issues Petroleum Exploration and Development Licence's (PEDL) in competitive offerings (licence rounds). These grant exclusivity to operators who receive a licence to drill in the licensed area once all other permissions and approvals are in place. NSTA have responsibility for assessing risk and monitoring seismic activity, as well as granting consent to flare or vent. Under section 4A of the Petroleum Act 1998 (inserted by section 50 Infrastructure Act 2015), all well consents issued on or after 6th April 2016 contain a requirement that the Licensee obtain hydraulic fracturing consent (HFC) from the Secretary of State before carrying out any associated hydraulic fracturing as defined in section 4B of that Act.
(b) The county council as Mineral Planning Authority – which grants permission for the location of any acceptable wells and wellpads and imposes conditions to ensure that the impacts on the use of the land are mitigated.
(c) Environment Agency – which is responsible for protecting water resources (including groundwater aquifers), ensuring appropriate treatment and disposal of mining waste, controlling emissions to air, and ensuring suitable treatment and management of any naturally occurring radioactive materials.
(d) Health and Safety Executive – which regulates the safety aspects of all phases of extraction, with responsibility for ensuring the appropriate design and construction of well casings for boreholes.

5.64 Hydrocarbon development has three distinct stages:

1. Exploration - which involves drilling, is often the most intrusive part of the development due to the potential visual, lighting and noise disturbance and impacts on local roads. It requires night-time drilling to ensure that the borehole does not close up, which would otherwise significantly extend the period the drilling rig needs to remain on site.
2. Appraisal - which is the longer-term testing of an exploratory well to assess the long-term suitability of the site for production purposes.
3. Production - which generally involves additional facilities such as pipelines, storage facilities and export terminals.

All stages require planning permission.

National considerations

5.65 Paragraph 215(b) of the NPPF sets out that mineral planning authorities should, when planning for on-shore oil and gas development, clearly distinguish between, and plan positively for, the three phases of development (exploration, appraisal and production), whilst ensuring appropriate provision is made for monitoring and site restoration.

5.66 The PPG states that where mineral planning authorities consider it is necessary to update their local plan and they are in a Petroleum Licence Area, they are expected to include criteria-based policies for each of the exploration, appraisal and production phases of hydrocarbon extraction (paragraph 106 of the minerals section). They may also include specific locations should the onshore oil and gas industry wish to promote specific sites (paragraph 107 of the minerals section).

5.67 The PPG goes on to state that mineral planning authorities should take account of government energy policy, which makes it clear that energy supplies should come from a variety of sources. This includes onshore oil and gas, as set out in the government's Annual Energy Statement published in October 2013 (paragraph 124 of the minerals section).

5.68 On 4 November 2019, following seismic events linked to shale gas exploration in Lancashire, the Secretary of State for Business, Energy and Industrial Strategy issued a ministerial statement announcing a moratorium on fracking. Whilst acknowledging the huge potential of UK shale gas to provide a bridge to a zero-carbon future, the statement confirmed that the government will take a presumption against issuing any further Hydraulic Fracturing Consents. This approach was considered necessary to minimise disturbance to those living and working nearby, and to prevent the risk of any damage. The statement goes on to state that this position will be maintained until compelling new evidence is provided which addresses the concerns around the prediction and management of induced seismicity.

5.69 Whilst the government has announced a moratorium on fracking, this does not override the requirements of the NPPF or the PPG for mineral planning authorities to plan for both types of hydrocarbon development (conventional and unconventional) in their local plans.

Existing approach

5.70 The council currently has a criteria-based policy (Policy M9) which is applicable to all three stages of development for both conventional and unconventional hydrocarbons. This policy requires that proposals must accord with all relevant development management policies set out in the plan, which seek to protect local amenity and the environment.

5.71 The supporting text to Policy M9 makes it clear that each stage of development is considered on its own merits with no presumption in favour of permission being granted for subsequent stages. It also states that applications for hydrocarbon development should contain sufficient information to adequately assess the impact of the proposal on the local community and the environment, and at the production stage should include detailed field development plans.

5.72 All sites that are granted planning permission are subject to planning conditions and, where appropriate, planning obligations to ensure that the operations do not have an unacceptable impact on local residents or the environment. Conditions are also imposed to require the restoration of the sites when operations cease, although this requirement is not implicit in the policy.

5.73 All mineral sites are regularly inspected by a dedicated monitoring officer to ensure that the planning requirements are being met in accordance with the council's Local Enforcement Plan.

Outcome of the LMWLP Review

5.74 The review of the LMWLP found no issues with the performance of Policy M9 in the determination of planning applications. However, two issues were identified with respect to its conformity with the NPPF:

(a) firstly, it has been questioned whether the current approach strictly adheres to the NPPF by having a single policy covering all stages of hydrocarbon development; and
(b) secondly, whether the policy accords with revisions made to the NPPF after the adoption of the CSDMP in 2016. In particular, the latest NPPF now includes an additional provision contained in paragraph 209 part (b) that, when planning for onshore oil and gas, mineral planning authorities should ensure that appropriate provision is made for appropriate monitoring and site restoration.

Options

5.75 The policy could be broken down into three separate policies to cover the three stages of hydrocarbon development. However, this would only be advantageous if different criteria were to apply to each stage. At present this is not the case in Policy M9. Furthermore, the requirements of the NPPF and PPG with respect to the three stages were similar at the time the CSDMP was under examination. At that time the Inspector found the "one policy approach" sound and legally compliant. It is therefore considered that the three phases can be accommodated within one policy.

5.76 The revised NPPF states that mineral planning authorities should ensure that "appropriate monitoring and site restoration is provided for". On the first aspect, "monitoring", this is not presently covered by Policy M9, but is covered by the council's Local Enforcement Plan in line with paragraph 58 of the NPPF. It is not therefore considered necessary to include this specifically in the LMWLP.

5.77 On the second aspect, restoration, this is covered by a separate policy (Policy R1) of the CSDMP, but is not referred to in Policy M9. For greater clarity, it could therefore be specifically included in a new policy.

Question 25

Do you agree that the three stages of hydrocarbon development (oil and gas) should be contained in one policy and that this should be expanded to make specific provision for restoration?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 7: Underground gas and carbon storage

Background

5.78 A number of underground geological structures are potentially suitable for the storage of gas, these can include depleted oil and gas reservoirs, aquifers, and rock and salt caverns. Each have distinctive characteristics which govern the deliverability and economic viability of different storage types.

5.79 Underground gas storage is predominantly associated with the storage and management of natural gas as part of the UK's energy infrastructure. In recent years however, it is becoming increasingly considered alongside emerging technologies involving carbon capture and storage (CCS) as part of the wider transition to a low carbon economy. CCS involves capturing the carbon dioxide produced by power stations and other industrial processes that would otherwise be released to the atmosphere. This carbon dioxide can then be permanently stored in deep geological formations such as those outlined above. CCS therefore has the potential to help mitigate against the impacts of climate change through reducing emissions.

5.80 The history of onshore oil and gas development in Lincolnshire suggests that geological circumstances in the county could be suitable for underground gas storage. Although not implemented, planning permission was granted in 2010 for an underground gas storage facility within the Saltfleetby gas field. With regard to CCS, the government's Overarching National Policy Statement for Energy (EN-1) suggests that in the UK, the majority of locations thought to be best suited to storage of carbon dioxide are located offshore.

5.81 Like hydrocarbon development, in addition to the need for planning permission and hazardous substances consent (where appropriate), underground gas storage facilities are comprehensively regulated by organisations including the HSE, EA and NSTA.

National considerations

5.82 Paragraph 215(b) of the NPPF states that minerals planning authorities should encourage underground gas and carbon storage and associated infrastructure if local geological circumstances indicate its feasibility. Paragraph 216 states that, when determining planning applications, minerals planning authorities should ensure that the integrity and safety of underground storage facilities are appropriate, taking into account the maintenance of gas pressure, prevention of leakage of gas and the avoidance of pollution.

5.83 The PPG for Minerals notes that mineral planning authorities are responsible for determining underground gas storage proposals within their areas which:

a) have an expected working capacity below 43 million standard cubic metres; or
b) have an expected maximum flow rate below 4.5 million standard cubic metres per day.

Any applications for storage projects above this size are dealt with under the Planning Act 2008 as Nationally Significant Infrastructure Projects and must be made to the relevant Secretary of State.

Existing approach

5.84 The existing CSDMP contains a simple criteria-based policy (Policy M10) which sets out that planning permission will be granted for the development of underground gas storage facilities provided that proposals accord with all relevant Development Management Policies set out in the Plan.

Outcome of the LMWLP Review

5.85 No planning applications for underground gas storage have been received since the CSDMP was adopted in 2016 so the current policy remains untested. However, the LMWLP Review concluded that the positive approach of the policy toward the provision of development for underground gas storage accords with the aims of current legislation and national policy.

Options

5.86 The existing policy could therefore be incorporated unchanged into the new LMWLP. Alternatively, the policy could be amended slightly to give more explicit reference to proposals for carbon storage.

5.87 CCS technology is at an early stage and the likelihood of any future proposals coming forward within Lincolnshire is unknown. However, given the potential contributions towards climate change mitigation, it is considered that it would be appropriate to specifically include it within a positive policy framework.

Question 26

Do you agree that a specific policy for underground gas storage should be retained in the new LMWLP, and that it should be expanded to include specific reference to carbon storage?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 8: Other minerals

Background

5.88 There are a number of minerals in the county which are not covered by strategic policies of the adopted LMWLP, which include clay, ironstone and coal.

5.89 Lincolnshire has a long history of clay working. However, competition from the major brick-working areas of South Humberside and Peterborough led to the decline of this local industry. By the mid-1970s all but one of the brickworks had closed, and the one remaining site (located in Stamford) was obtaining its supplies of clay from outside the county. The Stamford site subsequently closed around 2003.

5.90 The county also contains substantial deposits of ironstone. From the late nineteenth century to the 1970s, it was extensively worked both by underground and opencast methods. As a result, there are substantial areas of land with planning permission for ironstone working in the southwest and north of the county. Most of these permissions, however, are now dormant, and where working is still taking place, this is limited to the overlying limestone.

5.91 Due of the decline of the steel industry in the UK and the low-grade nature of the ironstone in Lincolnshire, it is considered unlikely that ironstone working will take place in the foreseeable future, other than potentially as a source of building stone.

5.92 Coal is also present in Lincolnshire with a major part of the county underlain by Lower and Middle Coal Measures strata. These coal measures, however, are entirely concealed by a thick Permian and Mesozoic cover and have never been worked. With current concerns over the burning of fossil fuels – particularly coal, it is looking increasingly unlikely that they will be worked in the future.

National considerations

5.93 Paragraphs 17 to 23 of the NPPF set out the plan making framework and the role of strategic policies. In particular:

- Paragraph 17 states that the development plan must include strategic policies to address the local planning authority's priorities for the development and use of land in its area
- Paragraph 20 indicates that strategic policies should, amongst other things, make sufficient provision for minerals
- Paragraph 21 states that strategic policies should be limited to those necessary to address the strategic priorities of the area (and any relevant cross-boundary issues)
- Paragraph 22 states that strategic policies should look ahead over a minimum 15 year period from adoption to anticipate and respond to long-term requirements and opportunities, such as those arising from major improvements in infrastructure

5.94 Paragraph 210 of the NPPF requires planning policies to provide for the extraction of mineral resources of local and national importance.

Existing approach

5.95 At the time the CSDMP was prepared, the council considered that clay, ironstone and coal were not of local and national importance. In line with Paragraph 210 of the NPPF, the CSDMP does not therefore include strategic policies for these minerals as they were not considered to be strategic priorities (i.e. there was no demand to extract these minerals and no demand was foreseen during the plan period).

Outcome of the LMWLP Review

5.96 No applications for the extraction of mineral types not covered by specific policies of the CSDMP were made during the review period. As a result, the review found no evidence that such policies are needed.

Options

5.97 No information has come to light to indicate that any mineral type not already covered by the LMWLP should be considered a strategic priority and therefore covered by a specific strategic policy. On this basis, it is considered that no additional strategic policies are needed to cover such minerals.

Question 27

Do you agree that the new LMWLP does not need to include strategic policies to cover additional mineral types (i.e. minerals not already covered by the adopted LMWLP)?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 9: Associated industrial development

Background

5.98 In addition to the plant, machinery and buildings directly associated with the working of minerals, mineral operators may seek to undertake certain associated industrial activities at mineral extraction sites. A limited range of industrial development is permitted under the Town and Country Planning (General Permitted Development) (England) Order 2015 (GPDO), which can be carried out without the prior approval of the mineral planning authority. This must be for purposes principally in connection with the winning and working of minerals and may only be carried out on land that is used as a mine. It includes the treatment, storage or removal of minerals and derived wastes. A wider range of development, including secondary industry, is also permitted under the GPDO both at the mine and on ancillary mining land, but this is subject to the prior approval of the mineral planning authority. It includes ready mixed concrete and coating plants.

5.99 There may be benefits for certain industrial development utilising minerals from the mine, but falling outside the scope of the GDPO, to be located in close proximity to where the mineral is extracted. This could include, for example, concrete products manufacturing operations. Such operations normally require planning permission from the mineral planning authority.

National considerations

5.100 There are no specific policies set out in the NPPF which relate directly to the provision of industrial development in association with mineral extraction.

Existing approach

5.101 Policy M13 of the LMWLP sets out that planning permission will be granted for ancillary industrial development within or in proximity to mineral sites where it can be demonstrated that there are close links with the minerals development and that the proposals accord with the relevant development management policies set out in the plan. Where permission is granted, the policy states that the operation and retention of the development will be limited to the life of the permitted reserves.

5.102 The mineral sites referred to in this policy incudes sites used for the winning and working of hydrocarbons (oil and gas).

Outcome of the LMWLP Review

5.103 The review indicates that the existing policy is underperforming. Only 43% of the applications that were granted planning permission strictly accorded with the policy as they were not considered to have close links with the associated minerals development.

Options

5.104 One option would be to delete this policy and to simply assess proposals for ancillary industrial development against the development management policies of the LMWLP. This approach would remove the need to demonstrate a close link between the existing mineral working and the proposed industrial development. However, it could result in permissions being granted without the imposition of conditions requiring the development to be removed on cessation of mineral working. This, in turn, could compromise the restoration of the mineral sites affected and leave industrial development in the open countryside where such development would not normally be permitted. It is therefore considered that a policy should be retained requiring the development to be removed on cessation of mineral working.

Question 28

Do you agree that the plan should continue to include a specific policy on associated industrial development that requires such development to be removed on cessation of mineral working?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

5.105 If a policy is retained, the reference to "close link" could either be deleted or given greater prominence, depending on how much importance is to be attached to this criterion. Relaxing this requirement so that ancillary development would only need a "link" to the minerals development would allow a wider range of industrial development to be undertaken on, or adjacent to, mineral sites. These could include, for example, renewable energy projects that generate electricity or produce green hydrogen primarily for use off site.

Question 29

If a specific policy on associated industrial development is retained, do you think the current requirement for it to have a "close link" with the minerals development should be relaxed so that it only needs a "link" to the minerals development?

Please explain the reason for reaching your decision.

