



Hampshire Local Flood Risk Management Strategy

Document 3 – Action Plan

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1 Introduction

1.1 The action plan

- 1.1.1.1 As a Lead Local Flood Authority, Hampshire County Council has a number of statutory duties to address local flood risk under the Flood and Water Management Act (2010). The production of a Local Flood Risk Management Strategy (LFRMS) is one of these duties.
- 1.1.1.2 Hampshire County Council have developed the LFRMS as suite of documents and assessments that combine to provide the overall strategic direction of local flood risk management in Hampshire.
- 1.1.1.3 This action plan is one of the documents making up the Strategy, it sets out both county wide measures and ward specific actions which may be pursued to mitigate and reduce the identified risk in high risk wards.
- 1.1.1.4 While an SEA and HRA was undertaken as part of the LFRMS there is considerable uncertainty involved in strategic assessments at this level.. It is therefore important that before the development of any measures and actions undertaken as part of the Strategy that further more detailed studies are undertaken at a project level to assess the potential environmental and social impacts (including to internationally important sites) and identify any mitigation or enhancement opportunities. Such assessments should be included as part of the environmental assessments of SWMPs and the GWSMP as well as Environmental Impact Assessments if necessary. It would be wise to undertake such assessments at an early stage to prevent any implementation delays or additional costs (associated with abortive work or additional avoidance and mitigation activities).

1.2 Measures to achieve our objectives

- 1.2.1.1 It will not be possible to deliver all potential flood risk management measures within the first action plan. Therefore we have taken a proportionate approach to focus effort and investment to deliver actions where they will be most effective. Some measures will be most effective where they are developed over the long term and delivered across the whole county. For example, policy or education measures work best at this scale. Some measures however are location specific and will work best when delivered at a ward, community or parish scale.
- 1.2.1.2 Table 1 below describes the general, long term or policy measures that we have put in place to achieve our objectives. There are number of measures already being delivered that will reduce or manage flood risk, and these have been included in Table 1.

- 1.2.1.3 In addition to the general measures in Table 1, we have developed ward specific action plans for those wards that are subject to the highest risk from local flooding. These are detailed in Section 1.2

Table 1 Measures planned to achieve our objectives

Objectives	HCC Actions to deliver the objective
<p>Improve our knowledge and understanding of local flood risk in Hampshire</p>	<p>This Strategy provides clear explanation of the types of local flooding and who is responsible for local flooding. It includes an annex which details what to do in a flood, and how to prepare for a flood.</p> <p>It includes a ward risk assessment that provides a solid evidence base for prioritising future activities.</p> <p>The County Council has developed the first phase of its flood register, and has developed a reporting and investigation procedure that will ensure future incidents improve the understanding of flooding.</p> <p>The County Council will ensure that the public is aware of this register and procedure through our public consultation and awareness events.</p> <p>The County Council is developing a consistent approach to the recording and designation of structures.</p> <p>During the biannual update of the action plans, Hampshire County Council will seek up to date flood incident information from the RMAs and use this data to ensure the HCC flood incident database is up to date. Where data is not available at the detail or resolution required, the County Council will work with all RMAs to advise them of the duty to cooperate. Specifically, the County Council will work with the LRF, water companies, and Fire and Rescue Service to find a way to align their reporting databases with the County Council’s to ensure data compatibility.</p> <p>The County Council will hold an annual public event on the issues of local flooding.</p> <p>Hampshire County Council is developing its highways drainage asset database to ensure it is up to date, fully mapped and made available to contractors through consultation with the Highways Authority – this will help prevent damage to existing drainage infrastructure when works are undertaken by 3rd parties.</p> <p>A programme of surface water management plans for each district in Hampshire in being undertaken, with all SWMPs being completed in 2015. Each SWMP will identify issues at a local district level, allowing district authorities and communities to identify problems and empower them to take action.</p>
<p>Work in partnership with other flood risk management authorities (RMAs) to deliver the Strategy and LFRMS Action Plan</p>	<p>All RMAs are part of the LFRMS steering group, and also are represented on the strategic group that provides oversight and scrutiny of this Strategy. The Strategy has been developed through a series of workshops with the RMAs, and with the support of the Regional Flood and Coastal Committees. Hampshire County Council will continue to facilitate the Hampshire Strategic Flood and Water Management Group</p> <p>Hampshire County Council is working with the Fire and Rescue Service to ensure that flood resilience is a routine part of the services community resilience outreach work.</p>

Objectives	HCC Actions to deliver the objective
	<p>As part of Hampshire County Council’s role as LLFA it is taking an overview for all forms of flooding in Hampshire, not just local flooding. HCC is currently delivering a number of partnership projects with RMAs and a number of other authorities to understand and manage the risks from coastal erosion and flooding.</p> <p>The LLFA will undertake investigations of significant flooding events following the procedure set out in Annex J, and will share investigation reports with other RMAs and with the public.</p>
<p>Maintain, and improve where necessary, local flood risk management infrastructure and systems to reduce risk</p>	<p>The County Council provides guidance and administers a new process for consenting of new structures and maintenance of existing structures where they have an impact on flood risk (or ordinary watercourses)..</p> <p>Hampshire County Council will develop a risk based approach to the maintenance of assets based on the risk assessment undertaken by the Strategy and through the process of preparing the Register and Record as required by the FWMA</p> <p>Hampshire County Council will maintain a database of assets so that responsibility can be established in the case of a problem or a failure to maintain</p> <p>Hampshire County Council will work closely with the Environment Agency to take a proactive role in making riparian owners and public bodies aware of their responsibilities around maintaining drainage infrastructure</p> <p>Hampshire County Council will develop a prioritised asset maintenance plan to ensure that we actively manage our assets to reduce the risk of local flooding.</p> <p>Hampshire County Council are piloting or leading a number of initiatives that will enable local communities to manage and improve infrastructure and systems:</p> <ul style="list-style-type: none"> • Parish Lengthsman scheme, delivered through the Hampshire Total Environment Initiative. • Local Flood resilience planning and supporting local implementation. Hampshire County Council have a call of contract with Community Action Hampshire and Groundwork Solent, requiring the two organisations to undertake local flood resilience planning and support practical implementation of schemes by the local community.
<p>Ensure that local planning authorities take full account of flood risk when allocating land and considering permitting development (by avoiding development in inappropriate locations and minimising flood risk wherever possible)</p>	<p>Hampshire County Council is working with Districts/Boroughs to prepare SuDS guidance and developing its SAB procedures that will ensure that new development will not increase runoff entering water bodies.</p> <p>Hampshire County Council expects to have a statutory duty to approve all flood risk assessment and drainage strategies for new developments when the SAB duty enacted in the Flood and Water Management Act is commenced (scheduled for April 2014).</p> <p>The County Council will ensure that planning authorities are made aware of the risk of local flooding, and will</p>

