

Appendix B

Progress and Implementation Plan 2019/20 – March 2020

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. Latest 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 Birkenshaw	31	2	242	47	273	49
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
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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 success?	Timescale for the Action	Progress from February 2019	Planned Activities up to March 2021
1.1	Assessment of High Flood Risk Locations	<ul style="list-style-type: none"> Complete the assessment of the highest risk locations Have a clear understanding of the type and size of flood risk at each location 	Ongoing	<ul style="list-style-type: none"> Assessments at Marsden, Milnsbridge/Golcar, Linthwaite, Birkby and Nth Mirfield have been completed. A district-wide study of surface water flood risk locations is in progress. 	<ul style="list-style-type: none"> Recommended works from all area assessments to be collated into work packages that can be put forward for EA funding Complete the district-wide SW study and develop a programme of schemes to address issues
1.2	Improve Skills and Knowledge of FRM Officers	<ul style="list-style-type: none"> Develop a multi-skilled team Encourage knowledge transfer from technical consultants 	Ongoing	<ul style="list-style-type: none"> Graduate engineer continuing to develop experience External technical consultant providing support on planning advice Local undergraduate working on a summer placement 	<ul style="list-style-type: none"> Additional senior officer to be recruited to the team
2.1	Publish and distribute information explaining responsibilities, local flood risk, property protection/ resilience etc.	<ul style="list-style-type: none"> Identify programme of community engagement Produce information templates Complete programme of community engagement 	Ongoing (2018-21)	<ul style="list-style-type: none"> 1st year of community/ member engagement programme completed with 5 of 23 wards completed and 3 in progress 	<ul style="list-style-type: none"> Continue to deliver programme, refining the process following member/public feedback Extend engagement to selected businesses at highest risk of flooding, if resources allow
2.2	Involve local communities in local initiatives and schemes	<ul style="list-style-type: none"> Develop an engagement programme which encourages information exchange (assets and flood incidents) with residents 	See above	<ul style="list-style-type: none"> Information distributed during community engagement process encourages residents to share information with the council 	<ul style="list-style-type: none"> Continue to engage with local members/residents and businesses
3.1	Identify highest risk open and culverted watercourses, highway drains and other drainage/flood features	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> EA-funded culvert improvement project into year 4 of 6 Ad hoc capacity improvement recommendations arising from area flood risk studies Comprehensive drainage survey carried out at Manchester Rd, 	<ul style="list-style-type: none"> 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

				Slaithwaite	which highlights surface water drainage systems which are under capacity <ul style="list-style-type: none"> • Bid for EA funding to address surface water flood risk
3.2	Develop an affordable cyclical and reactive maintenance regime based on risk	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Trash grille maintenance regime in place • Gully cleansing telemetry software procured, In use and condition data being collected • Gully cleansing performance monitoring measures in place 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Document a process to record and risk-assess significant private drainage assets • Compile a list of highest risk privately-maintained drainage systems 	Oct 2020	<ul style="list-style-type: none"> • Some assets have been recorded and advice on maintenance offered through the community engagement programme • Difficult to resource a planned programme of inspections 	<ul style="list-style-type: none"> • Establish a process to record private drainage assets, when resources allow
4.2	Develop technical advice for owners to guide them in preparing local maintenance plans	<ul style="list-style-type: none"> • Develop standard maintenance recommendations and a template for the plan • Distribute maintenance plans to asset owners identified in Item 2.1 	Oct 2019	<ul style="list-style-type: none"> • Maintenance advice developed 	<ul style="list-style-type: none"> • Advice to be embedded within community engagement programme
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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • The council is a key regional player in developing plans to manage surface water at source in the undeveloped upper catchments eg Wessenden NFM • Working closely with community led groups in the Holme and Colne valleys to support with council resources wherever possible. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • All of the high-priority area flood risk studies have been completed • District-wide surface water study in progress 	<ul style="list-style-type: none"> • Develop the identified works in the studies into a project(s) that can be submitted through the EA funding process
7.1	Embed the LFRMS into response and recovery plans and use developing knowledge on flood risk to “tune” emergency procedures	<ul style="list-style-type: none"> • Update the Operational Flood Plan to reflect highest risk locations requiring most support 	Oct 2019	<ul style="list-style-type: none"> • The Plan has been in place for 18 months and has been tested with both low-level real events and a practice event 	<ul style="list-style-type: none"> • Use the information from Area flood risk studies to update the priority locations identified in the Plan

3. Summary of Flood Management Initiatives carried out in 2019/20 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
Challenge Fund – Drainage Resilience	October 2019	Highway drainage improvement at high risk locations	600	DfT	Highway drainage capacity improvement works
Culverts Project	Ongoing	Surveys and repairs to various culverts	1500	Flood Grant/ Council	Original culvert capacity reinstated
Marsden Viability Study	September 2019	To identify higher risk locations and mitigation options	15	Local Levy	Detailed assessment of risk
Milnsbridge Viability Study	September 2019	To identify higher risk locations and mitigation options	15	Local Levy	Detailed assessment of risk
Property Clusters#4	Ongoing	To aggregate small clusters of issues into single projects	20	Local Levy	Detailed assessment of risk
Property Clusters#5	Ongoing	To aggregate small clusters of issues into single projects	20	Local Levy	Detailed assessment of risk
North Mirfield Viability Study	Ongoing	To identify higher risk locations and mitigation options	25	Local Levy	Detailed assessment of risk
Kirklees Surface Water Study	Ongoing	To identify higher risk locations and mitigation options	42	Council	Detailed assessment of risk
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.

The programme of local, area studies is now complete. Some early studies were opportunistic but most have been initiated by the Flood Risk Prioritisation tool. The location and size of flood risk is now better understood and a programme of mitigation measures can now be developed to address the locations at highest risk with greatest impact.

In broad terms, the risk of flooding from fluvial sources (the main river network, including the Colne, Holme, Calder, Spen, Dearne and Batley Beck) 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.

The focus for the 5 year period of this LFRMS will be to address surface water flood risk, including refining the LLFA's role as a Statutory Consultee to Planning, identifying opportunities for Natural Flood Management and developing a programme of works which mitigate surface water risk from residential property which could be funded from Flood Grant/Local Levy programmes. Improved management of the Councils own drainage systems (culverted watercourses and highway drainage) will also be prioritised to make optimum use of limited budgets.

4. Priorities for 2020/21

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 2020/21 are therefore:

- 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
- Support the planning department with technical advice on surface water drainage for new development sites.
- Review planning compliance on recent development sites in flood risk areas.
- Support Highways service in performance management of the highway drainage asset, particularly through improvement of the gully cleansing operation.
- Support regional initiatives around developing discussions with major landowners on land management practices which minimise surface water run-off