Issue 10: Agricultural irrigation reservoirs

Background

5.106 Agricultural irrigation reservoirs provide water for the irrigation of crops and can be constructed under agricultural permitted development rights granted by Paragraph 3 and Schedule 2, Part 6, Class A of the Town and Country Planning (General Permitted Development) (England) Order 2015, subject to the limitations and requirements of that Class. This includes a condition that any material excavated during construction must be retained on the agricultural unit. As a result, any proposal to construct an irrigation reservoir which involves the removal of the excavated material off the agricultural unit will require planning permission from the county council as mineral planning authority.

5.107 Historically many irrigation reservoirs that were constructed in Lincolnshire were relatively small in scale. These were often excavated into porous stratum allowing them to fill through the seepage of groundwater. In more recent times, however, there has been a move away from "seepage reservoirs" to "storage reservoir", which are sealed from the surrounding groundwater. These reservoirs are used to store water abstracted from nearby water courses during the winter months - when water flows are higher, and when the Environment Agency is more likely to allow abstraction.

5.108 As storage reservoirs are not recharged from the groundwater, they tend to be significantly larger than seepage reservoirs to allow them to hold sufficient water to meet the irrigation requirements of the agricultural unit. They also need to hold a surplus to account for evaporation losses and to enable the retention of some water to protect the impermeable seal and any wildlife. Such reservoirs can involve the extraction of very substantial amounts of mineral, in many cases sand and gravel. It is therefore important that these reservoirs are well designed to improve their efficiency and minimize the amount of material that needs to be excavated, particularly where it is proposed to remove this off site.

5.109 When considering an application for an irrigation reservoir that involves the removal of the excavated material off the agricultural unit, the county council needs to be satisfied that there is a genuine need for irrigation that can be met by a reservoir, and that the development is not simply mineral extraction under the guise of agricultural development.

National considerations

5.110 There are no specific policies set out in the NPPF for agricultural irrigation reservoirs.

Existing approach

5.111 The approach of Policy M14 of the CSDMP is that planning permission will be granted for new irrigation reservoirs or extensions to existing irrigation reservoirs where strict criteria are met. These are:

i. there is a proven agricultural justification for the reservoir; and
ii. the need can be met by an irrigation facility; and
iii. an abstraction licence has been granted by the Environment Agency; and
iv. the design is fit for purpose; and
v. the environmental impacts of removing material off-site would be less than constructing an above ground facility; and
vi. the proposals accord with all relevant Development Management Policies set out in the Plan.

Outcome of the LMWLP Review

5.112 One planning application was received for an agricultural irrigation reservoir over the review period 2016 – 2019, which was in part retrospective. The prospective part of this application was determined in accordance with Policy M14. The LMWLP Review therefore concluded that as no relevant changes had been made to national policy over this period, there is no evidence to indicate that that the policy needs any amendments.

Options

5.113 As no issues have been identified with Policy M14, no changes are proposed.

Question 30

Do you agree that no significant changes are required to the council's current approach to agricultural irrigation reservoirs?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 11: Borrow pits

Background

5.114 Borrow pits are temporary mineral workings sited in close proximity to major construction projects, particularly new road schemes and flood defence schemes, and are used solely to supply minerals (aggregate or clay) for this purpose. In some

cases, the void created by the extraction is backfilled by the disposal of waste materials arising from the project.

5.115 They can have advantages over established mineral sites by reducing the impact of concentrated flows of heavy goods traffic on the public highway, and meeting peaks of demand without disrupting supplies elsewhere. They can also assist in the sustainable use of minerals by conserving resources of higher quality at existing mineral sites, thereby reducing the need to make additional provision.

National considerations

5.116 There are no specific policies set out in the NPPF for borrow pits.

Existing approach

5.117 The approach of Policy M15 of CSDMP is that planning permission will be granted for borrow pits to supply materials for major construction projects where the following criteria are met:

i. there is a need for a particular type of mineral which cannot reasonably be supplied from existing sites, including alternative materials; and
ii. the transport of mineral from existing sites to the construction project would be seriously detrimental to the environment and local amenities because of the scale, location and timing of the operations; and
iii. in the case of proposals involving the extraction of aggregates, the site lies on or in close proximity to the project; and
iv. the mineral can be transported to the point of use without leading to harmful conditions on a public highway; and
v. the site can be restored to a satisfactory after-use without the need to import material other than that generated by the construction project itself and which can be brought to the site without leading to harmful conditions on a public highway; and
vi. the proposals accord with all relevant Development Management Policies set out in the Plan.

5.118 In addition, the policy goes on to state that where planning permission is granted, conditions will be imposed to ensure that operations are time-limited and that all mineral extracted is used only for the specified project.

Outcome of the LMWLP Review

5.119 No applications for borrow pits were received during the review period. Consequently, there was no evidence to indicate that a change to the council's approach is necessary.

Options

As no issues have been identified with Policy M15, no changes are proposed.

Question 31

Do you agree that no significant changes are required to the council's current approach to borrow pits?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 12: Safeguarding mineral resources

Background

5.120 Mineral resource safeguarding is the process of ensuring that non-minerals development, such as housing, does not needlessly prevent the future extraction of mineral resources of local and national importance, and involves safeguarding areas of land containing such resources.

5.121 In areas with two-tiers of local government such as Lincolnshire, safeguarding of mineral resources can be achieved only through county and district councils co-operating in the exercise of their respective planning powers over land with potential for mineral extraction.

5.122 Safeguarding a mineral resource does not mean that a proposal to extract that resource will be permitted, as the main purpose of the safeguarding is to protect the resource for the long term for future generations. Furthermore, it should be borne in mind that just because there may be no economic need for the minerals now, that may not be the case in the future.

National considerations

5.123 Paragraph 210 of the NPPF states that mineral planning authorities should safeguard mineral resources by defining Mineral Safeguarding Areas and Mineral Consultation Areas. They should also adopt appropriate policies so that known locations of specific minerals resources of local and national importance are not sterilised by non-mineral development where this should be avoided (whilst not creating a presumption that the resources defined will be worked). If it is necessary for non-minerals development to take place, it states that mineral planning authorities should set out policies to encourage the prior extraction of minerals, where practical and environmentally feasible.

5.124 The PPG (paragraph 003 of the minerals section) requires mineral planning

authorities to adopt a systematic approach for safeguarding mineral resources which:

(a) uses the best available information on the location of all mineral resources in the authority area. This may include use of British Geological Survey maps as well as industry sources;
(b) consults with the minerals industry, other local authorities (especially district authorities in 2-tier areas), local communities and other relevant interests to define Mineral Safeguarding Areas;
(c) sets out Minerals Safeguarding Areas on the policies map that accompanies the local plan and define Mineral Consultation Areas; and
(d) adopts clear development management policies which set out how proposals for non-minerals development in Minerals Safeguarding Areas will be handled, and what action applicants for development should take to address the risk of losing the ability to extract the resource. This may include policies that encourage the prior extraction of minerals, where practicable, if it is necessary for non-mineral development to take place in Minerals Safeguarding Areas and to prevent the unnecessary sterilisation of minerals.

Existing approach

5.125 The council carried out an assessment of mineral resources to support the production of the adopted LMWLP. This work identified the locations of the following minerals resources of particular economic importance: sand and gravel; limestone; blown sand; and potential sources of building stone for the repair and conservation of Lincoln Cathedral and Lincoln Castle. Chalk was not considered to be an economically important mineral and was not safeguarded, except for very limited areas around the permitted chalk workings.

5.126 At the time it was recognised that incompatible development, such as housing, granted planning permission in close proximity to a mineral resource could lead to (proximal) sterilisation of part of the resource due to the potential impact of working the mineral on the new development. This could, for example, be from the impacts of noise, visual intrusion, or blast vibration on local residents. When defining Mineral Safeguarding Areas (MSAs), the council therefore considered the advice included in the British Geological Survey (BGS) publication, 'Mineral Safeguarding in England: Good Practice Advice' (2011) and where appropriate incorporated buffer zones around the mineral resources. A distance of 250m was adopted around sand and gravel and blown sand resources, and 500m around limestone resources to ensure an adequate safeguarding margin.

5.127 The BGS also advises that, in urban areas, mineral planning authorities should define MSAs to highlight the potential for extracting minerals beneath large regeneration projects and brownfield sites. In Lincolnshire, however it was considered that the viability of such opportunities was probably limited to small scale building stone operations to provide stone for Lincoln Cathedral and Lincoln Castle. The resource areas consequently exclude mineral deposits within settlements with a population

more than 1000 and a minimum area of 20 hectares. However, in such cases a 250m buffer extending into the urban areas has been retained to avoid sterilisation by proximal development at the urban edge.

5.128 The current policy for mineral resource safeguarding is set out in Policy M11, which seeks to protect safeguarded resources from permanent sterilisation by other development. The following activities are, however, specifically exempted from the policy:

- Applications for householder development
- Applications for alterations to existing buildings and for change of use of existing development, unless intensifying activity on site
- Applications for Advertisement Consent
- Applications for Listed Building Consent
- Applications for reserved matters including subsequent applications after outline consent has been granted
- Prior Notifications (telecommunications; forestry; agriculture; demolition)
- Certificates of Lawfulness of Existing or Proposed Use or Development (CLEUDs and CLOPUDs)
- Applications for Tree Works

5.129 Policy M11 requires all applications for non-minerals development caught by the policy to be accompanied by a Minerals Assessment. The supporting text to the policy states that this should be prepared in accordance with the latest guidance from the BGS. In particular, it should provide an appropriate assessment of the minerals resource including an estimate of the economic value, its potential for use in the forthcoming development and an assessment of whether it is feasible and viable to extract the mineral resource ahead of development to prevent unnecessary sterilisation. Where prior extraction can be undertaken, the assessment should also include an explanation of how this will be carried out as part of the overall scheme.

5.130 Where the Minerals Assessment demonstrates that the development would not sterilise mineral resources within the MSA or prevent future minerals extraction on neighbouring land, the policy states that planning permission will be granted. Otherwise, planning permission will be granted when:

(a) the applicant can demonstrate to the Mineral Planning Authority that prior extraction of the mineral would be impracticable, and that the development could not reasonably be sited elsewhere; or
(b) the incompatible development is of a temporary nature and can be completed and the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or
(c) there is an overriding need for the development to meet local economic needs, and the development could not reasonably be sited elsewhere; or
(d) the development is of a minor nature which would have a negligible impact with respect to sterilising the mineral resource; or
(e) the development is, or forms part of, an allocation in the Development Plan.

5.131 To facilitate the safeguarding procedure, the council has defined Mineral Consultation Areas (MCAs) under the Town and Country Planning Act 1990. These cover the same areas as the MSAs and require the district councils to consult the mineral planning authority before determining any planning applications they receive within the boundary of an MCA not covered by the exemptions of Policy M11.

Outcome of the LMWLP Review

5.132 As part of the review, information was collated from the council's Authority Monitoring Reports (AMRs) on the efficacy of this policy since the adoption of the CSDMP in 2016. Full detail of the issues identified are set out in the LMWLP Review, which should be read in conjunction with this document.

5.133 Since the adoption of the CSDMP, eight decisions have been made by the district councils that have not reflected the county council's advice that the proposals would be contrary to policy M11. This indicates that the policy is not being particularly effective.

5.134 In addition, the review found that there have been other issues with the implementation of the policy, including:

- At best only 37% (in 2019) of applications submitted to the county council for consultation included a MA (referred to as Mineral Resource Assessments (MRA) in the LMWLP Review) as required by the policy
- Concerns have been raised by district council officers and developers questioning the scope of the policy, i.e., the cost implications of having MAs prepared for sites that in their view were not suitable for minerals extraction due to other constraints
- The council's officers have also recognised that, despite the policy requirement, it would be disproportionate and unreasonable to require an MA in a large number of cases

5.135 The LMWLP Review concluded that the performance data collated in the council's AMRs have demonstrated that Policy M11 in its current form does not provide a practical or an efficient approach for safeguarding mineral resources, and that it would benefit from being updated.

Options

5.136 The requirement for all applications caught by Policy M11 to be accompanied by a Mineral Assessment could be removed, and instead the supporting text to the policy expanded to provide greater guidance on the circumstances where an MA should be submitted. For some applications the current requirement is considered to be too onerous and amending it would give greater flexibility for the council to only require MAs where they are needed to inform the decision-making process.

Question 32

Do you agree that the council should remove the requirement that all applications caught by the mineral resource safeguarding policy must be accompanied by a Mineral Assessment, and that instead more guidance should be provided in the supporting text for the policy regarding the provision of Mineral Assessments?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

5.137 The council could consider exempting more types of non-minerals development from the requirements of the safeguarding policy where such development is unlikely to sterilise mineral resources.

Question 33

Do you agree that the council should seek to expand the list of exceptions to the policy to include more types of development that are unlikely to sterilise the safeguarded mineral resources?

If you agree, please indicate which additional types of development should be exempt from the policy. If you disagree, please give your reasons.

5.138 At present the council is receiving a large number of consultations for sites where mineral extraction is unlikely to be acceptable, particularly in urban areas. The council could therefore consider removing the buffer zones from the MSAs but retaining them in the MCAs. This would mean that the district councils would still need to consult the county council on applications falling within a buffer zone, allowing it to assess whether the proposals would be likely to compromise mineral working in an MSA. However, it would remove the presumption in favour of "prior extraction" in the buffer zone itself.

Question 34

Do you agree that the council should seek to remove the buffer zones from the Mineral Safeguarding Areas, but retain them in the Mineral Consultation Areas?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

5.139 For the minerals that are safeguarded, not all the resources have been included in the MSAs for the reasons set out earlier in this section. However, if new evidence emerges on this matter, the MSAs could be amended. In addition, there are a number of minerals which are present in the county that are not safeguarded (including clay and ironstone) because they were not considered to be of particular economic importance. Whilst the MSAs could be expanded, it is considered that the current requirements are disproportionate and that it would be preferable, wherever possible, to make the MSAs more focussed.

Question 35

Do you think that the council needs to amend the Mineral Safeguarding Areas in the county?

If so, please specify what changes you consider are needed.

Issue 13: Safeguarding existing minerals sites, mineral allocations and associated infrastructure

5.140 The safeguarding of mineral sites, mineral allocations and associated infrastructure is necessary to protect them from the encroachment of other forms of more sensitive development, such as housing. Such development could either directly or indirectly impact upon the current or future operation of the mineral sites or infrastructure interrupting the supply of minerals and associated products.

5.141 In areas with two-tiers of local government such as Lincolnshire, safeguarding of mineral sites, mineral allocations and associated infrastructure can be achieved only through county and district councils co-operating in the exercise of their respective planning powers.

National considerations

5.142 Paragraph 187 of the NPPF establishes the "agent of change" principle. It states that planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant should be required to provide suitable mitigation before the development has been completed.

5.143 In relation to minerals development, paragraph 210 of the NPPF states that planning policies should safeguard existing, planned and potential sites for: the bulk transport, handling and processing of minerals; the manufacture of concrete and

concrete products; and the handling, processing and distribution of substitute, recycled and secondary aggregate material.

5.144 The PPG (paragraph 006 of the minerals section) states:

> "Planning authorities should safeguard existing, planned and potential storage, handling and transport sites to:
> - ensure that sites for these purposes are available should they be needed; and
> - prevent sensitive or inappropriate development that would conflict with the use of sites identified for these purposes.
>
> In areas where there are county and district authorities, responsibility for safeguarding facilities and sites for the storage, handling and transport of minerals in local plans will rest largely with the district planning authority. Exceptions will be where such facilities and sites are located at quarries or aggregate wharves or rail terminals.
>
> Planning authorities should consider the possibility of combining safeguarded sites for storage, handling and transport of minerals with those for processing and distribution of recycled and secondary aggregate. This will require close co-operation between planning authorities"

Existing approach

5.145 Policy M12 of the adopted CSDMP safeguards mineral sites (excluding sites classified as dormant under the Planning and Compensation Act 1991 or the Environment Act 1995) and associated infrastructure that supports the supply of minerals in the county against development that would unnecessarily sterilise the sites and infrastructure, or prejudice or jeopardise their use by creating incompatible land uses nearby. By including mineral sites, the policy goes beyond the minimum requirements of the NPPF.

