

Name of meeting: Overview and Scrutiny Management

Date: 18 March 2021

Title of report: Kirklees Local Flood Risk Management - Annual Review

Purpose of report: To consider annual progress against the action plan of the Kirklees Local

Flood Risk Management Strategy (the Strategy),

| Key Decision - Is it likely to result in spending or saving £250k or more, or to have a significant effect on two or more electoral wards? | N/A |
|--|--------------------------------------|
| Key Decision - Is it in the Council's Forward Plan (key decisions and private reports)? | N/A |
| | Private Report/Private Appendix – No |
| The Decision - Is it eligible for call in by Scrutiny? | N/A |
| Date signed off by Strategic Director & name | David Shepherd |
| Is it also signed off by the Service Director for Finance? | N/A |
| Is it also signed off by the Service Director for Legal Governance and Commissioning? | N/A |
| Cabinet member portfolio | CIIr McBride |

Electoral wards affected: All

Ward councillors consulted: No consultations have been carried out

Public or private: Public

Has GDPR been considered? Yes

1. Summary

- The Council, as Lead Local Flood Authority, has a legal duty under the Flood and Water Management Act 2010 to produce, implement and monitor a Local Flood Risk Management Strategy (Local Strategy).
- £340K of Community and Business DEFRA Grant Support was provided to flood victims in 2020 following Storm Ciara/Dennis in February 2020.
- A West Yorkshire Innovative Resilience Fund bid was submitted in January 2021 for £9.8million. A successful bid will provide the necessary funding to scale up the Community and Voluntary Sector and Natural Flood Management works in Kirklees.
- Property Flood Resilience DEFRA Grant was launched in January 2021 to hopefully make 170 properties flooded due to Storm Ciara/Dennis better protected.
- Member's views on the Progress and Implementation Plan (2020/21) in delivery the Local Strategy will be helpful in directing resources towards the most appropriate priorities.
- Members view on the revision of the existing Local Strategy.

2. Information required to take a decision

The Local Strategy was refreshed in 2019 to provide an up to date evidence base to support the measures identified in the action plan. Actions completed since the 2013 Strategy, now embedded in routine processes, have been removed from the current Strategy, which now focuses on delivering 11 revised actions. The rationale behind this and details of progress against the action plan are outlined in a "**Progress and Implementation Plan (2020/21)**" included in Appendix A, which summarises the work carried out in support of the Action Plan.

The Local Strategy summarises the duties, responsibilities and actions that the Council will embrace to manage local sources of flood risk. The emphasis in the early years of the Strategy was to establish data collection systems and to carry out flood risk assessments of the highest risk areas in the district. With this work complete, or well under way.

The Flood and Water Management Act 2010 (FWMA) places a statutory duty on the Environment Agency to develop a National Flood and Coastal Erosion Risk Management Strategy for England (National Strategy). This strategy describes what needs to be done by all risk management authorities (RMAs) involved in flood and coastal erosion risk management for the benefit of people and places.

A revised National Strategy was published in July 2020 and was formally adopted by government in September 2020. Risk Management Authorities which include Kirklees must take the Strategy into account in their activities.

The themes within the National Strategy that we would consider to align within a new Local Strategy include:

- Emphasis on natured based solutions
- A greater focus on creating resilient communities
- Adaptive pathways being agile to new climate hazards
- A build-back better approach
- Extend the support to local communities
- Align incident response and recovery strategy

The FWMA requires the Council's Local Strategy must be consistent with the National Strategy. It is recommended that the Local Strategy be revised to ensure it remains consistent with the National Strategy. As part of this we would consult all risk management authorities that that maybe affected by the strategy, Members and the public. We would hope to start the process in new financial year and aim to have a new strategy adopted by 2021/22.

3. Implications for the Council

Working with People

A key part of the Strategy is and will continue to with communicates and include educating local residents. Many of the actions in the current Strategy, under the umbrella of "Community Engagement", involve information exchange with residents, businesses and ward councillors, explanation of responsibilities and encouragement of self-help to enable house-holders and business to understand, and manage, the flood risk they face.