Objectives	HCC Actions to deliver the objective
	<p>recommend that district and borough councils develop policies that ensure that the type and quantity of development is commensurate with the risk of flooding as determined through this Strategy.</p> <p>Hampshire County Council, as the Minerals and Waste Authority are a statutory consultee on planning applications, and will review significant planning applications in areas of high risk to advise the planning authority where the development is inappropriate or unacceptable with respect to local flood risk policies.</p>
<p>Engage with local communities to increase public awareness and reporting of flooding and promote appropriate individual and community level planning and action</p> <p>Improve and support community level flood response and recovery</p>	<p>The Strategy LFRMS Action Plan identifies where risk management authorities will work with local communities in the highest risk areas to promote local capital schemes to reduce the risk of flooding</p> <p>Hampshire County Council will engage with local communities, parish councils and businesses across the risk envelope to encourage and support them to take appropriate local action to prepare for flooding. This will include encouraging the preparation of local emergency plans and community flood plans in high risk areas.</p> <p>Hampshire County Council will use the media interest created during high profile flood events to remind people of their routes for reporting lower impact flooding and why it is important to do so.</p> <p>The risk management authorities will support the formation of local flood action groups where they do not already exist in the highest risk areas</p> <p>Hampshire County Council officers will meet regularly with District Authority Community Planning Officers to discuss key issues emerging from community or neighbourhood plans.</p> <p>The mailbox opened to allow public consultation on this Strategy will remain open to allow people to continue to report flooding through this means.</p>
<p>Identify national, regional and local funding mechanisms to deliver flood risk management interventions.</p>	<p>The Strategy has developed a funding strategy and funding guidance that identifies the primary sources of local flood risk management funding. The Strategy also identifies how to maximise other non flood related outputs to secure contributions from other secondary sources of funding.</p> <p>Hampshire County Council is working with the Environment Agency to develop a shared budget and procurement process to implement joint flood risk mitigation schemes.</p> <p>Hampshire County Council is working with the Association of British Insurers to develop a property resilience grant to support and help implement local flood protection action for individual properties.</p>

Objectives	HCC Actions to deliver the objective
Develop strategy, policy and a LFRMS Action Plan to manage these risks, providing balanced social and environmental benefits for the economic investment	The Strategy has developed an LFRMS Action Plan that is based on a detailed assessment of risk from local sources of flooding and considers river and coastal flooding. The LFRMS Action Plan detail is commensurate with the level of risk and the cost of flooding. The actions and measures to reduce risk have been tested through the SEA scoping process to ensure that where possible they achieve multiple benefits and maximise opportunities to deliver social and environmental benefits.

1.3 Ward specific action plans

- 1.3.1.1 We have used the outputs of the risk assessment (Annex D) to rank the wards, 1 being the ward with the highest risk of local flooding. Table 4.7 in the main technical report lists the wards identified with the highest ranked combined risk of flooding and identified for each individual data source.
- 1.3.1.2 Twenty two ward specific action plans have been produced; this represents almost 10% of wards with the highest ranked risk. The wards with the top 20 highest combined risk have been produced. These include the five wards with the highest 'combined' risk of flooding, five wards with the highest groundwater only flood risk, the five wards with the highest ranked risk calculated from the Environment Agency Flood Map for Surface Water. In addition, we have produced action plans for the three wards with the highest ranked risk according to the HCC¹ dataset, although these do not fall within the top twenty combined risk.
- 1.3.1.3 It should be noted that the ranking of wards and therefore production of ward action plans is based on a high level assessment and therefore this process does not preclude works being undertaken in other areas.
- 1.3.1.4 Section 2 of this document details these ward specific action plans

1.4 Ward summary

- 1.4.1.1 Table 2 below shows the full ward ranking, and identifies the actions required to manage risk. Where these risks are not directly within Hampshire County Council's control, we have identified the third party responsible for the actions.

Table 2 key

1	A red colour indicates that the ward is within the top 5 wards for the cost of impact from this type of flooding. The number indicates the actual rank.
17	A yellow colour indicates that the ward is within the top 6 - 20 wards for the cost of impact from this type of flooding. The number indicates the actual rank.
34	A green colour indicates that the ward is within the top 21 - 50 wards for the cost of impact from this type of flooding. The number indicates the actual rank.
*	Indicates concurrent coastal and fluvial flood risk

¹ The annualised costs of flooding for the ward ranked 3 in the HCC database is £17.5k. The ward with the same annualised impact in terms of modelled EA surface water flooding is ranked 162, and the equivalent ward in terms of groundwater flooding is ranked 18. Therefore because of the smaller relative cost of HCC reported incidents, only three wards were selected for ward specific action plans.

Table 2: Ranking of wards by local flood risk and measures identified to manage the risk.

Ward	Rank					Overall ranking	Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank		
Droxford, Soberton and Hambledon	1	1	62	67	Hambleton 18	Highest	See specific action plan
Fareham East	2	2	62	137	Wallington 25, South Fareham 34	Highest	See specific action plan
Penton Bellinger	3	12	17	6	Appleshaw 61, Thruxton 52, Kimpton 79	Highest	See specific action plan
St Mary's	4	56	34	1	Andover 21	Highest	See specific action plan
Popley East	5	56	62	2	Chineham 33	Highest	See specific action plan
Upper Meon Valley	6	3	62	74		High	See specific action plan
Eastrop	7	56	34	3		High	See specific action plan
Ashurst, Copythorne South and Netley Marsh	8	6	12	52	Just to the East of Totton 8	High	See specific action plan
Highclere and Bourne	9	25	61	7	St Mary Bourne 21, Stoke 71	High	See specific action plan
Brookvale and Kings Furlong	10	56	62	4		High	See specific action plan
Abbey	11	7	4	49	Romsey (part of) 7	High	See specific action plan
Hart Plain	12	45	62	5		High	See specific action plan
Basing	13	56	13	11		High	See specific action plan
Cowplain	14	56	27	8		High	See specific action plan
Clanfield and Finchdean	15	7	62	41	Finchdean and rowlands castle (part of) 78	High	See specific action plan
Battins	16	4	62	83	East Havant 14	High	See specific action plan
Cheriton and Bishops Sutton	17	5	62	75	Cheriton 56	High	See specific action plan

Ward	Rank					Overall ranking	Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank		
Aldershot Park	18	56	62	9		High	See specific action plan
Waterloo	19	56	62	10		High	See specific action plan
Buckskin	20	56	26	14		High	See specific action plan
Broughton and Stockbridge	21	15	62	27	Stockbridge 63	Moderate	Being assessed in GWSWMP
Tadley North	22	56	1	140	Tadley 46	Moderate	See specific action plan
Fleet Pondtail	23	56	34	12	Fleet 3	Moderate	N - HCC measures delivered
Fleet West	24	56	34	13	Fleet 3	Moderate	N - HCC measures delivered
Oakley and North Waltham	25	45	18	20		Moderate	Being assessed in Basingstoke SWMP
Cherrywood	26	56	62	15		Moderate	Being assessed in Rushmoor SWMP
South Ham	27	56	34	17		Moderate	Being assessed in Basingstoke SWMP
Fleet North	28	56	62	16		Moderate	Being assessed in Rushmoor SWMP
Upton Grey and The Candovers	29	13	34	53		Moderate	Being assessed in GWSWMP
St Barnabas	30	56	62	18		Moderate	Monitor and communicate risk - moderate risk status indicated primarily from modelling
Rowlands Castle	31	7	62	123		Moderate	Being assessed in GWSWMP
Purbrook	32	56	27	22		Moderate	Monitor: third party responsibility
Bourne Valley	33	18	62	46		Moderate	Being assessed in GWSWMP
Bishops Waltham	34	21	62	39		Moderate	Monitor and communicate risk
Fernhill NE	35	56	62	19		Moderate	Being assessed in Rushmoor SWMP
Bramshott and Liphook	36	56	62	21		Moderate	Monitor and communicate risk
Wickham	37	11	34	146		Moderate	Being assessed in GWSWMP
Knellwood	38	56	62	23		Moderate	Being assessed in Rushmoor SWMP
Fareham North	39	56	62	24		Moderate	Monitor and communicate risk - moderate risk status indicated primarily from modelling