5.146 The following activities are specifically exempted from Policy M12 as they are unlikely to have a significant impact on mineral sites and/or infrastructure:

- Applications for householder development
- Applications for alterations to existing buildings and for change of use of existing development, unless intensifying activity on site
- Applications for Advertisement Consent
- Applications for Listed Building Consent
- Applications for reserved matters including subsequent applications after outline consent has been granted
- Prior Notifications (telecommunications; forestry; agriculture; demolition)
- Certificates of Lawfulness of Existing or Proposed Use or Development (CLEUDs and CLOPUDs)
- Applications for Tree Works

5.147 The mineral sites and associated infrastructure safeguarded by Policy M12 are:

- sand and gravel quarries
- limestone quarries
- chalk quarries
- energy mineral development sites
- associated infrastructure co-located at quarries such as concrete batching plants and aggregate recycling facilities

As set out in the supporting text for the policy, each safeguarded site includes a 250m surrounding buffer zone.

5.148 Similarly, sites allocated for mineral working in the SLD have been safeguarded by Policy SL2 of that document. The requirements of this policy are essentially the same as Policy M12, although it makes it clearer within the policy itself that each site includes a surrounding 250m buffer area.

5.149 Safeguarded sites have been defined by the county council as Mineral Consultation Areas under the Town and Country Planning Act 1990 and notified to the district councils. This requires the district councils to consult the county council on any applications they receive within the safeguarded areas caught by Policy M12. Under this procedure, the county council can object to applications likely to compromise the operation of a safeguarded site unless adequate mitigation measures can be secured from the applicant.

Outcome of the LMWLP Review

5.150 No specific issues with the implementation of Policies M12 and SL2 were identified in the review.

Options

5.151 No specific issues were identified in the LMWLP Review. However, in order to remain consistent with the proposed approach to mineral resource safeguarding, it is considered that it would be preferable to limit safeguarded areas to the sites themselves whilst retaining the buffer zones within the mineral consultation areas.

Question 36

Do you agree that the council should continue to safeguard existing mineral sites, minerals allocations and associated infrastructure, but should remove the buffer zones from the safeguarded areas (whilst retaining them in the mineral consultation areas)?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

6. Providing for waste

Introduction

6.1 As Waste Planning Authority (WPA), Lincolnshire County Council is required to prepare a local plan which identifies sufficient opportunities to meet the identified needs of the area for the management of waste.

6.2 Periodically the county council commissions a Waste Needs Assessment (WNA) to establish the future waste management requirements for each waste stream in the county. This includes an assessment of whether existing waste management capacity will be sufficient to meet these needs or whether the county council should plan for additional capacity. The WNA therefore forms a key component of the evidence base that underpins the LMWLP.

6.3 The current adopted LMWLP is based upon WNAs carried out in 2014 and 2017. It identifies a need for additional waste management capacity and makes provision through a combination of criteria-based policies and allocations.

6.4 In order to provide an up-to-date evidence base to inform the new LMWLP, the county council commissioned the preparation of a new WNA by a waste management consultant. This latest WNA was published in June 2021 and covers a forecast period to the end of 2045 (five years beyond the proposed plan period). The WNA 2021 is based on a robust analysis of the best available data and is made up of several reports that focus on individual waste streams, along with an overview report. The WNA 2021 is available to view alongside this issues and options consultation.

Issue 14: Determining the waste management requirements

Waste arisings

6.5 The WNA 2021 has found that a total of just over 2 million tonnes of waste arose within Lincolnshire in 2019 (the latest data available). This was made up of the following principal waste streams (figures have been rounded):

- c360,000 tonnes of Local Authority Collected Waste (LACW)
- c730,000 tonnes of Commercial and Industrial Waste (C&I)
- c900,000 tonnes of Construction, Demolition and Excavation Waste (CD&E)
- c125,000 tonnes of Hazardous waste

Future requirements

6.6 In order to determine future waste management requirements up to 2045, the WNA 2021 generates a number of forecasts of future waste arisings for the different waste streams, taking into account factors such as population growth and economic

activity. The WNA 2021 also identifies targets for the management of waste, such as recycling rates, to ensure waste is managed in accordance with the waste hierarchy and any associated government targets and local aspirations. The key forecasts, assumptions and targets used for each waste stream are summarised below. Further detailed information is provided in the WNA 2021.

6.7 It should be noted that there are slight inconsistencies between some of the figures quoted in the documents forming the WNA 2021; however these minor variations do not materially affect the outcomes and conclusions of the WNA 2021.

Local Authority Collected Waste (LACW)

6.8 The WNA 2021 considers a number of different forecast scenarios for LACW. An annual growth rate per head of 0% multiplied by predicted population growth was selected, which is consistent with the approach taken in the current Joint Municipal Waste Management Strategy (JMWMS) for Lincolnshire and represents a maximum growth scenario. Taking into account the targets set out in the JMWMS, and the national Resource and Waste Strategy, the WNA 2021 applies a target of 55% recycling by 2025, and 65% by 2035. As minimal landfill levels are already being achieved, it is projected that the current rate of 5% is maintained over the forecast period.

6.9 Table 5 below sets out the projected future requirements for LACW at key milestone years when applying the selected forecasts and management targets to 2018/19 baseline arisings. Overall, LACW arisings are projected to increase to 404,062 tonnes by 2045, whilst the proportion of waste going to 'other recovery' (primarily energy from waste) is projected to reduce, reflecting increased recycling.

Table 5: Forecast future arisings and management profile for LACW at key milestone years (tonnes)

Year	Forecast arisings	Recycling or composting	Other recovery	Remainder to landfill
2018/19	359,911	156,662	187,946	15,303
2024/25	374,213	205,817	149,685	18,711
2029/30	383,750	230,250	134,312	19,187
2034/35	391,021	254,164	117,306	19,551
2039/40	397,499	258,374	119,250	19,875
2044/45	404,062	262,640	121,218	20,203

Source: WNA 2021

Question 37

Do you agree with the baseline, forecasts and targets that have been used to determine future waste management requirements for LACW?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Commercial and Industrial Waste (C&I)

6.10 In line with PPG, the WNA 2021 applies a positive growth rate when forecasting future C&I arisings. A conservative growth rate of 0.275% has been modelled to account for factors such as the move towards a more circular economy, and the forthcoming adoption of a 'Waste Prevention Programme for England'. In terms of future waste management targets, when considering the UK's commitment to the EU's circular economy package, it is proposed that recycling and composting will increase over the forecast period, from a baseline of 54%, to 75% by 2040. 'Other recovery' and landfill are both proposed to gradually reduce to a low of 2.5% respectively by 2040. The proposed targets are more ambitious than those proposed for LACW due to the differing composition of C&I waste.

6.11 Table 6 below sets out the projected future requirements for C&I waste at key milestone years when applying the selected forecasts and management targets to 2019 baseline arisings. Overall C&I waste arisings are projected to increase to c782,000 tonnes by 2045.

Table 6: Forecast future arisings and management profile for C&I waste at key milestone years (tonnes)

Year	Forecast arisings	Recycling or organic treatment	Other recovery	Remainder to landfill	Treatment to sewer
2019	c730,000	395,000	77,700	103,300	152,100
2025	c740,000	444,000	51,800	88,800	155,400
2030	c750,000	487,650	37,512	75,023	150,046
2035	c760,500	532,423	30,424	38,030	159,727
2040	c771,000	578,340	19,278	19,278	154,224
2045	c782,000	586,336	19,545	19,545	156,356

Source: WNA 2021

Question 38

Do you agree with the baseline, forecasts and targets that have been used to determine future waste management requirements for C&I waste?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Construction, Demolition and Excavation Waste (CD&E)

6.12 In line with PPG and having regard to the drive for waste minimisation and on-site management in parallel with projected growth in house building, the WNA 2021 proposes a static growth rate for CD&E waste. It is assumed that arisings in Lincolnshire will remain the same for the duration of the forecast period. In setting targets for future waste management, it is proposed that recycling and reuse will increase over the forecast period, from a baseline of 41%, to 65% by 2045, whilst 'other recovery' (including inert landfill and recovery to land) is anticipated to remain constant at around 30%. This leads to a combined total of 95% recycling and recovery by 2045 which is considered to be the maximum achievable.

6.13 Table 7 below sets out the projected future requirements for CD&E waste at key milestone years when applying the selected forecasts and management targets to 2019 baseline arisings.

Table 7: Forecast future arisings and management profile for CD&E waste at key milestone years (tonnes)

Year	Forecast arisings	Materials recycling	Recycled aggregate	Other recovery	Remainder to non-inert landfill
2020	c900,000	90,500	286,000	311,200	231,800
2025	c900,000	90,100	315,350	270,300	225,000
2030	c900,000	90,100	360,400	270,300	180,200
2035	c900,000	90,100	405,450	270,300	135,150
2040	c900,000	90,100	450,500	270,300	90,100
2045	c900,000	90,100	495,550	270,300	45,000

Source: WNA 2021

Question 39

Do you agree with the baseline, forecasts and targets that have been used to determine future waste management requirements for CD&E waste?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Hazardous Waste

6.14 Hazardous wastes are usually only created in relatively small quantities and this factor combined with the need for specialist facilities means it is unlikely that it will be economically viable to provide a full range of treatment or disposal facilities within a single WPA area. When forecasting future requirements, the WNA 2021 therefore focusses on total projected arisings but does not apply targets to specific management methods.

6.15 The WNA 2021 projects forward using a revised baseline arisings value of 51,600 tonnes for hazardous waste to account for issues, including double counting and permitting exemptions where identification of additional waste capacity is not required.

6.16 Based on an analysis of recent, and likely future trends in hazardous waste arisings, the WNA 2021 applies a zero-growth forecast to 2030, with a fall of 0.5% per annum from 2031 to 2040, and then a fall of 1.5% in the final five years to 2045.

6.17 Table 8 below sets out the projected future requirements for hazardous waste at key milestone years when applying the selected forecasts to 2019 baseline arisings. Overall hazardous waste arisings are projected to fall to around 45,250 tonnes by 2045.

Table 8: Forecast future arisings for Hazardous Waste at key milestone years

Year	Forecast arisings (tonnes)
2019	50,191
2025	50,191
2031	49,989
2035	48,996
2040	48,028
2045	45,250

Source: WNA 2021

Question 40

Do you agree with the baseline and forecasts that have been used to determine future waste management requirements for hazardous waste?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Other Waste

6.18 In line with PPG, the WNA 2021 also considers other waste streams including Wastewater, Agricultural Waste and Low Level Radioactive Waste when seeking to determine future waste management requirements for Lincolnshire. When considering the nature of these other wastes and the way that they are currently managed, the WNA 2021 does not identify any specific, separate management requirements for these waste streams, and therefore concludes that there is no need for further assessment of these other waste streams.

Question 41

Do you have any comments in relation to future waste management requirements for the other waste streams identified?

If so, please give details.

Capacity assessment

6.19 Once future requirements are determined, the WNA 2021 assesses the current capacity of existing waste management facilities within Lincolnshire to determine whether sufficient capacity exists to meet the requirements, or if there are likely to be any shortfalls or 'gaps' in capacity during the forecast period for which provision will need to be made.

6.20 Whilst future requirements have been determined in relation to specific waste streams, the assessment of capacity instead focuses on waste management method, since a single waste management facility may manage a mix of wastes from a number of different waste streams. The only exception to this approach is hazardous waste, for the reasons already set out.

6.21 The outcome of the capacity analysis includes two main components: an assessment of 'built waste management capacity' which considers the operational capacity of waste management facilities (tonnes per annum), and 'permanent deposit to land capacity' (available void space at landfill and recovery to land operations).

6.22 Table 9 below summarises the predicted capacity gaps and surpluses for built waste management facilities at key milestone years during the forecast period to 2045.

Positive figures identify a surplus of capacity. Negative figures would indicate a capacity gap, but none were identified.

Table 9: Forecast built waste management capacity gaps and surpluses (tonnes)

Capacity type	Gap 2025	Gap 2030	Gap 2035	Gap 2040	Gap 2045
Recycling and composting	+845,000	+777,000	+708,000	+658,000	+646,000
Energy recovery	+119,500	+149,000	+173,000	+182,500	+180,000
Aggregate recycling	+427,500	+382,000	+337,000	+292,000	+247,000
Hazardous waste	+15,500	+15,500	+15,500	+15,500	+15,500

Source: WNA 2021

6.23 In relation to permanent deposit to land, the WNA 2021 identifies existing void space capacity in Lincolnshire of at least 3.15 million m^3 at inert landfill sites and recovery to land operations, and at least 9.14 million m^3 at non-inert landfill sites.

6.24 Over the forecast period to 2045, the total cumulative permanent deposit to land requirement for inert waste is 4.5 million m^3. The identified void space available at dedicated inert landfill and recovery sites is therefore approximately 1.35 million m^3 less than this requirement. However, the WNA 2021 acknowledges that capacity will also be provided at non-inert landfill sites which require inert waste for operational use and restoration material. Allowing for 15% of the available non-inert void space for operational and restoration purposes would provide a further 1.37 million m^3 of inert waste management capacity, leaving no shortfall over the forecast period.

6.25 The total cumulative permanent deposit to land requirement for non-inert waste over the forecast period to 2045 is just under 6 million m^3. There is therefore sufficient capacity in Lincolnshire's non-inert landfill sites to accommodate future requirements for non-inert waste, even when it is assumed that 1.37 million m^3 of the available void is used for inert waste for operational and restoration purposes.

6.26 The WNA 2021 has therefore found that there appears to be sufficient existing consented capacity to meet predicted waste management requirements for Lincolnshire through to 2045 (beyond the proposed plan period), with surpluses identified in built waste management capacity, and sufficient combined void space available across consented recovery sites, inert and non-inert landfill sites. Further detailed information is provided in the WNA 2021.

Question 42

Do you have any comments in relation to the capacity assessment, and the findings that there are projected to be no capacity gaps over the forecast period?

If so, please give details.

Duty to cooperate

6.27 In assessing future waste management requirements and existing capacity, the county council is seeking to plan for sufficient waste management capacity to accommodate the amount of waste predicted to arise within Lincolnshire.

6.28 It is however acknowledged that waste movements occur between local authority boundaries due to factors such as commercial influences, proximity of facilities to arisings, and larger catchment areas associated with specialist facilities (including hazardous waste). Planning for waste management is therefore a strategic matter which requires cross-boundary co-operation between waste planning authorities and other organisations in line with the duty to cooperate.

6.29 The county council has, and will continue to cooperate with other waste planning authorities where significant movements of waste are identified, in order to ensure any implications for waste management requirements are identified. To date, no issues have been identified that affect the conclusions of the WNA 2021.

Issue 15: Making provision for waste management

Background

6.30 Once future waste management requirements have been identified, and capacity assessed, the LMWLP is required to make provision for the waste management infrastructure that may be required to meet any identified needs over the plan period.