Working with Partners

The Council will continue to work proactively with other Risk Management Authorities, including the Environment Agency and Yorkshire Water, to share information and good practice with neighbouring authorities, develop joint initiatives and provide clarity to communities on the responsibilities for the management of flood risk.

Place Based Working

The Strategy will recognise the diversity of the district and the actions identified in the Strategy pay regard to the needs of each community. The assessment tool which has been developed to prioritise the areas at higher levels of flood risk recognises local infrastructure and prioritises investment in deprived communities. The community engagement programme has been designed as a bespoke process, tailored to the requirements of a variety of communities.

Public engagement in drafting a new strategy will ensure business, community and voluntary sector can make representations and feed into shaping it.

• Climate Change and Air Quality

The Strategy, by definition, will deliver a local approach to managing the <u>impacts</u> of climate change in relation to flooding. Flood mitigation improvement schemes, funded by national flood grant, include allowances for increased rainfall from the impact of future climate change.

The Strategy will make further emphasis on the need for Natural Flood Management techniques that can store and slow water running off land in response to a rainfall to help reduce flood levels downstream. This can include tree planning. This will help to contribute to the vision set out in the Kirklees Climate Emergency

Recommendations made through the planning process for drainage provision on new development sites also "future-proof" against climate change impacts.

• Improving outcomes for children

No impact.

• Other (e.g. Legal/Financial or Human Resources)

N/A

Do you need an Integrated Impact Assessment (IIA)?

N/A

4. Consultees and their opinions

No specific consultation has been carried out on this annual report. Extensive public, member and general stakeholder consultation was carried out for the original 2013 Strategy. Proportionate levels of consultation are carried out when implementing actions in the Strategy.

5. Next steps and timelines

To continue to progress the measures in the action plan and to consider the views expressed by Overview and Scrutiny Committee.

6. Officer recommendations and reasons

Members are asked to note the progress in 2020/21 and planned actions for 2021/22 in the current Kirklees Local Flood Risk Management Strategy.

To support the review of the National Strategy and support any revisions to the existing Local Strategy in 2021/22 with a new Local Flood Risk Management Strategy implemented in 2022.

7. Cabinet Portfolio Holder's recommendations

This has been supported by the Portfolio Holder.

8. Contact officer

Rashid Mahmood, Flood Manager, Planning and Development

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9. Background Papers and History of Decisions

Original Strategy http://www.kirklees.gov.uk/beta/flooding-and-drainage/pdf/FloodRiskStrategy.pdf

10. Service Director responsible

Joanne Bartholomew, Service Director for Growth and Housing

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Appendix A

Progress and Implementation Plan 2020/21 - 21/22

The "Annual Progress and Implementation Plan"

Progress against the 32 actions in the 2013 Strategy have previously been reported annually through the Councils Overview and Scrutiny process using a "traffic light system". A substantial amount of work has been carried out over the last few years which has improved both the Councils evidence base and the local infrastructure to help manage local flood risk. Much of this work has not been reported through the annual review and it is appropriate now to highlight progress made with such initiatives. The approach, since 2019, has been to move away from rigid reporting against the action plan to summarising the work carried out in the previous year, with reference to the action plan. The annual reporting mechanism is now through this 'Annual Progress and Implementation Plan'. The plan provides more specific details on

- The current understanding of the location and extent of local flood risk
- progress against the Local Strategy objectives
- a record of works and studies carried out in the previous year, which are relevant to the Local Strategy objectives
- Working with Planning colleagues to influence planning decisions to take account of flood risk
- priorities for the forthcoming year

The Plan gives a clearer appreciation of what the council needs to do, how it intends to do it and what it has actually done.