Ward	Rank					Overall ranking	Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank		
Chandler's Ford East	40	45	62	26		Moderate	Being assessed in Eastleigh SWMP
Kings Worthy	41	13	62	82		Moderate	Being assessed in GWSWMP
St Michael	42	56	62	25		Moderate	Monitor and communicate risk - moderate risk status indicated primarily from modelling
St Faith's	43	56	14	47		Moderate	Monitor
Alamein	44	56	62	28		Moderate	Monitor and communicate risk - moderate risk status indicated primarily from modelling
Blackwater and Hawley	45	56	27	38		Moderate	Monitor: 3rd party responsibility
Liss	46	56	62	29		Moderate	Monitor and communicate risk - moderate risk status indicated primarily from modelling
Kings Somborne and Michelmersh	47	21	62	54		Moderate	Monitor: GW
Emsworth	48	35	20	60		Moderate	Monitor: combined sources
Alton Westbrooke	49	56	62	30		Moderate	Monitor and communicate risk - moderate risk status indicated primarily from modelling
Brighton Hill North	50	56	62	31		Moderate	Being assessed in Basingstoke SWMP
Manor Park	51	56	62	32		Low	Being assessed in Rushmoor SWMP
Brighton Hill South	52	56	62	33		Low	Being assessed in Basingstoke SWMP
Fleet Courtmoor	53	56	34	35		Low	LLFA liaison role: third party responsibility - Thames Water.
Fair Oak and Horton Heath	54	56	4	62		Low	Being assessed in Eastleigh SWMP
Lymington Town	55	25	4	110		Low	Combined tidal and surface water impacts. Monitor and communicate risk as overall risk is low

Ward	Rank						Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank	Overall ranking	
Portchester East	56	56	62	34		Low	Monitor and communicate risk - moderate risk status indicated primarily from modelling
Crandall	57	56	34	43		Low	Small scale capital solution on 3rd party land identified but not costed.
Hartley Witney	58	56	34	44		Low	Small capital scheme in progress. Monitor progress and performance
Eastleigh North	59	56	4	70		Low	Being assessed in Eastleigh SWMP
Whitchurch	60	56	62	36		Low	Being assessed in Basingstoke SWMP
Downlands and Forest	61	56	62	37		Low	Monitor and communicate risk - low risk status indicated primarily from modelling
St Bartholomew	62	21	62	71		Low	Monitor: Moderate GW risk
Colden Common and Twyford	63	15	62	103		Low	Being assessed in GWSWMP
Norden	64	56	62	40		Low	Being assessed in Basingstoke SWMP
Hedge End St John's	65	56	27	48		Low	Being assessed in Eastleigh SWMP
Westheath	66	56	62	42		Low	Being assessed in Rushmoor SWMP
Fleet Central	67	56	4	78		Low	Investigate: Combined fluvial and surface water flood cause. Capital scheme unlikely to be feasible, therefore consider property level protection. However, risk overall is low.
Wellington	68	56	62	45		Low	Being assessed in Rushmoor SWMP
Bedhampton	69	56	27	50		Low	

Ward	Rank					Overall ranking	Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank		
The Alresfords	70	18	62	93		Low	Being assessed in GWSWMP
Stakes	71	25	62	69		Low	
Hiltingbury West	72	56	4	97		Low	Being assessed in Eastleigh SWMP
Bishopstoke East	73	56	14	89		Low	Being assessed in Eastleigh SWMP
Wonston and Micheldever	74	25	62	90		Low	
Dun Valley	75	25	34	99		Low	
Town	76	7	62	244		Low	Being assessed in GWSWMP
Overton, Laverstoke and Steventon	77	56	62	51		Low	Being assessed in Basingstoke SWMP
Barncroft	78	56	34	61		Low	
Alton Whitedown	79	56	20	77		Low	
Winton	80	56	62	55		Low	
Itchen Valley	81	18	62	119		Low	Being assessed in GWSWMP
Chandler's Ford West	82	56	62	56		Low	Being assessed in Eastleigh SWMP
Holybourne and Froyle	83	56	62	57		Low	
Hook	84	56	34	66		Low	
Fordingbridge	85	56	62	58		Low	
Anna	86	56	62	59		Low	
Totton East	87	15	3	231	Totton	Low	See specific action plan
Alton Ashdell	88	56	62	63		Low	
Netley Abbey	89	56	62	64		Low	
St John and All Saints	90	56	62	65		Low	
Empress	91	56	20	94		Low	Being assessed in Rushmoor SWMP
Downland	92	56	62	68		Low	
Compton and Otterbourne	93	25	62	112		Low	
St Paul	94	56	62	72		Low	
St Mark's	95	56	62	73		Low	Being assessed in Rushmoor SWMP
Odiham	96	56	62	76		Low	
Eversley	97	56	2	169	Eversley, Eversley Cross	Low	See specific action plan
Kempshott	98	56	62	79		Low	Being assessed in Basingstoke SWMP
Ringwood South	99	56	62	80		Low	
Yateley North	100	56	62	81		Low	
Chineham	101	56	27	100		Low	Being assessed in Basingstoke SWMP

Ward	Rank						Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank	Overall ranking	
Fareham South	102	56	62	84		Low	
Petersfield St Peters	103	56	62	85		Low	
Warren Park	104	56	62	86		Low	
Portchester West	105	56	62	87		Low	
Brockenhurst and Forest South East	106	35	62	118		Low	
Hythe West and Langdown	107	40	62	109		Low	
Winklebury	108	56	62	88		Low	Being assessed in Basingstoke SWMP
Yateley East	109	56	20	113		Low	
Eastleigh South	110	35	62	121		Low	Being assessed in Eastleigh SWMP
Tadley South	111	56	62	91		Low	Being assessed in Basingstoke SWMP
St Luke	112	56	62	92		Low	
Totton North	113	56	34	105		Low	
Popley West	114	56	62	95		Low	Being assessed in Basingstoke SWMP
North Baddesley	115	56	62	96		Low	
Frogmore and Darby Green	116	35	20	165		Low	
Headley	117	56	62	98		Low	
Kingsclere	118	56	62	101		Low	Being assessed in Basingstoke SWMP
Horndean Catherington and Lovedean	119	56	62	102		Low	
Barton	120	56	62	104		Low	
Milton	121	56	62	106		Low	
Milford	122	25	62	153		Low	
Church Crookham West	123	56	62	107		Low	
North Town	124	56	62	108		Low	Being assessed in Rushmoor SWMP
Blackwater	125	40	62	133		Low	
Ropley and Tisted	126	56	34	117		Low	
Rowhill	127	56	62	111		Low	Being assessed in Rushmoor SWMP
Lyndhurst	128	56	4	180		Low	Investigate: regular maintenance required. Capital scheme to increase capacity proposed locally.
Denmead	129	45	62	129		Low	