National considerations

6.31 Paragraph 4 of the NPPW states that waste planning authorities should identify, in their local plans, sites and/or areas for new or enhanced waste management facilities in appropriate locations.

6.32 The PPG (paragraph 039 of the waste section) states that local plans covering waste should include clearly defined locations and/or areas of search.

6.33 Paragraph 1 of the NPPW states that positive planning plays a pivotal role in delivering this country's waste ambitions through a number of factors. These include providing a framework in which communities and businesses are engaged with and take more responsibility for their own waste, including by enabling waste to be disposed of or, in the case of mixed municipal waste from households, recovered, in line with the proximity principle.

Existing approach

6.34 In order to guide waste management facilities to the most sustainable locations and maintain an effective network of facilities across Lincolnshire, Policy W3 of the adopted LMWLP focuses new waste management facilities in and around specified 'main urban areas'. By focussing on the key centres of population, this approach seeks to locate facilities close to arisings, minimising the distances that waste is transported in line with the proximity principle. This approach also allows benefits such as greater potential for co-location of energy recovery facilities with potential customers for their heat and/or electricity.

6.35 There are a number of exceptions to this spatial strategy, which include:

a) facility types such as those involving biological treatment of waste and treatment of waste water, which due to their operational requirements, characteristics and potential amenity impacts may be best placed outside areas of high population;
b) small scale facilities outside the main urban areas to serve local communities;
c) extensions to existing facilities outside of the main urban areas provided certain tests are met including demonstrating need, proximity to arisings and transport links.

6.36 In addition, all facilities are required to comply with detailed locational criteria to reduce the potential for significant adverse environmental impacts, or impacts on the amenity of nearby residents.

6.37 The plan allocates a single waste 'site', and 16 'areas' considered suitable for waste management that accord with the spatial strategy and the locational criteria - identifying the types of facilities that would be potentially acceptable for each allocation.

6.38 The allocations make sufficient provision for the waste management needs that were identified at the time the plan was adopted. They are not, however, exclusive. A proposed facility that meets the spatial strategy and the locational criteria would potentially accord with the plan regardless of whether the land was allocated.

Outcome of the LMWLP Review

6.39 The review of the LMWLP concluded that whilst the spatial strategy and locational criteria are performing appropriately in terms of enabling delivery of waste management facilities in sustainable locations, the associated policies and linkages between them are too complicated and would benefit from updating.

6.40 The review also identified that the waste site and area allocations have been of very limited benefit in supporting the delivery of waste management facilities. This is because the broader range of acceptable locations set out through the spatial strategy and criteria-based policies have enabled most facilities to come forward on sites that are not allocated.

Options for the spatial strategy

6.41 As set out in detail in the previous section, the WNA 2021 has since demonstrated that there are no predicted waste management capacity gaps up to 2045. There is therefore no apparent need for specific provision to be made in the new LMWLP for the proposed plan period to 2040. However, when considering the ongoing evolution of waste management technologies, cross boundary movements, and the fact that waste needs may change over time, it is considered that it is still necessary for the new LMWLP to provide a suitable policy framework to guide and assess any future waste management proposals that may come forward during the plan period.

6.42 It is proposed to continue with the existing approach and set out a spatial strategy in the new LMWLP which focusses on the main urban areas, albeit in a simpler format to address the issues identified in the review. As most of the county's waste is produced in these urban areas, this approach is in line with the proximity principle. Alternatively, the council could consider other options for where waste management facilities may be acceptable, subject to compliance with national policy and guidance. At present, however, no such options have been identified.

Question 43

Do you agree that the spatial strategy for waste management should continue to focus new waste management facilities on the main urban areas?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

6.43 If the current spatial approach is continued, the council could consider whether any changes are necessary to the exceptions to the spatial strategy to ensure they remain relevant and effective. However, to date no alternatives have been identified.

Question 44

Do you agree that the council should continue to allow the current exceptions to the spatial strategy for waste management (as outlined in paragraph 6.35 above)?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Options for identifying appropriate locations

6.44 Within the overarching spatial strategy the new LMWLP needs to set out which specific types of locations would be acceptable for waste management facilities. As set out previously, the adopted LMWLP does this through a combination of site and area allocations, and criteria-based policies. The review of the LMWLP identified issues with the effectiveness of the existing waste allocations, and the WNA 2021 has not identified any additional waste management requirements for the plan period. It is considered that there is therefore no need for the new LMWLP to include specific allocations for additional waste management facilities.

6.45 The new LMWLP could, however, continue to set out criteria-based policies to ensure any future proposals that may come forward for waste management development are in the most appropriate locations. These policies could follow the same approach as the existing LMWLP which, in line with the NPPW and PPG focuses new waste facilities in locations such as previously developed land, existing or planned employment land, and land already in waste management use. Specific criteria are also set out for those facility types that are exempt from the spatial strategy and for those where other locations may be acceptable.

6.46 Alternatively the council could consider a different approach if any reasonable alternative options are put forward as part of this issues and options consultation. At present, however, no such options have been identified.

Question 45

Do you agree that criteria-based policies are the most appropriate mechanism to ensure any future proposals for waste management that come forward are located in the most appropriate and sustainable locations?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 16: Low level non-nuclear radioactive waste (LLW)

Background

6.47 Low level radioactive waste (LLW) is radioactive waste having a low radioactive content. The majority of this waste is produced by sectors outside the nuclear industry such as hospitals, the pharmaceutical sector, and research and educational establishments, and hence is termed “non-nuclear”. LLW makes up more than 90% of the UK’s radioactive waste by volume but contains less than 0.1% of the total radioactivity.

6.48 Most radioactive waste produced by non-nuclear sources contains very low levels of radioactive content and is therefore placed into a sub-category known as Very Low Level radioactive Waste (VLLW). Most of this material is similar in its physical and chemical nature to general wastes from households, commercial or industrial sources.

6.49 The disposal of most LLW (not falling within the sub-category VLLW) requires a permit to be held by both the waste producer and the operator of the waste management facility that receives it. LLW can either go to a landfill as "controlled burial" or may be dealt with by incineration. There are few facilities, however, in the UK with permits to take LLW. The closest one to Lincolnshire is in Northamptonshire (the East Northants Resource Management Facility – ENRMF). The ENRMF has a development consent including provision for disposal of LLW up to 2026 and a DCO application to extend its capacity and life is imminent. However, there is nothing to indicate that any LLW that would not be manged as VLLW is produced in Lincolnshire (LWNA 2021).

6.50 For VLLW the situation is different. A site producing less than $50m^3$ per year is classed as a low volume VLLW source and as such is exempt from reporting quantities of waste produced and managed. VLLW from such sources is not required to be managed separately and so will generally be manged in the same manner as general waste produced on the source site. As a result, any landfill or incinerator in the UK may accept small volumes of VLLW mixed in with the other wastes. Therefore, it may be assumed that any waste management facility receiving mixed waste might receive low volumes of VLLW depending on whether source sites fall within their catchment.

6.51 The WNA (2021) reports that a review of radioactive source permits granted by the Environment Agency indicates that there were six authorisations held by four entities in January 2021. These permits are issued to establishment which use radioactive substances. It is therefore possible that, as part of their activities, these entities will generate some LLW or VLLW requiring disposal offsite.

6.52 In addition to the above, there are a number of entities that hold permits for the disposal of radioactive waste in Lincolnshire. These are principally energy exploration companies. In the process of drilling for oil and gas, these companies might extract "naturally occurring radioactive materials" (NORM), which is present in many geological formations including oil- and gas-bearing strata. Holders of these permits are required to have contracts in place for the management of waste arisings prior to the commencement of production.

National considerations

6.53 The government's UK Strategy for the Management of Solid LLW Arising from the Non-Nuclear Industry (2012) states that waste planning authorities should be aware of the current disposal needs and waste management practices of non-nuclear industries that operate within their areas of responsibility as they prepare their

plans. The strategy includes a number of key points of which the following are of particular importance:

1) Producers of LLW should work with planning authorities, to ensure that such wastes may be effectively handled through the preparation of local plans and in determining planning applications.
2) Exempt low volume VLLW is currently disposed to landfills and incinerators used for handling Directive waste. No special provisions need to be addressed in environmental permits, and no extra provisions need to be made by waste planning authorities to allow this practice to continue.
3) The proximity principle needs to be a consideration, alongside other considerations, in any waste management plan prepared by LLW producers. The principle is a component of work and decisions by waste producers, the environment agencies, and planning authorities.
4) Communities which benefit from the beneficial uses of radioactive materials (including direct benefit such as the use of radiopharmaceuticals, and indirect benefits such as contributions to a local economy from commercial bodies using radioactive materials) should take a share in the responsibility for managing the radioactive wastes which inevitably arise from their use, where possible, while recognising that each and every local authority can not necessarily be self-sufficient in the matter of waste management.
5) Waste planning authorities should consider how to manage LLW and VLLW arising in their areas as part of the preparation of their local waste plans. They should seek advice from waste producers and the environment agencies to ensure that the waste is being sent to a suitable waste management facility. If necessary and feasible, they should work with other waste planning authorities to share facilities. The environment agencies will supply information on disposal facility locations, on request, to waste producers and planning authorities to assist their decisions.

6.54 Paragraphs 17 to 23 of the NPPF set out the plan making framework and the role of strategic policies. In particular:

- Paragraph 17 states that the development plan must include strategic policies to address the local planning authority's priorities for the development and use of land in its area
- Paragraph 20 indicates that strategic policies should, amongst other things, make sufficient provision for infrastructure for waste management
- Paragraph 21 states that strategic policies should be limited to those necessary to address the strategic priorities of the area (and any relevant cross-boundary issues)
- Paragraph 22 states that strategic policies should look ahead over a minimum 15 year period from adoption to anticipate and respond to long-term requirements and opportunities, such as those arising from major improvements in infrastructure

Existing approach

6.55 The approach of Policy W2 of the CSDMP is that planning permission for the management of low level non-nuclear radioactive waste should be granted where it is demonstrated that:

1. there is a proven need for the facility;
2. locating in Lincolnshire is the most viable locale for managing such waste; and
3. the proposals accord with all relevant development management policies.

Outcome of the LMWLP Review

6.56 No planning applications for LLW development have been received since the CSDMP was adopted in 2016. Consequently, the current policy remains untested.

Options

6.57 The WNA (2021) has found that there are only a small number of permitted sources of non-nuclear waste within Lincolnshire. This strongly suggests that there is no critical mass of material requiring specialist capacity provision that needs to be planned for within the county. Furthermore, most of the radioactive waste produced, classed as VLLW, is likely to be disposed of through conventional management routes. The WNA also states that holders of permits for NORM arising from oil and gas exploration can be expected to make their own management arrangements.

6.58 As there is unlikely to be any demand for waste management facilities for dealing with LLW in Lincolnshire during the proposed plan period, it is not considered necessary to include a specific policy for LLW in the new LMWLP. This is consistent with the NPPF which states that strategic policies should be limited to those necessary to address the strategic priorities of the area (and any relevant cross-boundary issues).

6.59 In the unlikely event that an application is submitted, it would simply be assessed against national policy and the general waste policies of the plan.

Question 46

Do you agree that a specific policy for LLW is not needed in the new LMWLP?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 17: Landfill

Background

6.60 Lincolnshire has a significant number of sites with planning permission for non-inert and/or inert landfill as set out in the Waste Needs Assessment (2021), which are predominantly connected with the restoration of former mineral extraction sites. Most of these planning permissions were granted at a time when landfill was the principal means of dealing with waste generated in the county.

6.61 The opening of the Energy from Waste Plant at North Hykeham in 2013 has diverted most of the county's Local Authority Collected Waste away from the landfill sites. As a result, some of these landfill sites are now inactive.

National considerations

6.62 Section 3 of the National Planning Policy for Waste (NPPW) states that in preparing waste local plans, waste planning authorities should, amongst other things, drive waste management up the waste hierarchy, recognising the need for a mix of types and scale of facilities, and that adequate provision must be made for waste disposal.

6.63 Section 4 of the NPPW goes on to state that in preparing their plans, waste planning authorities should, amongst other things, plan for the disposal of waste in line with the proximity principle.

6.64 The NPPW states that it should be read in conjunction with a number of other documents, including the Waste Management Plan for England. The latest version of this was published in 2021.

6.65 The Waste Management Plan for England states that landfill should usually be the last resort for waste, particularly biodegradable waste. It goes on to state that the landfill tax is one of the key drivers to divert waste from landfill to ensure that the 2020 target (of no more than 10.16 million tonnes of biodegradable municipal waste to landfill) and the 2035 target (of no more than 10% of municipal waste to landfill) are both met. The plan states that this does not mean that all wastes will be diverted from landfill, and that there are some wastes for which landfill remains the best, or least worst, option. It recognises that there is an ongoing role for landfill in managing waste, particularly for inert waste that cannot be prevented, recovered or recycled, but that its use should be minimised as much as possible.

6.66 The Waste Management Plan for England also states that it is for the Environment Agency to determine on a case-by-case basis whether an application for an environmental permit constitutes a waste recovery or a disposal operation. Inert waste can and should be recovered or recycled whenever possible. However, the disposal of inert waste in or on land, i.e. landfill, remains a valid way of restoring quarries and worn out mineral workings where this is a planning requirement.

Existing approach

6.67 At the time the adopted CSDMP was prepared, no requirement for further landfill capacity above that already existing had been found through the chosen Waste Needs Assessment scenarios. The plan therefore contains a restrictive policy (Policy W6) which states that planning permission will only be granted for new landfills or extensions to existing landfills (inert, non-hazardous and hazardous) provided that:

1. it has been demonstrated that the current capacity is insufficient to manage that waste arising in Lincolnshire or its equivalent, which requires disposal to landfill in the county; and
2. there is a long term improvement to the local landscape and character of the area, with enhanced public access where appropriate; and
3. the development would not cause a significant delay to the restoration of existing waste disposal sites; and
4. the proposals accord with all relevant development management and restoration policies set out in the plan.

Outcome of the LMWLP Review

6.68 The LMWLP Review found that out of the six applications assessed and granted planning permission during the review period, two did not strictly comply with Policy W6 because the first criterion of the policy was not met. This criterion requires proposals to demonstrate that the current landfill capacity is insufficient to manage that waste arising in Lincolnshire or its equivalent.

6.69 Each of the non-compliant decisions were related to the use of inert wastes in the restoration or improvement of land, and this was considered on balance to be an appropriate use of waste despite there being existing consented capacity for this waste within the county at the time.

6.70 The review concluded that these decisions may highlight that either the policy criteria are too restrictive, or that the requirements of the policy are not sufficiently clear.

Options

6.71 The council's adopted CSDMP contains a restrictive policy on granting new capacity for landfill because at the time of its preparation the county had sufficient capacity for the plan period. This approach also:

- helps to ensure that the existing landfill sites receive the available wastes so they can be restored
- provides an additional incentive for operators to recycle waste materials wherever possible before considering disposal to landfill, which is consistent with the aims of national policy.

6.72 The latest Waste Needs Assessment (2021) indicates that the council still has sufficient landfill capacity for inert and non-inert waste for the proposed plan period.