1. Last Analysis of the Location and Size of Flood Risk in Kirklees (on a ward basis)

Note: Numerous datasets are available which provide information on flood risk and are based on high-level assumptions which may under or over-estimate flood risk in some locations. However, the table gives an overview of our current assessment of the numbers of properties at risk from rainfall events that have a 1% chance of occurring in any given year (1% AEP). The 1% AEP flood is the level of risk that the Government currently judges to be an "acceptable" level of risk.

The actual risk to individual properties can only be determined through detailed local flood studies. A significant number of additional properties are also at risk from flooding from blocked or collapsed underground drainage systems, particularly in urban areas.

Although many properties will be at risk from both river and surface water flooding, it is possible that flooding from each source could happen during different rainfall events. The "Total" numbers at the right hand side of the table provide an indication of the maximum number of properties at risk but, inevitably, includes some double-counting of properties.

| Ward | Fluvial (river) risk | | Surface Water risk | | Total at risk from both Sources | |
|-----------------------------|----------------------|------------|--------------------|------------|---------------------------------|------------|
| | Homes | Businesses | Homes | Businesses | Homes | Businesses |
| Almondbury | 130 | 6 | 251 | 13 | 381 | 19 |
| Ashbrow | 72 | 11 | 198 | 38 | 270 | 49 |
| Batley East | 9 | 54 | 237 | 94 | 246 | 148 |
| Batley West | 0 | 6 | 198 | 49 | 198 | 55 |
| Birstall and | 31 | 2 | 242 | 47 | 273 | 49 |
| Birkenshaw | | | | | | |
| Cleckheaton | 236 | 30 | 249 | 73 | 485 | 103 |
| Colne Valley | 88 | 28 | 462 | 84 | 550 | 112 |
| Crosland Moor and Netherton | 1 | 4 | 229 | 39 | 230 | 43 |
| Dalton | 651 | 172 | 347 | 81 | 998 | 253 |
| Denby Dale | 6 | 11 | 197 | 36 | 203 | 47 |
| Dewsbury East | 3 | 73 | 242 | 129 | 245 | 202 |
| Dewsbury South | 2 | 7 | 181 | 34 | 183 | 41 |
| Dewsbury West | 69 | 77 | 343 | 33 | 412 | 110 |
| Golcar | 16 | 27 | 336 | 68 | 352 | 95 |
| Greenhead | 22 | 9 | 425 | 58 | 447 | 67 |
| Heckmondwike | 52 | 18 | 279 | 35 | 331 | 53 |
| Holme Valley North | 130 | 61 | 341 | 55 | 471 | 116 |
| Holme Valley South | 42 | 38 | 304 | 73 | 346 | 111 |
| Kirkburton | 30 | 11 | 192 | 30 | 232 | 41 |
| Lindley | 0 | 0 | 197 | 10 | 197 | 10 |
| Liversedge and Gomersal | 122 | 26 | 251 | 28 | 373 | 54 |
| Mirfield | 58 | 38 | 407 | 24 | 465 | 62 |
| Newsome | 164 | 91 | 193 | 115 | 357 | 206 |
| Totals | 1934 | 800 | 6301 | 1246 | 8235 | 2046 |

2. Progress against the Actions Delivering the Objectives in the 2019 Strategy

Note: The outstanding measures from the 2013 Strategy form the basis of the action plan in the updated 2019 Strategy and are outlined below:

| Ref. | Measure | How will we measure Timescale Actions from February 2020 | | Planned Actions up to | |
|------|--|--|----------------------|---|--|
| | | success? | for the | | March 2022 |
| | | | Action | | |
| 1.1 | Assessment of High Flood Risk Locations | Complete the assessment of the highest risk locations Have a clear understanding of the type and size of flood risk at each location | Ongoing | A district-wide study of surface water flood risk locations has completed. Flood studies for Cluster 4 (Linthwaite, Cowersley, Crosland) complete. Flood Study for Cluster 5 (Lindley, Birkby, Fartown) is complete. North Mirfield (surface water) Flood Study complete | Recommended works from all area assessments to be collated into work packages that can be put forward for EA funding Review district-wide SW study and develop a programme of schemes to address issues Commence priority cluster areas 6 (Kirkheaton, Upper and Lower Hopton and Gomersal) and 7 Thornhill Lees, Thornhill, Overthorpe and Highburton |
| 1.2 | Improve Skills and Knowledge of FRM Officers | Develop a multi-skilled team Encourage knowledge transfer from technical consultants | Ongoing | New Principal Project Officer appointed with significant experience New Senior Engineer appointed to support development/delivery New Apprentice has joined the team Further training was provided to all staff | Continue with staff training and development Encourage flexibility in the team to undertake new roles |
| 2.1 | Publish and distribute information explaining responsibilities, local flood risk, property protection/ resilience etc. | Identify programme of community engagement Produce information templates Complete programme of community engagement | Ongoing (2018-23) | Community/ member engagement programme has now completed 10 of 23 wards. This included distribution of Member booklets and leaflets for residents. Kirklees Twitter Account was used during severe rain events WY Bid of £9.8m has been submitted to support community workshops/training | Continue to deliver programme, refining the process following member/public feedback 4 wards to target for 2021. Enhance flood risk management website to be established. Extend engagement to selected businesses at highest risk of flooding, if resources allow |
| 2.2 | Involve local communities in local initiatives and schemes | Develop an engagement programme which encourages | See above | £340K of financial support was given to Residents/Businesses to flood victims of Storm Ciara/Dennis | Continue to engage with local members/residents and businesses |

| | | information exchange (assets and flood incidents) with residents | | Property Flood Resilience Grant launched in January 2021. Site meetings have been taking place with businesses and residential communities in conjunction with the Environment Agency Verbal contact with key businesses of concerns to offer support | |
|-----|---|--|------------|---|---|
| 3.1 | Identify highest risk open and culverted watercourses, highway drains and other drainage/flood features | Develop a prioritisation process to rank watercourses and other drainage systems/assets Develop a program of condition surveys on high priority assets Compile a list of highest risk council- maintained drainage systems | March 2020 | Grant funded culvert improvement project into year 5 of 6 Investigation and Surveys being carried out throughout the district to enhance asset and flood risk knowledge A Debris Screen Asset Performance Study is on the programme. A list of high risk highway culverts is being established Kirklees have commenced a new initiative for a modern Asset Management System for flood and drainage asset data. | Establish and populate a highway drainage asset spreadsheet which records and ranks the highest risk assets, directing improvement budgets to the areas of highest need. Develop an assessment process which highlights surface water drainage systems which are under capacity Confirm funding and commence the Debris Screen Asset Performance Study Outsource the design work for the high risk highway culvert programme for design and costings. Review funding sources and establish a delivery programme. |
| 3.2 | Develop an affordable cyclical and reactive maintenance regime based on risk | Document the inspection/ maintenance regime for trash grilles Document the cleansing process for road gullies including performance management Document an affordable inspection/ maintenance process for significant highway culverts | March 2020 | A new 2 weekly inspection /cleansing regime has been introduced for debris screens for areas that can cause internal flooding List of Priority Gullies reported to have caused flooding have been established; Gully cleansing telemetry software has been handed to Highways Service to continue with the performance assessment | Gully telemetry data to be analysed to redesign cleansing rounds to meet need Establish a periodic low-cost inspection regime for higher priority culverts |
| 4.1 | Identify highest risk private flood defence and drainage assets | Document a process to record and risk-assess significant private drainage assets Compile a list of highest risk privately-maintained drainage systems | Oct 2020 | Some assets have been recorded Difficult to resource a planned programme of inspections | Establish a process to record private drainage assets, when resources allow |
| 4.2 | Develop technical advice for owners to guide them in | Develop standard maintenance recommendations and a template for the plan | Oct 2019 | Maintenance advice developed | Advice to be embedded within community engagement programme |