Ward	Rank						Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank	Overall ranking	
Holbury and North Blackfield	130	56	62	114		Low	
Harewood	131	56	62	115		Low	
West End North	132	56	34	130		Low	Being assessed in Eastleigh SWMP
Grove	133	56	62	116		Low	Being assessed in Basingstoke SWMP
Swanmore and Newtown	134	45	34	141		Low	
Sherborne St John	135	56	62	120		Low	Being assessed in Basingstoke SWMP
Titchfield	136	21	62	186		Low	
Horndean Hazleton and Blendworth	137	56	62	122		Low	
Bransgore and Burley	138	45	34	147		Low	
Totton Central	139	56	19	155		Low	
Warsash	140	56	62	124		Low	
Hatch Warren and Beggarwood	141	56	62	125		Low	Being assessed in Basingstoke SWMP
Dibden and Hythe East	142	56	62	126		Low	
Sarisbury	143	56	62	127		Low	
Horndean Kings	144	56	62	128		Low	
Alton Eastbrooke	145	56	62	131		Low	
Calleva	146	56	62	132		Low	Being assessed in Basingstoke SWMP
Owslebury and Curdrige	147	40	62	158		Low	
Fareham North-West	148	56	62	134		Low	
Forest North West	149	56	62	135		Low	
East Meon	150	56	62	136		Low	
Boldre and Sway	151	25	62	191		Low	
Whitehill Deadwater	152	56	62	138		Low	
Petersfield Bell Hill	153	56	62	139		Low	
Ampfield and Braishfield	154	35	62	178		Low	
Alton Wooteys	155	56	34	152		Low	
Over Wallop	156	56	62	142		Low	
Bondfields	157	56	16	189		Low	

Ward	Rank					Overall ranking	Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank		
Littleton and Harestock	158	25	62	196		Low	
Bishopstoke West	159	56	62	143		Low	Being assessed in Eastleigh SWMP
St John's	160	56	62	144		Low	Being assessed in Rushmoor SWMP
Four Marks and Medstead	161	56	62	145		Low	
Cove and Southwood	162	56	62	148		Low	Being assessed in Rushmoor SWMP
Bramshaw, Copythorne North and Minstead	163	45	34	173		Low	
Froxfield and Steep	164	56	62	149		Low	
Becton	165	56	62	150		Low	
Totton South	166	56	34	160		Low	
Harroway	167	56	62	151		Low	
Ringwood North	168	56	34	161		Low	
Hayling West	169	56	20	185		Low	
Valley Park	170	56	62	154		Low	
Locks Heath	171	56	62	156		Low	
Millway	172	56	62	157		Low	
Park Gate	173	56	62	159		Low	
Amport	174	45	34	184		Low	
Yateley West	175	56	62	162		Low	
Hordle	176	56	62	163		Low	
Tadburn	177	56	62	164		Low	
Marchwood	178	25	62	217		Low	
Hamble-le-Rice and Butlocks Heath	179	56	62	166		Low	Being assessed in Eastleigh SWMP
Petersfield Rother	180	56	62	167		Low	
Bashley	181	56	62	168		Low	
Church Crookham East	182	56	62	170		Low	Being assessed in Rushmoor SWMP
Binsted and Bentley	183	56	62	171		Low	
Totton West	184	56	62	172		Low	
Pennington	185	56	62	174		Low	
Long Sutton	186	56	62	175		Low	
The Hangers and Forest	187	56	62	176		Low	
Leesland	188	56	4	247		Low	Scheme delivered: Monitor
East Woodhay	189	40	62	201		Low	Being assessed in Basingstoke SWMP
Fernhill SW	190	45	62	188		Low	Being assessed in Rushmoor SWMP
Lee West	191	56	62	177		Low	

Ward	Rank						Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank	Overall ranking	
Chilworth, Nursling and Rownhams	192	56	62	179		Low	
Botley	193	56	27	203		Low	Being assessed in Eastleigh SWMP
Petersfield Causeway	194	56	62	181		Low	
Butts Ash and Dibden Purlieu	195	56	62	182		Low	
Hedge End Wildern	196	56	62	183		Low	Being assessed in Eastleigh SWMP
Grayshott	197	56	62	187		Low	
Titchfield Common	198	56	62	190		Low	
Petersfield St Marys	199	56	62	192		Low	
Alton Amery	200	56	62	193		Low	
Eastleigh Central	201	56	34	205		Low	Being assessed in Eastleigh SWMP
Whiteley	202	56	62	194		Low	
Fawley, Blackfield and Langley	203	56	62	195		Low	
Selborne	204	56	62	197		Low	
Ringwood East and Sopley	205	56	34	210		Low	
Rooksdown	206	56	62	198		Low	Being assessed in Basingstoke SWMP
Burghclere	207	56	62	199		Low	Being assessed in Basingstoke SWMP
Shedfield	208	45	62	213		Low	
Buckland	209	56	62	200		Low	
Olivers Battery and Badger Farm	210	56	62	202		Low	
Hayling East	211	40	62	230		Low	
Alverstoke	212	56	62	204		Low	
Fareham West	213	56	62	206		Low	
Bursledon and Old Netley	214	56	34	218		Low	
Hiltingbury East	215	56	62	207		Low	Being assessed in Eastleigh SWMP
Whitehill Hogmoor	216	56	62	208		Low	
West End South	217	56	62	209		Low	Being assessed in Eastleigh SWMP
Whitehill Walldown	218	56	62	211		Low	
Whitehill Chase	219	56	62	212		Low	
Hedge End Grange Park	220	56	62	214		Low	Being assessed in Eastleigh SWMP

Ward	Rank					Overall ranking	Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank		
Ringwood East and Sopley	205	56	34	210		Low	
Rooksdown	206	56	62	198		Low	Being assessed in Basingstoke SWMP
Burghclere	207	56	62	199		Low	Being assessed in Basingstoke SWMP
Shedfield	208	45	62	213		Low	
Buckland	209	56	62	200		Low	
Olivers Battery and Badger Farm	210	56	62	202		Low	
Hayling East	211	40	62	230		Low	
Alverstoke	212	56	62	204		Low	
Fareham West	213	56	62	206		Low	
Bursledon and Old Netley	214	56	34	218		Low	
Hiltingbury East	215	56	62	207		Low	Being assessed in Eastleigh SWMP
Whitehill Hogmoor	216	56	62	208		Low	
West End South	217	56	62	209		Low	Being assessed in Eastleigh SWMP
Whitehill Walldown	218	56	62	211		Low	
Whitehill Chase	219	56	62	212		Low	
Hedge End Grange Park	220	56	62	214		Low	Being assessed in Eastleigh SWMP
Horndean Murray	221	56	62	215		Low	
Baughurst	222	56	62	216		Low	Being assessed in Basingstoke SWMP
Stubbington	223	56	62	219		Low	
Lindford	224	56	62	220		Low	
Pamber	225	56	62	221		Low	Being assessed in Basingstoke SWMP
Forton	226	56	34	232		Low	
Romsey Extra	227	56	62	222		Low	
Charlton	228	56	62	223		Low	
Boarhunt and Southwick	229	45	62	237		Low	
Brockhurst	230	56	62	224		Low	
Sparsholt	231	56	62	225		Low	