Whilst this might suggest that no changes are needed to the policy, there are a number of reasons why it may be beneficial to amend the policy approach for inert waste where this is to be used in the restoration of former quarry workings. These are:

1. Whilst the WNA (2021) indicates that the county has more than sufficient capacity for inert landfill for the forecast period (which goes 5 years beyond the proposed plan period), the excess capacity is marginal and provides little flexibility if demand exceeds the forecast. It may therefore be preferable to provide additional provision though the "recovery" of the waste in quarry restoration schemes.
2. The Waste Management Plan for England recognizes that inert landfill remains a valid way of restoring quarries, but with the important caveat "where this is a planning requirement".
3. The LMWLP Review has identified that planning permissions have been granted for inert landfill despite the fact that the first criterion of Policy W6 was not met, indicating that other factors carried greater weight.

6.73 Relaxing the first criterion of Policy W6 (the need to demonstrate that the current capacity is insufficient) may help to overcome the issues identified above, but it could also have disadvantages. This is because the use of inert waste in the restoration of quarries may be exempt landfill tax – removing one of the principal drivers for encouraging recycling. If the policy is relaxed it is therefore considered that the use of inert waste in restoration schemes would need to be strictly controlled, and that applicants would need to demonstrate:

- substantial improvements to the overall restoration, particularly in terms of biodiversity gains (compared with the best scenario without using waste)
- that the restoration scheme is designed to minimise the amount of inert waste required
- adherence to the proximity principle
- that the other criteria currently attached to Policy W6 are met (i.e. proposals should provide long term local landscape improvements and public access (where appropriate), they should not delay the restoration of other sites, and they should accord with the Development Management Policies and Restoration Policies)

Question 47

Do you agree that the policy for landfill should be amended with respect to the use of inert waste in the restoration of quarries (as outlined above)?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 18: Safeguarding waste management sites

Background

6.74 Waste management sites are an important element of a community's infrastructure, ensuring that waste is dealt with at appropriate locations and that communities take responsibility for their own waste. Gaining permission for such facilities can be a challenging and protracted process in direct opposition to the wishes of parts of the host community. Because of this, the council considers it essential that those waste management sites should be protected. Such protection should be twofold: firstly, to ensure that a site permitted or allocated with a waste use is not redeveloped to another use (thereby retaining capacity); and secondly that there remains a sufficient distance between the waste facility and other forms of development or sensitive land uses (for example, housing). The latter requirement is to make certain that non-waste developments are not permitted within the vicinity of a waste management facility if it would either prevent or prejudice the effective use of that facility.

6.75 In two-tier planning areas such as Lincolnshire, the safeguarding of waste sites can be achieved only through county and district councils co-operating in the exercise of their respective planning powers. The county council can, however, invoke a formal consultation procedure under Schedule 1, paragraph 7 of the Town and Country Planning Act 1990. Under this procedure the district councils must consult with the county council before determining applications to which the consultation requirements apply.

National considerations

6.76 The 'agent of change' principle set out in paragraph 182 of the NPPF is relevant. This states that existing businesses and community facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established.

6.77 Paragraph 8 of the NPPW states that when determining planning applications for non-waste development, local planning authorities should, amongst other things, ensure that the likely impact of proposed, non-waste related development on existing waste management facilities, and on sites and areas allocated for waste management, is acceptable and does not prejudice the implementation of the waste hierarchy and/or the efficient operation of such facilities.

6.78 The PPG (paragraph 010 of the waste section) states that "non-waste" planning authorities must have regard to national planning policy for waste and are expected to help deliver the Waste Hierarchy. It goes on to state that this might include, amongst other things:

- working constructively with waste planning authorities to identify and protect those sites needed for waste management facilities
- considering the need for waste management alongside other spatial planning objectives

- considering, where relevant, the likely impact of proposed, non-waste related development on existing waste management sites and on sites and areas allocated for waste management

Existing Approach

6.79 National policy and guidance with respect to both safeguarding and consultation on waste management facilities is less prescriptive than for minerals, which is reflected in the way it is dealt with in the LMWLP.

6.80 Policy W8 of the adopted LMWLP sets out that the county council will seek to safeguard existing and allocated waste management facilities from redevelopment to a non-waste use and/or the encroachment of incompatible development unless:

a) alternative provision in the vicinity can be made in accordance with the Development Plan; or
b) it can be demonstrated that there is no longer a need for a waste facility at that location.

6.81 The CSDMP states that it is the responsibility of the district councils to ensure that when considering planning applications or proposals for future development within or near a boundary of a waste site, the presence of the waste site is taken into account. In practice this means that the district councils need to assess whether there are likely to be any conflicts, taking into account the nature of the waste management activities and the sensitivity of the proposed development to those activities. Where this is the case, the district councils should consult the county council.

Outcome of the LMWLP Review

6.82 The performance target for Policy W8 is that no applications should be granted by the district councils where the county council has expressed the view that the proposals would be contrary to Policy W8. In this respect the review concluded that the target is being met. However, it also acknowledged that the effectiveness of this performance target is limited by the fact that it assumes that the district councils have consulted the county council in all appropriate cases (which might not be the case).

Options

6.83 The current approach in the adopted LMWLP is to safeguard all existing and allocated waste management facilities. This approach is considered to be in line with the NPPW and PPG. Therefore, no other options have been considered at this stage.

Question 48

Do you agree that all existing waste management facilities and any sites allocated for waste management in the LMWLP should be safeguarded by both the county council and the district councils?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

6.84 In terms of the consultation arrangements, the current situation leaves this to the judgement of the district councils, which may lead to inconsistencies in how the arrangements are applied in practice. It is therefore considered that a more formal arrangement is put in place. This could include a requirement that the district councils consult the county council on all applications they receive within a waste management site. The county council could then assess whether this would have an unacceptable impact on waste management capacity.

6.85 In terms of applications for sensitive development beyond the boundaries of waste management sites but which encroach upon them, it is considered that the district councils should assess these for themselves in consultation with their Environmental Health Officers. They would then be expected to determine such applications in accordance with:

1. the county council's policy for the safeguarding of waste management facilities; and
2. the requirements of the NPPF and NPPW.

Question 49

Do you agree that consultation arrangements between the county council and the district councils for the safeguarding of waste sites should be amended as outlined in paragraphs 6.84 and 6.85 above?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

7. Restoration and after-use of mineral sites and landfill sites

Issue 19: Restoration and after-use priorities

Background

7.1 Both the extraction of minerals and the landfilling of waste are forms of transient development that can take place over many years. It is therefore important that proper provision is made for the restoration of such sites and that, wherever possible, this is undertaken on a phased basis.

7.2 Restoration is secured through planning conditions, which are imposed when planning applications are determined. Conditions can also be imposed to require aftercare measures to be carried out for a period of up to five years following the completion of restoration of each phase of working. For the longer-term management, a legal agreement (s106 planning obligation) is required.

7.3 Mineral planning permissions are subject to the requirements of Section 96 and Schedule 14 of the Environment Act 1995. This means that the planning conditions can be reviewed by the county council periodically, including the restoration and aftercare conditions.

National considerations

7.4 With respect to restoration, sub paragraph 210(h) of the NPPF states that planning policies should ensure that worked land is reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites takes place. This aim is also considered relevant to landfill sites given the NPPW states that when determining applications, waste planning authorities should ensure that land raising, or landfill sites are restored to beneficial after uses at the earliest opportunity and to high environmental standards through the application of appropriate conditions where necessary (paragraph 7).

7.5 There are a number of other objectives within the NPPF that are of particular relevance to the restoration of mineral sites and landfill sites as set out below.

7.6 Paragraph 153 includes the provision that plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures.

7.7 Paragraph 174 states, amongst other things, that planning policies should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the

economic and other benefits of the best and most versatile agricultural land, and of trees and woodland
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate

7.8 Paragraph 176 states, amongst other things, that great weight should be given to conserving and enhancing landscape and scenic beauty in Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas.

7.9 Paragraph 179 of the NPPF states that to protect and enhance biodiversity and geodiversity, plans should amongst other things promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

Existing approach

7.10 The LMWLP contains four policies relating to restoration and after-use (Policies R1 to R4). Policy R1 is an overarching policy that requires proposals to demonstrate that the restoration of mineral workings and landfill operations will be of a high quality and carried out at the earliest opportunity. It states that all proposals should be accompanied by detailed proposals for restoration, including an appropriate after-use of the site and demonstrate that:

i. restoration will be undertaken using best practice to secure a high standard of restoration and aftercare; and
ii. restoration will be completed within a reasonable timescale and is progressive; and
iii. the restoration is appropriate for the natural and historic landscape and geological and wildlife interest of the area and measures to create, protect, restore and enhance geodiversity and biodiversity conservation features, and the historic landscape are practical, of a high quality appropriate to the area and secure their long term safeguarding and maintenance; and
iv. there is an aftercare management programme, appropriate to the objectives of the site, to ensure that the restoration of the site is established successfully.

7.11 The supporting text for Policy R1 makes it clear that all after-uses will be considered in the light of realistic assumptions about the availability of restoration materials, particularly inert waste.

7.12 Policy R2 deals specifically with after-use and states:

"The proposed after-use should be designed in a way that is not detrimental to the local economy and conserves and where possible enhances the landscape character and the natural and historic environment of the area in which the site is located.

After-uses should enhance and secure a net gain in biodiversity and geological conservation interests, conserve soil resources, safeguard the potential of the best and most versatile agricultural land, and decrease the risk of adverse climate change effects. Such after-uses could include: agriculture, nature conservation, leisure, recreation (including sport), and woodland.

Where appropriate, the proposed restoration should provide improvements for public access to the countryside including access links to surrounding green infrastructure.

Restoration proposals should be designed to ensure that they do not give rise to new or increased hazards to aviation."

7.13 The supporting text for Policy R2 goes into more detail over aspects of the policy. It recognises that restoration can provide opportunities to secure a net gain in both biodiversity and accessible geodiversity as well as adding to the county's green infrastructure. It also recognises that habitat creation can act as a living carbon sink and that well-designed schemes, in appropriate locations, may offer benefits in terms of provision of climate change mitigation measures such as greater flood storage capacity allied to recreational or biodiversity after-uses.

7.14 Agricultural restoration is given significant consideration in the plan. Over 70% of agricultural land in Lincolnshire is classified as Best and Most Versatile Agricultural Land (BWVAL), that is Grades 1, 2 or 3a. There is therefore pressure to restore this land back to agricultural use in order to safeguard food supplies. The plan recognises that of all mineral types, sand and gravel extraction in Lincolnshire causes the greatest loss of land. Although these workings are generally shallow, they often extend below the water table and normally fill with water, which creates challenges when restoration to agriculture is considered. To address this, low level restoration techniques have been developed which involve sealing the floor and sides of the excavation with an impermeable material to prevent the entry of ground water and replacing soils together with a suitable drainage system. The only water then entering the site is rainwater which is regulated by occasional pumping.

7.15 Whilst the plan recognises that BMVAL should be safeguarded, and soils on all sites should be protected, this will not necessarily require sites to be restored to agriculture, provided that the requirements of the development management policies relating to soils (Policy DM11) and Best and Most Versatile Agricultural Land (Policy DM12) are met.

7.16 The plan also recognises that afforestation could make a potentially significant contribution to the achievement of carbon sequestration targets. This would add diversity to the county given that only 4% of Lincolnshire is covered by woodland, making it one of the least wooded counties in Britain.

7.17 The plan acknowledges that a large number of former sand and gravel workings have resulted in the creation of significant areas of standing water. The creation of further open water bodies may conflict with the high levels of RAF activity within the county due to increased bird activity and the potential for bird strike on aircraft. Proposals for the creation of large open water bodies therefore need to be closely scrutinised. The plan recognises that adapting restoration schemes to incorporate habitats such as reedbed and wet woodland can help alleviate the problem of bird strike by creating less open water.

7.18 Policy R3 of the CSDMP sets the restoration priorities for sand and gravel operations within the county's areas of search. This requires restoration proposals, other than those involving the restoration of BMVAL back to agriculture of a comparable quality, to have regard to the landscape scale objectives of the area. It then goes on to list priorities for different parts of the county. For the sites allocated in the SLD, more detail on the priorities is provided in the development briefs set out in Appendix 1 of that document.

7.19 Policy R4 of the CSDMP sets the restoration priorities for limestone and chalk workings. This requires restoration proposals to be sympathetic to the surrounding landscape and, other than those involving the restoration of BMVAL back to agriculture of a comparable quality, prioritises the creation of calcareous grassland habitat. It also requires the retention of suitable exposures for geological educational use where appropriate.

Outcome of the LMWLP review

7.20 The review found that all of the restoration policies had performed effectively in delivering appropriate schemes for the restoration and after-use of sites. Although the NPPF has been updated since the plan was adopted, giving greater emphasis to the effects of climate change, it is considered that this matter is already covered by the restoration policies.

Options

7.21 As no issues have been identified with the policies, there are no proposals for change. However, the updating of the LMWLP provides an opportunity for comment on whether they can be improved.

Question 50

Do you think that any changes or additions are needed to the restoration and after-use policies?

If so, please give details.

8. Development management policies

Introduction

8.1 With the exceptions referred to below (Policies DM1 and DM2), the development management policies in the adopted LMWLP primarily provide detailed criteria for assessing the potential impacts of development proposals on the environment and local amenity. Both mineral and waste planning applications are assessed against these criteria and, in general, would only accord with the policies if the proposed development would not have a significant impact, or the impact could be remediated through the implementation of mitigation measures. Such measures would be secured through planning conditions and/or legal agreements (s106 planning obligations).

8.2 These policies cover the following issues:

DM1: Presumption in favour of sustainable development
DM2: Climate change
DM3: Quality of life and amenity
DM4: Historic environment
DM5: Lincolnshire Wolds Area of Outstanding Natural Beauty
DM6: Impact on landscape and townscape
DM7: Internationally designated sites of biodiversity conservation value
DM8: Nationally designated sites of biodiversity and geological conservation value
DM9: Local sites of biodiversity conservation value
DM10: Local sites of geological conservation value
DM11: Soils
DM12: Best and Most Versatile Agricultural Land
DM13: Sustainable transport movements
DM14: Transport by road
DM15: Flooding and flood risk
DM16: Water resources
DM17: Cumulative impacts

Issue 20: Sustainable development (Policy DM1)

National considerations

8.3 Paragraph 11 of the NPPF states that plans and decisions should apply a presumption in favour of sustainable development. For plan-making this means that:

a) all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects;

b) strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas, unless:
    i. the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for restricting the overall scale, type or distribution of development in the plan area; or
    ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole

8.4 Paragraph 16 goes on to state, amongst other things, that plans should be prepared with the objective of contributing to the achievement of sustainable development and should serve a clear purpose, avoiding unnecessary duplication of policies that apply to a particular area (including policies in the NPPF, where relevant)

Existing approach

8.5 Policy DM1 of the CSDMP states:

> "When considering development proposals, the county council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.
>
> Planning applications that accord with the policies in this Local Plan will be approved without delay, unless material considerations indicate otherwise.
>
> Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the County Council will grant permission unless material considerations indicate otherwise – taking into account whether:
>
> - Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or
> - Specific policies in that Framework indicate that development should be restricted."

Options

8.6 This policy is the first of two exceptions to the general approach taken by the other Development Management Policies, which relate directly to specific impacts on the environment or amenity. In contrast, this policy is more general in nature. It was included in the plan because at the time of the plan's preparation it was understood

that the Planning Inspectorate required its inclusion. This, however, is no longer the case.

8.7 As set out in the NPPF, all plans should promote a sustainable pattern of development. The concept of sustainability therefore goes to the heart of plan making and is reflected in the plan as a whole rather than in one specific development management policy. It is therefore considered that Policy DM1 is an unnecessary duplication of the requirements of the NPPF. As such, it appears to be at odds with Paragraph 16 of the NPPF.