| | preparing local maintenance plans | Distribute maintenance plans to asset owners identified in Item 2.1 | | | |
|-----|--|--|------------|---|--|
| 5.1 | Develop proposals to engage with landowners to embrace land management techniques and initiatives which help to reduce the rate of surface water run-off | Support council and regional initiatives to implement NFM measures Identify local landowners in higher priority areas and offer encouragement/advice and support to help them to reduce surface water run-off. | Ongoing | Working closely with community led groups in the Holme and Colne valleys to support with council resources wherever possible. WY IRF Bid of £9.8m has been submitted to support NFM projects in Kirklees Future Landscapes Strategy has been prepared and consulted on. Feedback and comments being reviewed. | Develop longer term plans to engage with smaller landowners to share advice on implementing low-cost, high-impact NFM measures The regional Aire and Calder NFM project will deliver a method to identify the key landowners where NFM interventions will have the greatest impact |
| 6.1 | Develop and deliver a pragmatic programme of schemes and initiatives which are likely to be funded through the National Programme or Local Levy | Formulate the outputs of the studies carried out in Item 1.1 into an affordable long-term works programme Deliver the programme, optimising the use of council budgets to attract external funding | March 2020 | List of priority schemes has been established in the EA programme with a value of £30 million. | Develop the identified works in the programme into business cases that can be submitted through the grant funding process. |
| 7.1 | Embed the LFRMS into response and recovery plans and use developing knowledge on flood risk to "tune" emergency procedures | Update the Pre-Flood Operational Flood Plan to reflect highest risk locations requiring most support | Oct 2019 | The Pre-Flood Operational plan review has begun. Existing River Monitoring Stations in Kirklees that can show forecasts to be made public EA alert and flood levels and impact to be shared with Kirklees. | Use the information from Area flood risk studies and local knowledge to update the priority locations identified in the Plan |

3. Summary of Flood Management Initiatives carried out in 2020/21 to support the Strategy

Many of the actions outlined in the 2013 Strategy involved establishing new council procedures to investigate flood events, introduce more robust data collection processes and to establish the LLFA as the main point of contact for the management of local flood risk.

A number of other actions in the 2013 Strategy involved improving the council's understanding of the location and size of local flood risk and developing a programme of mitigation measures to manage the risk. Some progress has been made on these actions through a variety of studies and works which have provided information and drainage infrastructure improvements. Some projects have been opportunistic, resolving immediate issues and others have formed part of a broader programme to better understand local flood risk. The latter is part of an iterative process to, ultimately, provide interventions at a local level in an informed and prioritised way.

The initiatives carried out in the last year are detailed below:

| Initiative | Date Completed | Purpose | Cost (£,000's) | Funded by (Council or External) | Benefits |
|--------------------------------------|-------------------|---|-------------------|---------------------------------------|---|
| | | | | | |
| Property Clusters#4 | 2020 | To aggregate small clusters of issues into single projects | 20 | Local Levy | Detailed assessment of risk |
| Property Clusters#5 | 2020 | To aggregate small clusters of issues into single projects | 20 | Local Levy | Detailed assessment of risk |
| North Mirfield Viability Study | 2020 | To identify higher risk locations and mitigation options | 25 | Local Levy | Detailed assessment of risk |
| Kirklees Surface Water Study | 2020 | To identify higher risk locations and mitigation options | 42 | Council | Detailed assessment of risk |
| Community/Business Support Grant | 2020 | Provide much needed relief to residents/businesses following Storm Ciara/Dennis | 340 | Grant | To assist with recovery. |
| WY Innovative Resilience Fund Bid | 2021 | Seek funding to deliver an innovative list of flood management projects | 9800 | Grant | Provide funding to undertake natured based solutions, community and voluntary initiatives and develop integrated water management solutions in flood risk areas. |
| Culverts Project | Ongoing | Surveys and repairs to various culverts | 1500 | Flood Grant/ Council | Original culvert capacity reinstated |
| Gully Cleansing telemetry | Ongoing | To record gully cleansing operation – gully visits and gully condition | 30 | Council | Electronically recorded data can be used to better understand gully condition, gang outputs and gully round efficiency. Several cycles of data will be needed before gully rounds can be made more efficient. |
| Property Cluster#6 | Ongoing | To aggregate small clusters of issues into single projects | 20 | Local Levy | Outline assessment of risk |
| Property Cluster#7 | Ongoing | To aggregate small clusters of issues into single projects | 20 | Local Levy | Outline assessment of risk |