Ward	Rank						Measures
	Total	Groundwater	HCC dataset	Environment Agency Flood Map for Surface Water	EA communities at risk rank	Overall ranking	
Cupernham	232	56	62	226		Low	
Furzedown and Hardley	233	56	62	227		Low	
Horndean Downs	233	56	62	227		Low	
Privett	235	56	62	229		Low	
Peel Common	236	56	62	233		Low	
Anglesey	237	56	62	234		Low	
Whitehill Pinewood	238	56	62	235		Low	
Bridgemy North	239	56	62	236		Low	
Hardway	240	56	62	238		Low	
Elson	241	56	62	239		Low	
Rowner and Holbrook	242	56	62	240		Low	
Bridgemy South	243	56	62	241		Low	
Christchurch	244	56	62	242		Low	
Hill Head	245	56	62	243		Low	
Petersfield Heath	246	56	62	245		Low	
Lee East	247	56	62	246		Low	
Grange	248	56	62	247		Low	

2 Ward specific action plans

Ward specific action plan Abbey

About the Ward					
Ward area (km²)	1.8	District	Test Valley	Catchment	River Test, Test (Lower), Tadburn Lake
No. Residential properties	2444	No. other buildings	778	Critical Infrastructure	60

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	High	Economic Cost (£k)	110
Current local risk assessment		Potential local flood risk	
Groundwater	High	Environment Agency Surface Water Maps	Moderate
HCC incident database	Highest	Flood risk from other sources (rivers/sea)	Yes. Abbey falls within the EA community at risk of Romsey which has 598 properties at significant or moderate risk of fluvial flooding.

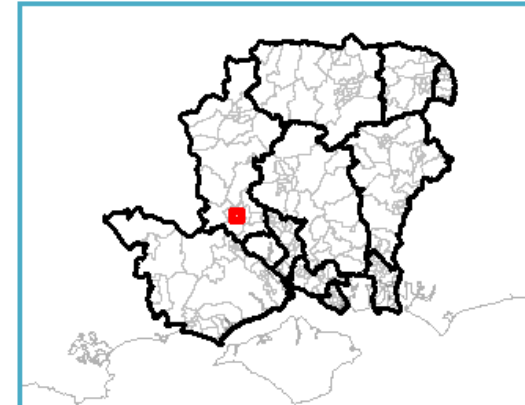
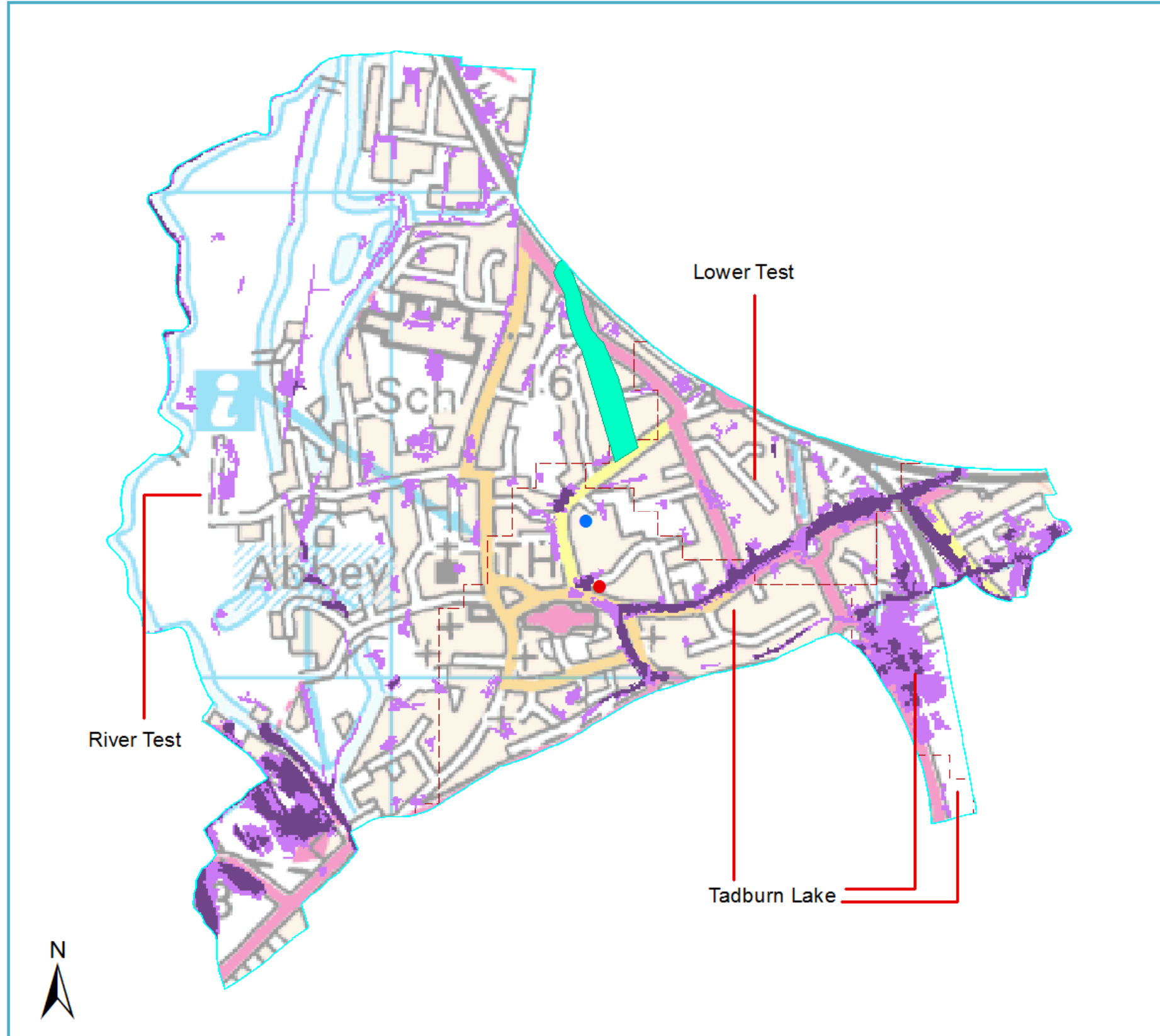
Summary
<p>The ward of Abbey lies to the east of Romsey in southern Hampshire, between the A3090 to the west and A3057 to the north. There are two residential mental/social care facilities in the ward. Other infrastructure includes numerous electricity sub stations, the Romsey fire station, schools, health centres and a telephone exchange.</p> <p>Groundwater flooding has been reported in the centre of the ward in 2000/2001 and 2002/2003. Hampshire County Council has records of surface water flooding affecting properties in the vicinity of the A3057 and works have been delivered to manage this flooding. The Environment Agency Flood Map for Surface Water indicates there is some risk of surface water flooding in the south west of the ward and in the east (near central Romsey).</p> <p>The Environment Agency flood map suggests a risk of flooding from the River Test to the west of the ward, with some smaller areas at risk to the east of the ward. Abbey is part of Romsey, located to the east of the ward is identified as a community at risk of fluvial or coastal flooding by the Environment Agency, and is ranked the 8th highest at risk community in Hampshire.</p>