8.8 As an alternative, it may be more appropriate to include sustainability within an overarching strategic policy to help guide the development of the plan as a whole.

Question 51

Do you agree that the present development management policy should be superseded by a strategic policy setting out the need for minerals and waste development to contribute to the achievement of sustainable development?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 21: Climate change

National considerations

8.9 The UK has made specific commitments to reducing emissions of greenhouse gases. In June 2019, the Climate Change Act 2008 was amended setting a new target for reducing these gases by at least 100% from the 1990 baseline by 2050, making the UK a “net zero emitter”.

8.10 Section 19 (1A) of the Planning and Compulsory Purchase Act 2004 states that development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change.

8.11 Revisions to the NPPF in 2019 place more emphasis on the effects of climate change, including requirements on new development for enhanced flood management and the delivery of net gains in biodiversity.

8.12 Paragraph 153 of the NPPF states that plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Policies should support

appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.

8.13 Paragraph 154 of the NPPF goes on to state that new development should be planned for in ways that:

a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and
b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards.

8.14 Paragraph 155 of the NPPF states that to help increase the use and supply of renewable and low carbon energy and heat, plans should:

a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);
b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and
c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers

Existing approach

8.15 Policy DM2 of the CSDMP sets out the matters which proposals for minerals and waste development should address where applicable. These include for both minerals and waste a need to identify locations which reduce distances travelled by HGVs in the supply of minerals and the treatment of waste, unless other environmental, sustainability and, for minerals, geological considerations override this aim.

8.16 In addition, for waste the policy lists the following matters that need to be addressed:

- Implement the Waste Hierarchy, and in particular reduce waste to landfill
- Identify locations suitable for renewable energy generation
- Encourage carbon reduction/capture measures to be implemented where appropriate

and for minerals it lists the following matters:

- Encourage ways of working which reduce the overall carbon footprint of a mineral site
- Promote new/enhanced biodiversity levels/habitats as part of restoration proposals to provide carbon sinks and/or better connected ecological networks
- Encourage the most efficient use of primary minerals

Outcome of the LMWLP Review

8.17 The review found that the policy was difficult to apply directly because of its more strategic nature. In addition, it was found that many of the issues were covered by more specific policies in the plan which could be more readily applied.

Options

8.18 As with Policy DM1, this policy is also less specific than the other Development Management Policies. It is also considered to be more strategic in nature, so its aims might be better incorporated into an overarching strategic policy possibly combined with sustainability (see Issue 20) in the new LMWLP rather than a development management policy. This would then help to guide the development of the plan, with the strategic aims of the new policy secured through the more detailed policies of the plan (e.g. by requiring increases in biodiversity through the restoration policies).

Question 52

Do you agree that climate change objectives should be incorporated into a strategic policy rather than a specific development management policy?

Whether you agree or disagree it would be helpful to have your comments on this matter. However, if you disagree, please let us know what approach you think should be taken.

Issue 22: Other development management policies

Options

8.19 The LMWLP review did not find any significant issues with the remaining development management policies (Policies DM3 to DM17). However, the updating of the plan provides an opportunity to take a fresh look at the scope and content of the development management policies. The council is therefore seeking views on whether any changes or additions are needed to these policies.

Question 53

Do you think that any other changes or additions are needed to the development management policies?

If so, please give details.

9. Other key issues

9.1 This document has sought to identify the key issues which need to be considered in the updating of the LMWLP and has put forward options for improving the plan. It is, however, recognised that during the consultation interested parties may wish to raise issues not included in this document. The county council would welcome comments identifying such issues and any suggestions on how they should be addressed in the updated plan. Such comments will be given careful consideration.

Question 54

Are there any other issues which you think need to be considered in the updating of the LMWLP?

If so, please provide details together with your thoughts on how these should be addressed in the updated plan.

This page is intentionally left blank

Lincolnshire Minerals and Waste Local Plan

Proposed site selection methodology for updating the plan

[Date to be inserted]

This document can be provided in another language or format. For all enquiries, please contact the county council on telephone number 01522 782070

Contents

1. Introduction

1.1 Lincolnshire County Council is updating its Lincolnshire Minerals and Waste Local Plan (LMWLP), which was produced in two parts: the Core Strategy and Development Management Policies (2016) and the Site Locations document (2017). The new plan will be produced as one document.

1.2 Work on updating the LMWLP is at an early stage. The council has published an Issues and Options document for consultation which, amongst other things, sets out the level of provision that the council is proposing to make for aggregate minerals (sand and gravel, and crushed rock) during the new plan period up to 2040. It is proposed that any additional reserves that are needed to meet this provision will be met through new site allocations in the plan. The council is therefore undertaking a "Call for Sites" exercise during the consultation period to give landowners and other interested parties an opportunity to nominate potential mineral sites for allocation in the new LMWLP.

1.3 This consultation document sets out how the council is proposing to assess and select the most appropriate nominated sites for allocation in the new LMWLP. The methodology has been developed to ensure that the sites that are selected accord with the emerging policies of the LMWLP and promote a sustainable pattern of development, as required by the government's National Planning Policy Framework.

1.4 The updating of the LMWLP, including the assessment and selection of sites, will be informed by a Sustainability Appraisal (SA) throughout its preparation. SA is both a systematic and iterative process which promotes sustainable development by assessing the extent to which the emerging plan, when judged against the reasonable alternatives, will help to achieve relevant environmental, economic, and social objectives. This process will be carried out by independent consultants.

1.5 Details of the consultation procedure and how to make representations on this document are set out in the Issues and Options document.

2. The call for sites

2.1 In parallel with the consultations on this document and the Issues and Options document, the council has invited interested parties to nominate sites for the future working of aggregate minerals (sand and gravel, and crushed rock) for potential allocation in the new Lincolnshire Minerals and Waste Local Plan. The invitation is targeted at minerals operators, landowners and land agents who may wish to nominate a 'new' mineral site or an 'extension' to an existing one.

2.2 It is proposed that sites already allocated in the adopted LMWLP will be carried forward as allocations in the updated LMWLP, provided there have been no substantial change in circumstances since they were originally allocated. In particular, the council will need to be satisfied that they can still be delivered in accordance with the development briefs set out in Appendix 1 of the Site Locations document (2017). The council will therefore be entering into discussions with the previous proponents for these sites to confirm whether this is still the case.

2.3 Site nominations will only be accepted when a mineral site nomination form (see Appendix 1) has been completed and returned. This form has a series of questions arranged under the following headings:

- Site details
- Land ownership and deliverability
- Resource and operational details
- Access and transportation
- Restoration and afteruse
- Environmental information
- Other relevant information

In addition, it is expected that any applicable technical papers, reports or plans that are available to the applicant will be submitted to support the nomination.

3. Methodology for site selection

3.1 The following methodology provides a relatively objective approach for assessing sites for allocation in the updated LMWLP. Sites will be assessed in five stages as detailed in Appendix 2 (Assessment form for mineral sites). This process is described below:

Stage 1 (exclusionary criteria)

3.2 Stage 1 is an initial filtering stage which will assess each site against five "exclusionary" criteria. These constraints are considered to be so significant that any site caught by any of the criteria will normally be discounted and not progress to Stage 2.

3.3 The criteria are:

1. Sites that could have a significant effect on a "European Site" as defined in the national Planning Practice Guidance (i.e. SACs, SPAs, proposed SACs, potential SPAs and Ramsar Sites).

2. Sites that include or are adjacent to Ancient Woodland.

3. Sites that include or are adjacent to a Site of Special Scientific Interest (SSSI).

4. Sites that include or are adjacent to the Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB).

5. Site that include or are adjacent to a site or building with a nationally recognised designation (Scheduled Monuments, Conservation Areas, Listed Buildings, Registered Historic Battlefields and Registered Parks and Gardens).

3.4 Where a site falls into one or more of the exclusionary criteria, the proponent may be invited to amend the site boundaries to overcome the conflicts if the council considers it to be practicable and desirable to do so.

3.5 Sites that conflict with the exclusionary criteria 2 to 5 will only be exempted and taken forward to Stage 2 if the proponent provides evidence upfront that working the site would be unlikely to have a detrimental effect upon the protected feature. This should include details of any mitigation measures required. In the case of the first criterion, no sites would be carried forward that conflict with the requirements of the Conservation of Habitats and Species Regulations 2017.

3.6 For each site, assessment at Stage 1 will include reviewing the finding of the work undertaken under the Conservation of Habitats and Species Regulations 2017 for the first criterion, and desk-based analysis using GIS for the other criteria. Sites that pass the exclusionary criteria, and sites that have been exempted will progress to Stage 2 of the assessment.

Stage 2 (constraints)

3.7 The aim of the Stage 2 constraints is to highlight any other issues that may have an adverse effect on the acceptability of a site. These will be given significant weight in the assessment and are grouped under the following headings:

a) Communities (impacts on people and sensitive business)

b) Historic environment

c) Nature conservation

d) Landscape

e) Water resources and Flood risk

f) Traffic and access

g) Agricultural land

h) Aircraft hazard

i) Physical constraints

For full details of the criteria under each heading see Appendix 2.

3.8 The assessment of sites at Stage 2 will include desk-based analysis using GIS and site visits. In addition, it will include where appropriate:

- Consultation and meetings with key stakeholders, for example the district councils; the Environment Agency; Natural England; Historic England; Highways England; in-house experts at the county council; the county council's SA consultants; and representatives of local communities

- Meetings with the proponents and industry representatives to discuss the sites puts forward in more detail.

3.9 Each site will then be initially allocated to a provisional band as set out in Table 1 below.

Table 1: Provisional site bands based on constraints

Band A	**Band B**	**Band C**	**Band D**	**Band E**
Sites subject to no more than minor constraints that need little or no mitigation	Sites subject to a small number of moderate constraints that can be addressed through standard mitigation measures.	Sites with a significant number of moderate constraints that can be addressed through standard mitigation measures.	Sites subject to a major constraint where more challenging bespoke mitigation may be required	Sites subject to a major constraint where mitigation may not be effective.

3.10 Whether a constraint is minor, moderate, or major will be a matter of judgement for each criterion. However, it will need to take into account the sensitivity and level of protection of any features, and the advice of statutory consultees and other relevant expert bodies.

Stage 3 (deliverability)

3.11 The third stage of the assessment considers whether there are any issues that might prevent the delivery of the mineral resource specified by the proponent during the plan period. It considers a number of criteria (set out in Schedule 2) grouped under the following headings:

- Ownership – including both landowners and mineral owners
- Mineral operator and competition – whether a mineral operator has been identified and whether this might affect competition in the area
- Geological data – whether bore information or other survey work has been undertaken
- Policy context and planning history – whether the site accords with the development plan and the emerging strategic policies of the updated LMWLP.

3.12 The first three criteria are important because if there is reasonable doubt that a site would be brought forward and deliver the specified reserves during the plan period, its allocation would affect the soundness of the updated plan. Proponents will therefore be required to demonstrate that agreements are place between owners and operators to ensure that sites would be available when required during the plan period.

3.13 The final criteria is also important as any sites allocated in the updated LMWLP will need to accord with its strategic policies, and should not conflict with any other strategic policies of the development plan.

3.14 Each proponent will therefore need to provide sufficient evidence that their site and its reserve can be delivered when required during the plan period. If there are any significant issues over the deliverability of a site, its provisional banding will be reduced. More minor issues will not affect the banding but will be taken into account in ranking sites within a particular band.

3.15 This part of the assessment will be based on information provided by the proponent (including any provided through subsequent discussions) together with a review of development plan documents and the emerging strategic policies of the updated LMWLP. If there are any changes to these emerging strategic policies, the site assessments may need to be reassessed.

Stage 4 (opportunities)

3.16 Stage 4 will consider any opportunities that a site may provide both whilst it is being worked and post restoration. The criteria fall under the following headings:

- Accessibility and sustainable transport, which includes the use of more sustainable means of transport and whether a site could supply aggregate for a nearby market
- Restoration and after-use, which include the creation of priority habitats, potential for water and flood management, and the provision of green infrastructure and community benefits
- Other environmental benefits, including other measures help mitigate the effects of climate change and increasing biodiversity.

3.17 This part of the assessment will take into account the details provided by the proponent (including any provided through subsequent discussions) and will include where appropriate consultation and meetings with key stakeholders, for example the district councils; the Environment Agency; Natural England; Historic England; in-house experts at the county council; the county council's SA consultants; representatives of local communities and other interest groups, including nature conservation bodies.

3.18 The weight given to any opportunities identified will depend on how significant the benefit is likely to be, and the likelihood of it being delivered. As opportunities are only positive, they will not be used for down-grading a site to a lower band. Instead, they will mainly be used for ranking sites within each provisional band. If a site offers exceptional benefits, it may result in it being moved to a higher provisional band. However, if the site is subject to a significant constraint that would only be considered with the support of the appropriate statutory consultee.

3.19 The final band to which a site is assigned will be established at the end of Stage 4 and will range from Band A (the best sites) to Band E (the worst sites which will be discounted).

Stage 5 (ranking)

3.20 Stage 5 is the final stage which will be used for the final ranking of sites within a band where only some of the sites need to be selected for allocation. This stage will take into account information from the previous stages (including mitigation measures identified) together with the findings of the Sustainability Appraisal and Flood Risk Sequential Test.

3.21 As the Sustainability Appraisal (SA) is an iterative process, there should be strong agreement between the SA and the results of this methodology. At this stage it should therefore help to fine tune the ranking of sites within a band where only some of the sites are needed.

3.22 Similarly the Flood Risk Sequential Test will be an important factor in the final selection of sites for allocation.

3.23 The sites selected for allocation in the new LMWLP will be those within the highest bands starting with Band A then moving down through the lower bands until sufficient sites have been selected to meet the proposed level of provision for sand and gravel, and crushed rock. If there are more sites than required to meet the required provision in the bands selected, the highest-ranking sites within the lowest band will be chosen to complete the provision.

Appendix 1: Mineral site nomination form

This form should be completed if you have a potential minerals site for the winning and working of aggregate that you wish to put forward for consideration in the updating of the Lincolnshire Minerals and Waste Local Plan. Please note that the county council is only seeking to allocate sites for aggregate minerals (sand and gravel, and crushed rock).

The information requested will help us to carry out an initial assessment of the site and should be submitted within the consultation period for the "Issues and Options" document.

Complete one form per site and continue on a separate sheet if necessary. More detailed information may be required for sites which are shortlisted to allow further assessment as to whether they should be included in the next stage of plan preparation. This will be the Draft Lincolnshire Minerals and Waste Local Plan (Preferred Options document), which will be subject to consultation in 2023.

Please also provide an OS based map of the site showing the following information:

- Proposed boundary of the site (edged in red)
- Other land within the same ownership edged in blue
- Adjacent areas which have already been worked, if applicable
- The likely extent of excavations
- The proposed access

The proposed methodology for assessing any sites that are nominated through the "Call for Sites Exercise" is currently subject to consultation alongside the Issues and Options document for updating the plan.