| PFR Grant Scheme | Ongoing | To provide £5K to make homes/communities more resilient | 1,000 | Grant | Allow homes to be more resistant and recover quicker following a flood event. |
|------------------|---------|---|-------|-------|---|
| | | | | | • |
| | | | | | |
| | | | | | |

A number of studies have been completed to understand the surface water flood risk (cause of the flooding in the areas) with outline recommendations being made. A programme of mitigation measures can now be developed to address the locations at highest risk with greatest impact. These will require further detail assessments and grant funding for these will be sought but often do not generate all the funding required.

In broad terms, the risk of flooding is such that major flood defence schemes to reduce the risk to property are likely to be unaffordable. Whilst a substantial number of residential properties in the district are at risk from river flooding, and a significant amount of historic industrial buildings lie adjacent to the river, the funding formula for the national Flood Grant in Aid programme is such that it won't generate significant amounts of grant funding to make such schemes affordable.

Funding opportunities are regularly considered and developed where resources permit as alternative funding means to bridge funding gaps or to act as standalone initiatives. A West Yorkshire wide Innovative Resilience Fund bid was made for £9.8 million to look at proving innovative ways to make resilient places. The bid focussed on a few key areas within Kirklees these included Natured Based Solutions, Community and Voluntary Sector Action and Integrated Water Management Systems.

Natural Flood Management is key part of the solution to flood risk management and compliments wider Council and partner organisations priorities. Hence, the approach being taken is done on a catchment wide baisis using a multi-agency approach to gain multiple benefits such as flood risk mitigation, supporting biodiversity, carbon sequestration, impact on Climate Change. The key partners include Environment Agency, White Rose Forest (covering West Yorkshire and North Yorkshire) and Our Future Landscapes Partnership (covering the Holme and Colne catchments).

Improved management of the Councils own drainage systems (culverted watercourses and highway drainage) has continued to make optimum use of limited budgets. As part this priority gullies list has been established that records indicate have historically resulted in property flooding and in high risk areas.

4. Priorities for 2021/22

Much of the groundwork to establish information, assessment and performance management processes has been completed and future work will concentrate on making best use of our greater knowledge base. Local priorities have moved towards establishing programmes of capacity improvement and targeted maintenance of drainage assets, developing the role of Statutory Consultee to Planning and maximising external funding to support the Council's limited budgets. National priorities and policies for flood risk management are developing with an emphasis on managing flooding at source (natural flood management), ensuring that new developments minimise flood risk and that current climate change predictions are factored into hydraulic assessments.

The main priorities for 2021/22 are therefore:

- Review the Council's Flood Risk Management Strategy following the release of the National Strategy and Policy
- Review the Pre-Flood Operational Plan and Sandbag Policy
- Increase our efforts in S19 Investigations subject to resources
- Complete the high-level area flood risk assessment programme to help understand the location and size of flood risk in our highest risk areas
- Investigate the potential for drainage capacity improvement to address surface water flood risk, optimising the effectiveness of the Council's own operational activities in both improvement and maintenance programmes
- Continue with our engagement/information-sharing programme with local ward members and at-risk communities
- Establish a new geotechnical consultancy framework for technical advice on geotechnical engineering matters
- Continue planning compliance efforts on recent development sites in flood risk areas.
- Support regional initiatives around developing discussions with major landowners on land management practices which minimise surface water run-off