Current Risk
<p>Groundwater flooding was reported in 2000/2001 and 2002/2003. During the 2000/2001 event a total of 22 properties were affected by flooding. Of these 16 experienced internal flooding to the ground floor, 1 experienced cellar flooding and 5 experienced external flooding. Of those properties flooded on the ground floor, 12 were also affected by foul water flooding.</p> <p>The surface water flooding recorded by Hampshire County Council in the vicinity of the A3057 is thought to affect the road and any properties below the level of the carriageway. The cause of the flooding is believed to be inadequate and blocked drainage.</p>

Potential surface water flood risk
<p>The Environment Agency Flood Map for Surface Water indicates the potential for 'deep' (greater than 0.3m deep) flooding in the south west of the ward at a 1 in 30 year return period. This flooding extends into the south east of the ward for the data modelling the 1 in 200 year return period. There is therefore the potential for internal flooding of properties in these locations.</p> <p>The Environment Agency Flood Map for Surface Water indicates that 'shallow' (0.1 - 0.3 m deep) surface water flooding could occur throughout the ward. This suggests the potential for shallow, or nuisance, flooding of roads, driveways and gardens.</p> <p>The Environment Agency flood maps suggest that there is the potential for fluvial flooding to occur in the west of the ward and the south east. There is therefore the potential for an interaction between fluvial and surface water flooding in the south west and south east of the ward. There are 598 properties at significant or moderate fluvial flood risk in Romsey, located to the east of the ward, therefore there is likely to be interaction between fluvial and surface water flooding at the eastern extent of the ward.</p>

Measures already delivered to reduce risk
<p>Measures have been delivered to address the risk of surface water flooding reported within the HCC database. A new gully was installed to reduce the risk.</p>

Future measures needed to reduce risks
<p>A new inspection pit may be required to facilitate cleaning and maintenance of the highway drainage. This is currently being investigated by HCC. HCC will continue regular maintenance including cleaning of the highway drainage to reduce the risk of flooding. However, this may not be enough to protect the properties that are below the level of the road, and individual property protection may be required to protect these properties.</p> <p>This ward remains at a high risk of groundwater water flooding. The groundwater surface water management plan will be reviewing the pathways of groundwater flooding within this ward, and will consider future measure and actions to mitigate the risk. This will include reviewing maintenance regimes, the groundwater flood warning service, and potential capital schemes. However, this risk assessment identifies that there is a risk of combined flooding. Therefore Hampshire County Council should act as coordinating authority for a delivery team, which includes representation from the Water Company, the Environment Agency, the District Council and residents.</p> <p>This delivery team should work alongside the GWSWMP and:</p> <ul style="list-style-type: none"> • Ensure that residents are aware of the risk of flooding • Promote the groundwater flood alert system to residents • Ensure that residents are made aware of advice on how to protect themselves and their property in times of flooding • Ensure that RMAs, individuals and riparian owners maintain and manage their drainage systems and waterbodies • Undertake a detailed investigation into the sources, pathways and receptors of flooding, to assess the feasibility of a flood risk management scheme to reduce the risk in the ward. The Environment Agency will provide more detail resolution regarding actual properties at risk of fluvial flooding in Romsey, to allow the delivery team to understand and quantify the risk of flooding from combined sources. <p>Specific policies should be considered by the Local Planning Authority (Test Valley Borough Council) to control development within this risk area, ensuring suitable property resilience levels until such time as the source, pathways and receptors are understood at a detailed enough scale to ensure that new development is not at risk of flooding. Any new development must not increase flood risk elsewhere.</p>



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth



Ward specific action plan Aldershot Park

About the Ward					
Ward area (km²)	1.44	District	Rushmoor	Catchment	Blackwater
No. Residential properties	3050	No. other buildings	225	Critical Infrastructure	37

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	High	Economic Cost (£k)	94.4
Current local risk assessment		Potential local flood risk	
Groundwater	None	Environment Agency Surface Water Maps	High
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, but not identified as an Environment Agency 'Community at Risk'

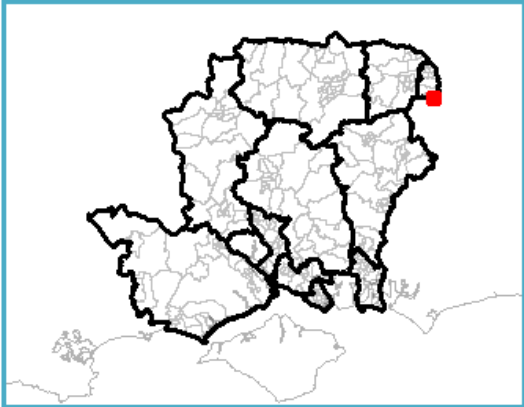
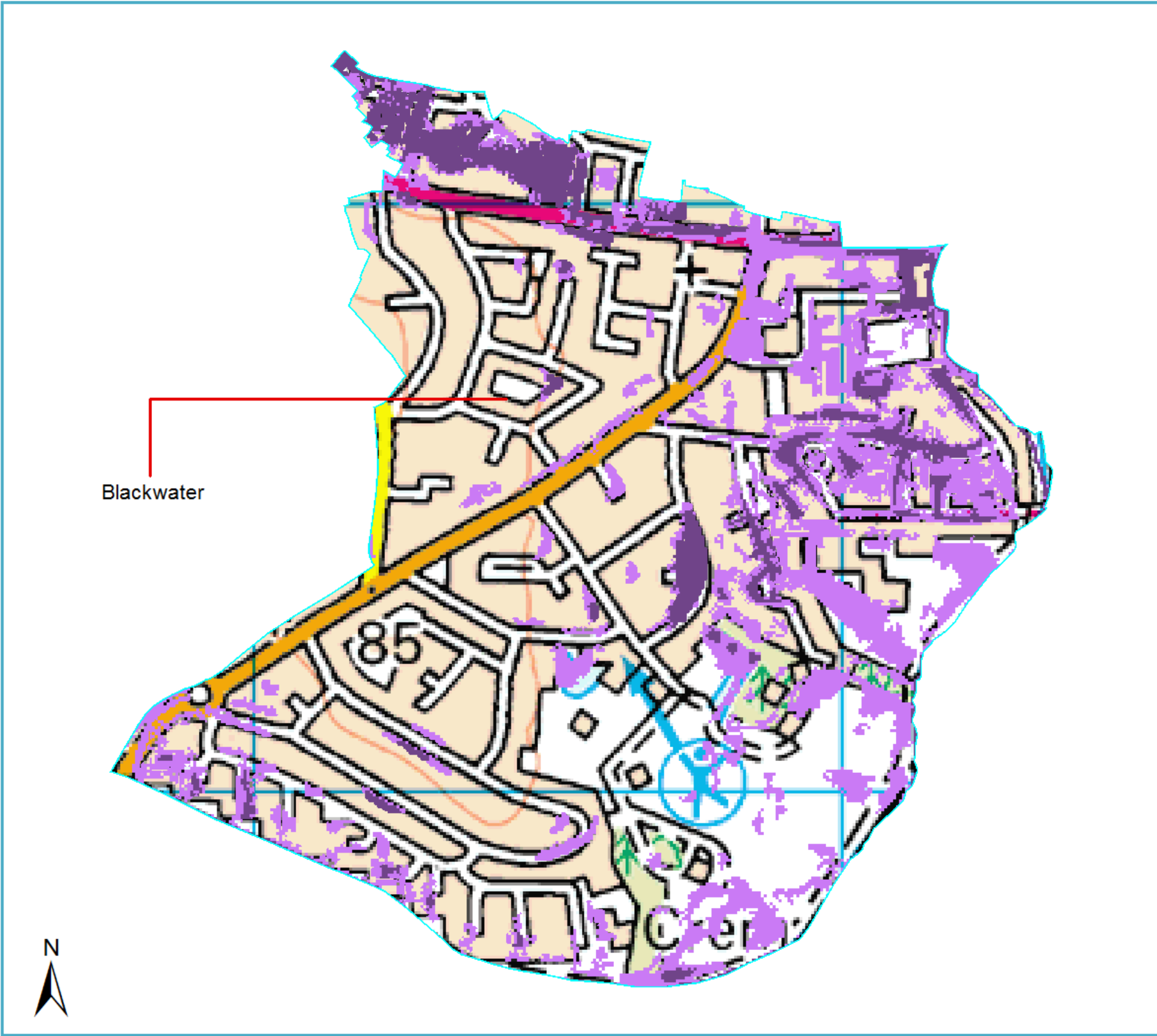
Summary
<p>Aldershot Park is a ward in the North East of Hampshire, comprising the southern part of Aldershot. Critical infrastructure within the ward includes electricity substations, schools and a doctor's surgery.</p> <p>There is no recorded groundwater or surface water flooding in this ward.</p> <p>The Environment Agency Flood Map for Surface Water shows areas at risk of surface water flooding throughout the ward, but particularly to the North and East.</p>