Completed forms and supporting information should be submitted by email to:

mineralsandwaste@lincolnshire.gov.uk

or by post to:

Planning Services,
Lincolnshire County Council,
County Offices,
Newland,
Lincoln LN1 1YL

How we will use your information

Lincolnshire County Council (LCC) will use the information that you supply on this form in the site selection process, and to inform the preparation of the Lincolnshire Minerals and Waste Local Plan (LMWLP) in accordance with the Planning and Compulsory Purchase Act 2004 (as amended) and the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended). Please note that any information relating to site nominations for the LMWLP may be made publicly available and therefore cannot be treated as anonymous or confidential. Your information is kept only for as long as necessary. To find out more information on how your data is processed and your rights, please see the privacy notice directory which can be accessed via our website or made available on request.

Contact information	Please provide details
Title	
Surname	
First name	
Organisation (company)	
Job title	
Address	
Post code	
Telephone	
Email	
Are you the landowner, prospective developer, or other (please specify)?	

Site information	Please provide details
Name of site	
Location (grid reference)	
Size of site (hectares)	
Current land use	
Adjoining land uses	

Land ownership and deliverability	Please provide details
Landowner(s) name and address (NB there is no need to complete this section if you are the sole landowner and the address details are the same as above)	
If you are not the landowner, please give details of your interest in the land (e.g. do you have a legal option to purchase the land?)	
Please give details of any legal restrictions on the land (e.g. covenants, leases etc.)	
Have all the landowners and mineral rights owners agreed to mineral extraction being carried out on the site?	
Are there any known constraints restricting when the land would be available for mineral extraction? If so, please give details.	
Has an agreement been made with a mineral operator to work the site? If so, please give details of the operator, and whether they have any other mineral operations in or near the county.	

Resource and operational details	Please provide details
Mineral type(s) (e.g. sand and gravel, limestone)	
Total reserve (tonnes) (approximate quantity)	
Estimated annual output	
Is there geological evidence to indicate with confidence that a mineral is present of a suitable quality and in economically workable quantities? (Please provide details of any surveys or other evidence)	
Is the site an extension to an existing mineral site or a replacement for one that will become worked out during the plan period? If so, please give details of the linked mineral site.	
What is the timescale for proposed extraction? (Approximate start date and estimated life of site)	
Will extraction occur near to or below the water table?	
How will the excavated material be transported to the plant site? Will this involve crossing a public highway?	
Would part of the site be used for any ancillary uses or operations (e.g. aggregate processing plant, concrete batching plant, asphalt plant, aggregate recycling)? Please specify.	
Please provide an indication of direct employment either created or safeguarded by the proposal?	

Access and transportation	Please provide details
How will the minerals be transported from the site and what are the likely destinations?	
Please estimate the number of commercial vehicle movements that would be generated to and from the site each week.	
Where would the access to the public highway be located, and what route would be taken to the primary road (A class roads) network?	

Restoration and after-use	Please provide details
What is the proposed after-use of the site following the cessation of working? (i.e. agriculture, forestry, nature conservation, recreation, or other - please specify) If a mixture, please indicate the percentage of each.	
Is it proposed to import waste into the site for use in the restoration? If so please specify the type of waste, an estimate of the quantity, and whether this would be for “landfill” or “recovery”.	
Please provide a brief description of the restored landform and whether it will include any water bodies.	
What biodiversity gains would the restoration be seeking to deliver?	
Would the restoration provide any green infrastructure (e.g. footpaths) or other community benefits?	

Restoration and after-use	Please provide details
If the site is likely to include best and most versatile agricultural land (grades 1, 2 and 3a), how will this be addressed in the restoration?	
If the site is located in a military or civil airfield safeguarding area, what provision would be made in the restoration to prevent the site attracting bird species that present a hazard to aircraft?	
Would the restoration provide any benefits in terms of flood water storage or the storage of water for agriculture or industry?	
Is it proposed to make provision for the long-term management of the restored site through a legal agreement? If so, please give details.	

Environmental Information	Please provide details
Are there any sensitive uses in close proximity to the proposed site (e.g. housing, schools, health, community uses)? If so, what measures would be implemented to reduce the impacts?	
If a buffer zone would be used to reduce impacts on nearby sensitive uses, please specify the proposed separation distance.	
Has a survey been undertaken to establish the agricultural grade of the land? (Please provide details)	
Has any impact on ecology been assessed? (If so, please provide details)	
Has any impact on the historic environment (including archaeology) been assessed? If so, please provide details.	

Environmental Information	Please provide details
Has any impact on groundwater and/or hydrology been assessed? (If so, please provide details)	
Have any other environmental surveys been carried out for the site? (If so, please provide details)	
Are any advance mitigation measures proposed for the site, such as landscaping works to screen the site?	
What measure for climate change adaptation and mitigation would be implemented during the operation of the site and its restoration?	

Other relevant information	Please provide details
Please specify if you hold any other information to support this nomination.	

Appendix 2: Assessment form for mineral sites (to be completed by planning officers)

Introduction

Question	Answer
Site name	
Site reference number	
Parish	
District	
OS grid reference	
Size (ha)	
Mineral type	
Production area (sand and gravel only)	
Estimated reserves	
Type of site (extension, satellite, or new) - provide details of linked Active Mineral Site if applicable	
Proposed ancillary development (including processing, secondary industry, and waste management, recovery or disposal)	
Description of site (including existing land use)	
Description of surrounding uses	
Proponent (i.e. developer, landowner or other (please specify))	

Stage 1 (exclusionary criteria)

Ref. no.	Question	Answer
1	Does the HRA indicate that the proposal could have a significant effect on a European Site (SACs, SPAs, proposed SACs, potential SPAs or Ramsar Site)?	
2	Does the site include or is it adjacent to a Site of Special Scientific Interest (SSSI)?	
3	Does the site include or is it adjacent to Ancient Woodland?	
4	Is the site located within or adjacent to the Lincolnshire Wolds Area of Outstanding Natural Beauty (AONB)?	
5	Does the site include or is it adjacent to a site or building with a nationally recognised designation (Scheduled Monuments, Conservation Areas, Listed Buildings (grade 1 and 2* and 2), Registered Historic Battlefields and Registered Parks and Gardens)?	

Stage 1: Summary and decision

Question	Answer
If the answer to any of the stage 1 criteria is “yes”, is there a reason for taking the assessment to stage 2?	
Have any mitigation measures been identified from the stage 1 Criteria?	
Should the site be taken forward for further consideration? (Yes or No)	

Stage 2 (constraints)

Communities (impacts on people and sensitive business uses)

Ref. no.	Question	Answer
6	How close is the site to the nearest sensitive receptors, existing or proposed? (including houses, schools, hospitals, sensitive business uses, public or outdoor recreation uses).	
7	Are there any nearby receptors that are particularly sensitive to noise, vibration, dust, other emissions to air, and/or light where “standard” mitigation measures may not suffice? If so have any measures been proposed, such as standoffs (buffer zones) within the site?	
8	Is the site located in or close to an existing Air Quality Management Area (AQMA)?	
9	Is the site well screened visually from the surrounding area? If not, is any advanced screen planting proposed.	
10	Would it be likely to require the stopping up or diversion of a public right of way?	
11	Would it be likely to affect the setting of a public right of way?	

Historic environment

Ref. no.	Question	Answer
12	Is the site in proximity to archaeological sites or remains?	
13	Is development at this location likely to impact on a site or building with a nationally recognised designation (Scheduled Monuments, Conservation Areas, Listed Buildings grade 1, 2* and 2, Registered Historic Battlefields and Registered Parks and Gardens) or its setting?	

Nature conservation

Ref. no.	Question	Answer
14	Does the site appear to include habitats with a high potential to harbour protected species (e.g. ponds and copses)? Have any ecological surveys been undertaken?	
15	Is the site in an Impact Risk Assessment Zone for a SSSI? If so, is mineral working included in the types of development which could potentially have adverse impacts or has a nature conservation body raised any issues?	
16	Is the site in proximity to a site of local nature conservation importance, or has a nature conservation body identified an area that might be affected? If so, what is the reason for the designation?	
17	Is the site in proximity to Ancient Woodland or does it appear to include ancient or veteran trees?	
18	Is the site in proximity to a Local Geological Site (LGS) or Regional Geological Site (RIG), or has a nature conservation body identified an area of geological or geomorphological interest that might be affected? If so, what is the reason for the designation or interest?	

Landscape

Ref. no.	Question	Answer
19	Is the site located in a position where it could impact on views of the Lincolnshire Wolds A.O.N.B?	
20	Is the site located in a prominent location that could have a significant impact on the wider landscape?	

Water resources and flood risk

Ref. no.	Question	Answer
21	Is the site located within or adjacent to a Principal Aquifer or Source Protection Zone 1 or 2?	
22	Are there likely to be impacts on the quality and quantity of groundwater?	
23	Are there likely to be other impacts on surface water drainage?	
24	Are there likely to be any impacts on nearby watercourses?	
25	Does the SFRA indicate that the site is within flood zones 2 or 3, or in an area with a history of flooding?	

Traffic and access

Ref. no.	Question	Answer
26	Have any significant issues been identified over the proposed means of access to the site.	
27	How suitable is the road network to accommodate the transportation of material from the site to market?	
28	Will there be any impacts on the public highway in transporting excavated material from the site to the processing plant?	
29	Are lorries likely to pass through settlements on their way to an A Class Road and are adverse impacts on amenity likely?	

Agricultural land

Ref. no.	Question	Answer
30	Does a significant part of the site fall in an area identified on DEFRA's 1988 agricultural land classification survey as grade 1, 2 or 3? If so, has a site survey been carried out to establish whether the land comprises best and most versatile agricultural land and have any mitigation measures been proposed?	
31	If the site is likely to include best and most versatile agricultural land have any mitigation measures been put forward.	

Aircraft hazard

Ref. no.	Question	Answer
32	Is the site within an airfield safeguarding area (bird strike zone)? If so, have any mitigation measures been put forward?	

Physical constraints

Ref. no.	Question	Answer
33	Are there any other known physical constraints on or adjacent to the site such as infrastructure (e.g. electricity, gas, or water) or the presence of railway or flood embankments?	

Constraints: summary and initial band allocation

Stage 3 (deliverability)

Ownership

Ref. no.	Question	Answer
34	Details of landowner(s) and mineral owners	
35	Are there any issues arising from the land ownerships and/or mineral ownerships that could prevent delivery of this site for working?	

Mineral operator and competition

Ref. no.	Question	Answer
36	Has the proposed mineral operator been identified for the site? (Provide details)	
37	If an operator has been identified, do they work any other quarries in or near Lincolnshire? Could this lead to a reduction in competition or give rise to sites being mothballed?	

Geological data

Ref. no.	Question	Answer
38	Has borehole data or other information on the extent and quality of the material been submitted as part of the call for sites?	

Policy context and planning history

Ref. no.	Question	Answer
39	Is the site allocated in a development plan documents for other land uses (e.g. employment, housing, recreation etc.)? If so would mineral working be compatible with the allocated use?	
40	Does the site accord with the strategic policies of the emerging LMWLP?	
41	Is there any relevant planning history of the site that should be considered?	

Deliverability: summary and reason for any downward adjustment to the band

Stage 4 (opportunities)

Accessibility and sustainable transport

Ref. no.	Question	Answer
42	Is there a navigable waterway or wharf adjacent or very close to the site? Could this be used to transport material from the site?	
43	Is there a railway line suitable for freight traffic adjacent or very close to the site? Could this be used to transport material from the site?	
44	Is the site located in an area of major new development? Would it have the potential to supply material for this development?	

Restoration and after-use

Ref. no.	Question	Answer
45	What restoration objectives have been identified for this site?	
46	Have any opportunities been identified for the creation of priority habitats?	
47	Have any opportunities been identified for the restored site to improve water management (for example, by providing water for agricultural irrigation)?	
48	Have any opportunities been identified for the restored site to provide storage capacity for flood water?	
49	Would the restoration provide any green infrastructure (e.g. footpaths) or other community benefits?	
50	Is it proposed to make provision for the long-term management of the restored site through a legal agreement?	

Other environmental benefits

Ref. no.	Question	Answer
51	Has the proponent identified any other measures that would help to mitigate the effects of climate change during the working of the site or following its restoration?	
52	Has the proponent identified any other measures that would help to increase biodiversity during the working of the site or following its restoration?	

Opportunities: summary and reason for any upward adjustments to the band

Stage 5 (summary of other assessments)

Ref. no.	Type of assessment	Summary
53	Sustainability Appraisal	
54	Sequential Test	

Mitigation measures

Question	Answer
Are there any specific mitigation measures that have been identified in the appraisal which would need to be taken into account in the allocation process (e.g. standoffs to designated features)?	

Conclusions

Overall site performance

Question	Answer
To which band has the site been allocated (Band A to Band E)?	
Should this site be taken forward for proposed allocation)?	
Date the assessment was completed	

Equality Impact Analysis to enable informed decisions

The purpose of this document is to:-

I. help decision makers fulfil their duties under the Equality Act 2010 and
II. for you to evidence the positive and adverse impacts of the proposed change on people with protected characteristics and ways to mitigate or eliminate any adverse impacts.

Using this form

This form must be updated and reviewed as your evidence on a proposal for a project/service change/policy/commissioning of a service or decommissioning of a service evolves taking into account any consultation feedback, significant changes to the proposals and data to support impacts of proposed changes. The key findings of the most up to date version of the Equality Impact Analysis must be explained in the report to the decision maker and the Equality Impact Analysis must be attached to the decision making report.

****Please make sure you read the information below so that you understand what is required under the Equality Act 2010****

Equality Act 2010

The Equality Act 2010 applies to both our workforce and our customers. Under the Equality Act 2010, decision makers are under a personal duty, to have due (that is proportionate) regard to the need to protect and promote the interests of persons with protected characteristics.

Protected characteristics

The protected characteristics under the Act are: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation.

Section 149 of the Equality Act 2010

Section 149 requires a public authority to have due regard to the need to:

- Eliminate discrimination, harassment, victimisation, and any other conduct that is prohibited by/or under the Act
- Advance equality of opportunity between persons who share relevant protected characteristics and persons who do not share those characteristics
- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The purpose of Section 149 is to get decision makers to consider the impact their decisions may or will have on those with protected characteristics and by evidencing the impacts on people with protected characteristics decision makers should be able to demonstrate 'due regard'.

Decision makers duty under the Act
Having had careful regard to the Equality Impact Analysis, and also the consultation responses, decision makers are under a personal duty to have due regard to the need to protect and promote the interests of persons with protected characteristics (see above) and to:-

(i) consider and analyse how the decision is likely to affect those with protected characteristics, in practical terms,
(ii) remove any unlawful discrimination, harassment, victimisation and other prohibited conduct,
(iii) consider whether practical steps should be taken to mitigate or avoid any adverse consequences that the decision is likely to have, for persons with protected characteristics and, indeed, to consider whether the decision should not be taken at all, in the interests of persons with protected characteristics,
(iv) consider whether steps should be taken to advance equality, foster good relations and generally promote the interests of persons with protected characteristics, either by varying the recommended decision or by taking some other decision.

Conducting an Impact Analysis

The Equality Impact Analysis is a process to identify the impact or likely impact a project, proposed service change, commissioning, decommissioning or policy will have on people with protected characteristics listed above. It should be considered at the beginning of the decision making process.

The Lead Officer responsibility
This is the person writing the report for the decision maker. It is the responsibility of the Lead Officer to make sure that the Equality Impact Analysis is robust and proportionate to the decision being taken.

Summary of findings
You must provide a clear and concise summary of the key findings of this Equality Impact Analysis in the decision making report and attach this Equality Impact Analysis to the report.

Impact – definition

An impact is an intentional or unintentional lasting consequence or significant change to people's lives brought about by an action or series of actions.