Current Risk
<p>There are no records of groundwater flooding.</p> <p>Hampshire County Council has no records of internal surface water flooding within the ward.</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water flooding indicates areas to the north and east of the ward may be at risk from deep (greater than 0.3m depth) surface water flooding with a 1 in 30 and 1 in 200 year return period. This suggests the potential for surface water flooding affecting properties internally in these areas.</p> <p>The Environment Agency Flood Map for Surface Water indicates that a wider part of the northern and eastern areas of the ward could be at risk from shallow (0.1 – 0.3m deep) surface water flooding, as well as some areas to the south of the ward. Therefore there is some risk of shallow or nuisance flooding to roads, driveways and gardens throughout much of the ward.</p>

Measures already delivered to reduce risk
<p>Hampshire County Council has no records of internal property flooding in this ward, therefore measures to combat flood risk, beyond regular maintenance of drainage assets that are the responsibility of Hampshire County Council, have not been identified or delivered.</p>

Future measures needed to reduce risks
<p>The risk assessment for this ward is based entirely on modelled flooding. With no incidents to verify this modelling, we do not recommend that any capital interventions be considered for this ward. This ward is being assessed as part of the Rushmoor SWMP which may amend the measures suggested here. Measures to be delivered for this ward therefore are based on monitoring and communication:</p> <ul style="list-style-type: none"> • Communication of the modelled risk of surface water flooding in this ward to the community • Ongoing monitoring and reporting of incidents to validate the risk • Actions based on the outcomes of the Rushmoor SWMP.



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth



Ward specific action plan Ashurst, Copythorne South and Netley Marsh

About the Ward

Ward area (km²)	21.48	District	New Forest	Catchment	Cadnam River, River Test, Jacobs Gutter, Bartley Water, Fletchwood Tributary
No. Residential properties	2306	No. other buildings	1623	Critical Infrastructure	73

About the Local Flood Risk

Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding

Over all local flood risk	High	Economic Cost (£k)	115
Current local risk assessment		Potential local flood risk	
Groundwater	High	Environment Agency Surface Water Maps	Low
HCC incident database	High	Flood risk from other sources (rivers/sea)	Yes. Ward lies on the western extent of Totton, identified as a 'community at risk' from fluvial and tidal Flooding by the Environment Agency.

Summary

Ashurst is in the south west of Hampshire. The settlements of Cadnam and Stonyford as well as part of Ashurst are located in this ward. Critical infrastructure includes electricity substations, a hospital and several telephone exchanges.

Hampshire County Council has 4 records of surface water flooding of which 1 alleviation scheme has been delivered. There are 4 records of groundwater flooding in 2000/2001. The Environment Agency Flood Map for Surface Water identifies a risk of flooding along watercourses all over the catchment.

This ward lies just west of Totton, which is identified as a community at risk of fluvial or coastal flooding by the Environment Agency, and is ranked the 8th highest at risk community in Hampshire.

Current Risk

There are 4 sites with records of groundwater flooding.

Hampshire County Council has 4 recorded incidents of surface water flooding.

Two recorded incidents are reported at Bartley, which is known to suffer from flooding from a combined source of fluvial and surface water flooding

There is frequent fluvial flooding at Old Romsey Road in Cadnam which leads to external flooding and a risk property flooding.

Surface water flooding at Peterscroft Avenue in Ashurst, is believed to have been caused by a lack of capacity in the surface drainage system.

Potential surface water flood risk

Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.

The Environment Agency Flood Map for Surface Water flooding indicates small areas along watercourses throughout the ward may be at risk from deep (greater than 0.3m depth) surface water flooding with a 1 in 30 and 1 in 200 year return period. This suggests the potential for surface water flooding affecting properties internally in these areas.

The Environment Agency Flood Map for Surface Water indicates that a slightly wider area of the ward could be at risk from shallow (0.1 – 0.3m deep) surface water flooding. Therefore there is some risk of shallow or nuisance flooding to roads, driveways and gardens throughout much of the ward.

There are 592 properties at significant or moderate fluvial and / or tidal flood risk in Totton, located to the east of the ward, therefore there is likely to be interaction between tidal, fluvial and surface water flooding at the eastern extent of the ward.

Measures already delivered to reduce risk

The flooding in Bartley is believed to be partly caused by a lack of main river maintenance causing restricted flow. The river maintenance is the responsibility of the Environment Agency. Hampshire County Council is liaising with the Agency to ensure river maintenance is carried out. There is also a known lack of capacity in the surface water and highway drainage system. Additional drainage capacity has been installed by HCC.

The flooding at Peterscroft Avenue is believed to be due to a lack of capacity due to tree roots ingress and debris in the drainage system. These have been removed, removing the risk of further blockage. Regular maintenance of ditches around Peterscroft Avenue by HCC ensures that the risk of blockage remains low.