How much detail to include?
The Equality Impact Analysis should be proportionate to the impact of proposed change. In deciding this asking simple questions “Who might be affected by this decision?” "Which protected characteristics might be affected?" and “How might they be affected?” will help you consider the extent to which you already have evidence, information and data, and where there are gaps that you will need to explore. Ensure the source and date of any existing data is referenced.
You must consider both obvious and any less obvious impacts. Engaging with people with the protected characteristics will help you to identify less obvious impacts as these groups share their perspectives with you.

A given proposal may have a positive impact on one or more protected characteristics and have an adverse impact on others. You must capture these differences in this form to help decision makers to arrive at a view as to where the balance of advantage or disadvantage lies. If an adverse impact is unavoidable then it must be clearly justified and recorded as such, with an explanation as to why no steps can be taken to avoid the impact. Consequences must be included.

Proposals for more than one option If more than one option is being proposed you must ensure that the Equality Impact Analysis covers all options. Depending on the circumstances, it may be more appropriate to complete an Equality Impact Analysis for each option.

The information you provide in this form must be sufficient to allow the decision maker to fulfil their role as above. You must include the latest version of the Equality Impact Analysis with the report to the decision maker. Please be aware that the information in this form must be able to stand up to legal challenge.

Background Information

Title of the policy / project / service being considered	The Lincolnshire Minerals and Waste Local Plan: Issues and Options for updating the plan	**Person / people completing analysis**	Adrian Winkley Minerals and Waste Policy and Compliance Manager
Service Area	Planning Services	**Lead Officer**	Adrian Winkley Minerals and Waste Policy and Compliance Manager
Who is the decision maker?	The Executive	**How was the Equality Impact Analysis undertaken?**	Desk top exercise
Date of meeting when decision will be made	04/05/2022	**Version control**	Second Version (v2.0) - Initial version produced for the Review of the Lincolnshire Minerals and Waste Local Plan
Is this proposed change to an existing policy/service/project or is it new?	Existing policy/service/project	**LCC directly delivered, commissioned, re-commissioned or de-commissioned?**	Directly delivered
Describe the proposed change	The Lincolnshire Minerals and Waste Local Plan (LMWLP) forms part of the statutory development plan for the county and covers the period to 2031. It is proposed to roll the adopted LMWLP forward to 2040 and to update the policies so that they remain sound and legally compliant		

Evidencing the impacts

In this section you will explain the difference that proposed changes are likely to make on people with protected characteristics.
To help you do this first consider the impacts the proposed changes may have on people without protected characteristics before then considering the impacts the proposed changes may have on people with protected characteristics.

You must evidence here who will benefit and how they will benefit. If there are no benefits that you can identify please state 'No perceived benefit' under the relevant protected characteristic. You can add sub categories under the protected characteristics to make clear the impacts. For example under Age you may have considered the impact on 0-5 year olds or people aged 65 and over, under Race you may have considered Eastern European migrants, under Sex you may have considered specific impacts on men.

Data to support impacts of proposed changes

When considering the equality impact of a decision it is important to know who the people are that will be affected by any change.

Population data and the Joint Strategic Needs Assessment

The Lincolnshire Research Observatory (LRO) holds a range of population data by the protected characteristics. This can help put a decision into context. Visit the LRO website and its population theme page by following this link: http://www.research-lincs.org.uk If you cannot find what you are looking for, or need more information, please contact the LRO team. You will also find information about the Joint Strategic Needs Assessment on the LRO website.

Workforce profiles

You can obtain information by many of the protected characteristics for the Council's workforce and comparisons with the labour market on the Council's website. As of 1st April 2015, managers can obtain workforce profile data by the protected characteristics for their specific areas using Agresso.

Positive impacts
The proposed change may have the following positive impacts on persons with protected characteristics – If no positive impact, please state *'no positive impact'.*

Age	No positive impacts identified at this stage
Disability	No positive impacts identified at this stage
Gender reassignment	No positive impacts identified at this stage
Marriage and civil partnership	No positive impacts identified at this stage
Pregnancy and maternity	No positive impacts identified at this stage
Race	No positive impacts identified at this stage
Religion or belief	No positive impacts identified at this stage

Sex	No positive impacts identified at this stage
Sexual orientation	No positive impacts identified at this stage

If you have identified positive impacts for other groups not specifically covered by the protected characteristics in the Equality Act 2010 you can include them here if it will help the decision maker to make an informed decision.
None identified

Adverse/negative impacts
You must evidence how people with protected characteristics will be adversely impacted and any proposed mitigation to reduce or eliminate adverse impacts. An adverse impact causes disadvantage or exclusion. If such an impact is identified please state how, as far as possible, it is justified; eliminated; minimised or counter balanced by other measures.
If there are no adverse impacts that you can identify please state 'No perceived adverse impact' under the relevant protected characteristic.

Negative impacts of the proposed change and practical steps to mitigate or avoid any adverse consequences on people with protected characteristics are detailed below. If you have not identified any mitigating action to reduce an adverse impact please state *'No mitigating action identified'*.

Age	No negative impacts identified at this stage
Disability	No negative impacts identified at this stage
Gender reassignment	No negative impacts identified at this stage
Marriage and civil partnership	No negative impacts identified at this stage
Pregnancy and maternity	No negative impacts identified at this stage

Race	No negative impacts identified at this stage
Religion or belief	No negative impacts identified at this stage
Sex	No negative impacts identified at this stage
Sexual orientation	No negative impacts identified at this stage

If you have identified negative impacts for other groups not specifically covered by the protected characteristics under the Equality Act 2010 you can include them here if it will help the decision maker to make an informed decision.
None identified

Stakeholders

Stake holders are people or groups who may be directly affected (primary stakeholders) and indirectly affected (secondary stakeholders)

You must evidence here who you involved in gathering your evidence about benefits, adverse impacts and practical steps to mitigate or avoid any adverse consequences. You must be confident that any engagement was meaningful. The Community engagement team can help you to do this and you can contact them at engagement@lincolnshire.gov.uk

State clearly what (if any) consultation or engagement activity took place by stating who you involved when compiling this EIA under the protected characteristics. Include organisations you invited and organisations who attended, the date(s) they were involved and method of involvement i.e. Equality Impact Analysis workshop/email/telephone conversation/meeting/consultation. State clearly the objectives of the EIA consultation and findings from the EIA consultation under each of the protected characteristics. If you have not covered any of the protected characteristics please state the reasons why they were not consulted/engaged.

Objective(s) of the EIA consultation/engagement activity
In 2021 the Full County Council sanctioned the updating of the LMWLP, which will be carried out in several stages in accordance with the programme set out in the Lincolnshire Minerals and Waste Development Scheme 2021. Each stage will be subject to public consultation in accordance with the adopted Statement of Community Involvement (SCI). The approval of the Executive is currently being sought to undertake consultation on the first stage of this process. This is a "high level" Issues and Options consultation seeking views on what an updated LMWLP should contain. More detailed consultations on the emerging plan will take place in subsequent stages of plan preparation. The SCI seeks to ensure that all sections of the community with an interest in a particular area will be engaged during this process. In particular, it requires effort to be made to identify and engage under-represented and seldom heard groups in Lincolnshire, including those with the following protected characteristics: age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation. The SCI recognises that within a sparsely populated county such as Lincolnshire it is important to ensure the involvement of groups including rural communities suffering from isolation. Challenges encountered by the above groups range from accessibility to venues, language barriers, social differences and types of media being used. Specific organisations aimed at targeting

these groups, will be identified with assistance from the Council's Community Engagement Team for consultation purposes. Appropriate locations and a variety of media will also be employed. Comments received through the consultation procedures relating to protected characteristic will be reviewed at each stage of plan preparation.

Who was involved in the EIA consultation/engagement activity? Detail any findings identified by the protected characteristic

Age	N/A at this stage
Disability	N/A at this stage
Gender reassignment	N/A at this stage
Marriage and civil partnership	N/A at this stage
Pregnancy and maternity	N/A at this stage
Race	N/A at this stage
Religion or belief	N/A at this stage

Sex	N/A at this stage
Sexual orientation	N/A at this stage
Are you confident that everyone who should have been involved in producing this version of the Equality Impact Analysis has been involved in a meaningful way? The purpose is to make sure you have got the perspective of all the protected characteristics.	It is considered that consultation is not necessary at this stage. The Issues and Options document is the formative stage of plan development and, if approved by the Executive, will be subject to extensive publicity/consultation. This will be undertaken in accordance with the adopted Statement of Community Involvement which seeks to ensure that hard to reach groups, including those with protected characteristics, are caught by the process. The consultation will seek to establish if there are any perceived negative impacts on people with protected characteristics and whether further measures could be taken to increase any positive impacts.
Once the changes have been implemented how will you undertake evaluation of the benefits and how effective the actions to reduce adverse impacts have been?	If changes are necessary, these will be identified and evaluated at later stages of plan development.

Further Details

Are you handling personal data?	Yes Data on the Council's records will be used to undertake consultation in accordance with Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012 Any contact details provided by any respondents will be retained so that they can be contacted, if necessary, about their comments and during further consultations.

Actions required Include any actions identified in this analysis for on-going monitoring of impacts.	**Action**	**Lead officer**	**Timescale**

Version	Description	Created/amended by	Date created/amended	Approved by	Date approved
V2.0	LMWLP: Issues and Options for updating the plan	Adrian Winkley	7 March 2022	Neill McBride	9 March 2022

Examples of a Description:
'Version issued as part of procurement documentation'
'Issued following discussion with community groups'
'Issued following requirement for a service change; Issued following discussion with supplier'

This page is intentionally left blank

Open Report on behalf of Andrew Crookham, Executive Director - Resources	
Report to:	**Environment and Economy Scrutiny Committee**
Date:	**12 April 2022**
Subject:	**Environment and Economy Scrutiny Committee Work Programme**

Summary:

This item enables the Committee to consider and comment on the content of its work programme for the year to ensure that scrutiny activity is focused where it can be of greatest benefit. The work programme will be reviewed at each meeting of the Committee to ensure that its contents are still relevant and will add value to the work of the Council and partners.

Actions Required:

Members of the Committee are invited to review the work programme and highlight any additional scrutiny activity which could be included for consideration in the work programme.

1. Background

Overview and Scrutiny should be positive, constructive, independent, fair and open. The scrutiny process should be challenging, as its aim is to identify areas for improvement. Scrutiny activity should be targeted, focused and timely and include issues of corporate and local importance, where scrutiny activity can influence and add value.

All members of overview and scrutiny committees are encouraged to bring forward important items of community interest to the committee whilst recognising that not all items will be taken up depending on available resource.

Members are encouraged to highlight items that could be included for consideration in the work programme.

2. Work Programme

12 April 2022		
Item		**Contributor**
1.	**Flood and Coastal Resilience and Innovation Programme - Submission of Outline Business Case** **[Pre-decision Scrutiny]** **(Executive Councillor Decision between 15 - 29 April 2022)**	David Hickman, Head of Environment / Chris Miller, Deputy Head of Environment Matthew Harrison, Flood and Water Manager
2.	**Lincolnshire Minerals and Waste Local Plan: Issues and Options for updating the plan** **[Pre-decision Scrutiny]** **(Executive Decision on 4 May 2022)**	Adrian Winkley, Minerals and Waste Policy and Compliance Manager

24 May 2022		
Item		**Contributor**
1.	**Sustainable Transport**	Dan Clayton, Sustainability Manager - Environment
2.	**Joint presentation on Local Transport Plan focusing on the Green Agenda**	Dan Clayton, Sustainability Manager – Environment
3.	**Infrastructure Planning – 6 month Progress Update**	Vanessa Strange, Head of Infrastructure Investment

12 July 2022		
Item		**Contributor**
1.	**Service Level Performance Reporting Against the Performance Framework 2021 - 2022 – Quarter 4:** • **Economy** • **Flooding** • **Waste**	Samantha Harrison, Head of Economic Development David Hickman, Head of Environment/ Chris Miller, Deputy Head of Environment Mike Reed, Head of Waste
2.	**Theddlethorpe Geological Disposal Facility Working Group - Update**	Justin Brown, Assistant Director Growth
3.	**Adult Education and Community Engagement and Development**	Justin Brown, Assistant Director Growth Thea Croxall, Adult Learning & Skills Manager-Economic Development

13 September 2022		
Item		**Contributor**
1.	**Service Level Performance Reporting Against the Performance Framework 2022 - 2023 – Quarter 1:** • **Economy** • **Flooding** • **Waste**	Samantha Harrison, Head of Economic Development David Hickman, Head of Environment/ Chris Miller, Deputy Head of Environment Mike Reed, Head of Waste

29 November 2022		
Item		**Contributor**
1.	**Service Level Performance Reporting Against the Performance Framework 2022 - 2023 – Quarter 2:** • **Economy** • **Flooding** • **Waste**	Samantha Harrison, Head of Economic Development David Hickman, Head of Environment/ Chris Miller, Deputy Head of Environment Mike Reed, Head of Waste

Items to be Programmed

- Historic Places Team Strategy
- Verge Biomass
- Humber and East Coast Strategies
- Review of Land Sales Policy – Regeneration (County Farms)
- Skegness Business Park
- Planning White Paper
- Green Technology Grant
- Coastal Car Park Strategy
- Climate Change Impact
- Recycling and Food Waste Collection
- Property Green Agenda – potential guest presentation facilitated by Sustainability
- UK Share Prosperity Fund
- Internationalisation Strategy
- Greater Lincolnshire Nature Partnership Presentation
- Update to Paper and Card Waste Collection Project
- Study Visit Gibraltar Point

3. Conclusion

Members of the Committee are invited to review and comment on the work programme and highlight any additional scrutiny activity which could be included for consideration in the work programme.

4. Consultation

a) Risks and Impact Analysis

N/A

5. Appendices

These are listed below and attached at the back of the report	
Appendix A	Forward Plan of Decisions relating to the Environment and Economy Scrutiny Committee.

6. Background Papers

No background papers within Section 100D of the Local Government Act 1972 were used in the preparation of this report.

This report was written by Kiara Chatziioannou, Scrutiny Officer, who can be contacted on 07500 571868 or by e-mail at kiara.chatziioannou@lincolnshire.gov.uk.

APPENDIX A

Forward Plan of Decisions relating to the Environment and Economy Scrutiny Committee

MATTERS FOR DECISION	DATE OF DECISION	DECISION MAKER	PEOPLE/GROUPS CONSULTED PRIOR TO DECISION	HOW AND WHEN TO COMMENT PRIOR TO THE DECISION BEING TAKEN	KEY DECISION YES/NO	DIVISIONS AFFECTED
Flood and Coastal Resilience and Innovation Programme - Submission of Outline Business Case [I022487]	15-29 April 2022	Executive Councillor for Economic Development Environment and Planning	Environment and Economy Scrutiny Committee.	Head of Environment e-mail: david.hickman@lincolnshire.gov.uk	Yes	Louth Wolds; Market Rasen Wolds; Metheringham Rural; North Wolds
Lincolnshire Minerals and Waste Local Plan: Issues and Options for updating the plan [I025460]	4 May 2022	Executive	Environment and Economy Scrutiny Committee. Otherwise not applicable as the report will be seeking approval to undertake public consultation on an Issues and Options document.	Minerals and Waste Policy and Compliance Manager; E-mail: Adrian.winkley@lincolnshire.gov.uk	No	All Divisions

This page is intentionally left blank