Future measures needed to reduce risks

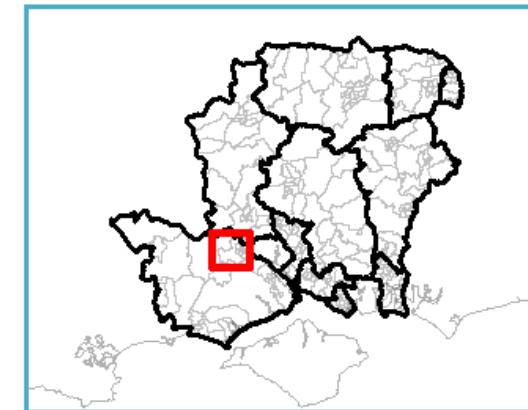
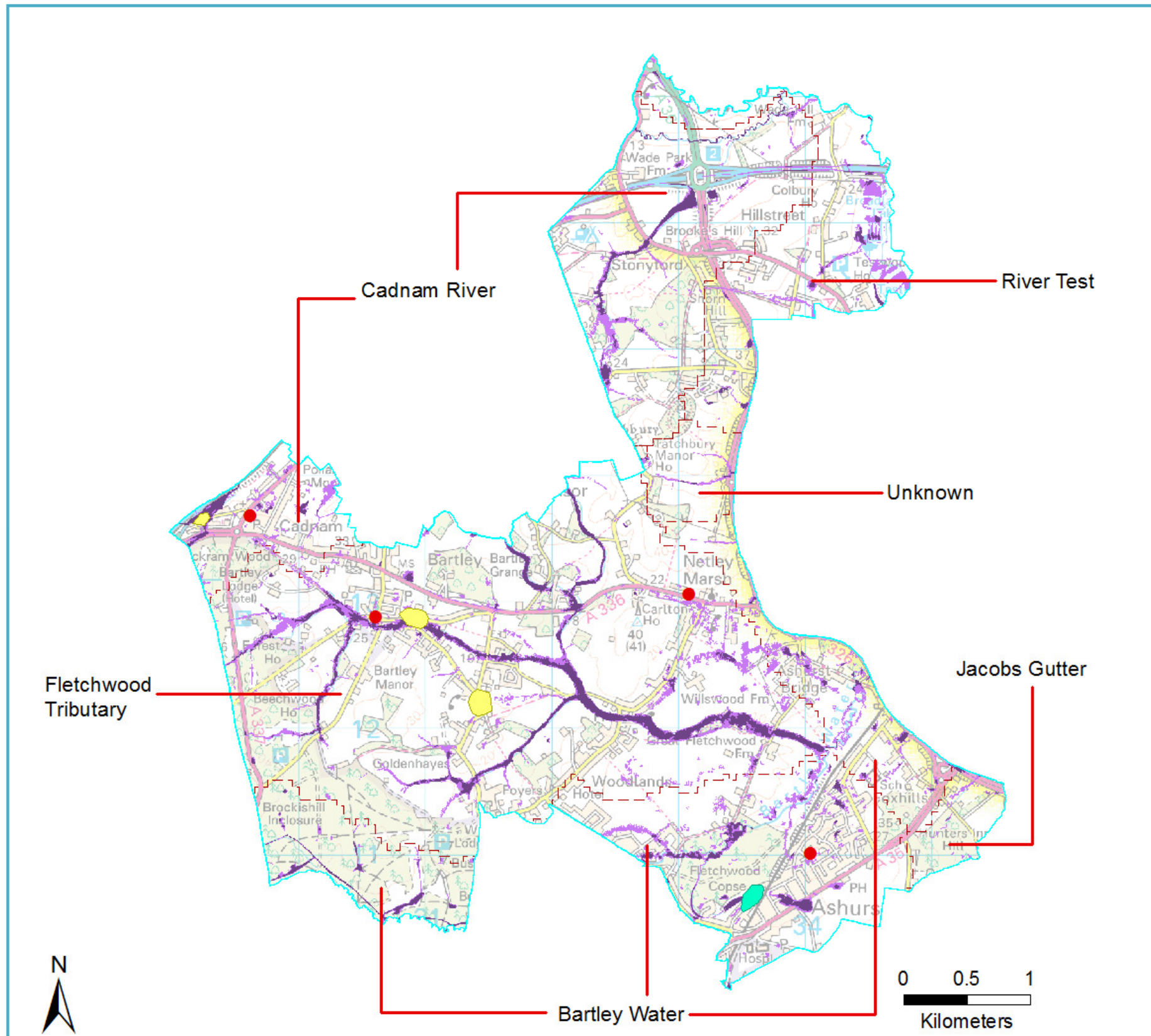
HCC has identified the responsible authority for the surface water flood incidents that have occurred historically. Maintenance and physical improvements at Peterscroft Avenue have reduced the risk of flooding and no further incidents have occurred since the work was completed. However HCC will ensure that regular maintenance of the highway drainage system is undertaken to prevent any increase in risk. Should flooding occur again, HCC may need to review the effectiveness of the solution delivered and consider whether additional actions are required to reduce the risk.

This ward remains at a high risk of groundwater water flooding. The groundwater surface water management plan will be reviewing the pathways of groundwater flooding within this ward, and will consider future measure and actions to mitigate the risk. This will include reviewing maintenance regimes, the groundwater flood warning service, and potential capital schemes. However, this risk assessment identifies that there is a risk of combined flooding. Therefore Hampshire County Council should act as coordinating authority for a delivery team, which includes representation from the Water Company, the Environment Agency, the District Council and residents.

This delivery team should work alongside the GWSWMP and:

- Ensure that residents are aware of the risk of flooding
- Promote the groundwater flood warning system to residents
- Ensure that residents are made aware of advice on how to protect themselves and their property in times of flooding
- Ensure that RMAs, individuals and riparian owners maintain and manage their drainage systems and waterbodies
- Undertake a detailed investigation into the sources, pathways and receptors of flooding, to assess the feasibility of a flood risk management scheme to reduce the risk in the ward. The Environment Agency will provide more detail resolution regarding actual properties at risk of fluvial of tidal flooding in Totton, to allow the delivery team to understand and quantify the risk of flooding from combined sources.

Specific policies should be considered by the Local Planning Authority (New Forest District Council) to control development within this risk area, ensuring suitable property resilience levels until such time as the source, pathways and receptors are understood at a detailed enough scale to ensure that new development is not at risk of flooding. Any new development must not increase flood risk elsewhere.



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Basing

About the Ward					
Ward area (km²)	27.43	District	Basingstoke and Deane	Catchment	Loddon, Lyde, Whitewater
No. Residential properties	3541	No. other buildings	1336	Critical Infrastructure	55

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	High	Economic Cost (£k)	104
Current local risk assessment		Potential local flood risk	
Groundwater	None	Environment Agency Surface Water Maps	High
HCC incident database	High	Flood risk from other sources (rivers/sea)	Yes, but not identified as a ‘community at risk’ from by the Environment Agency

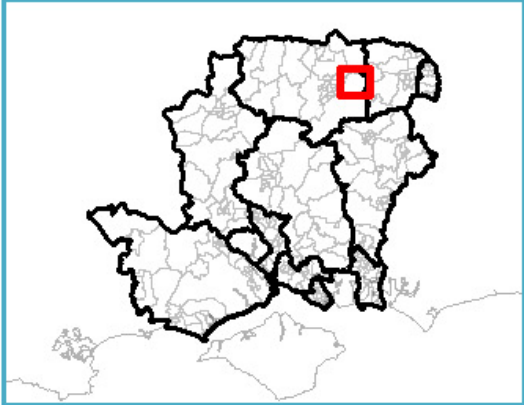
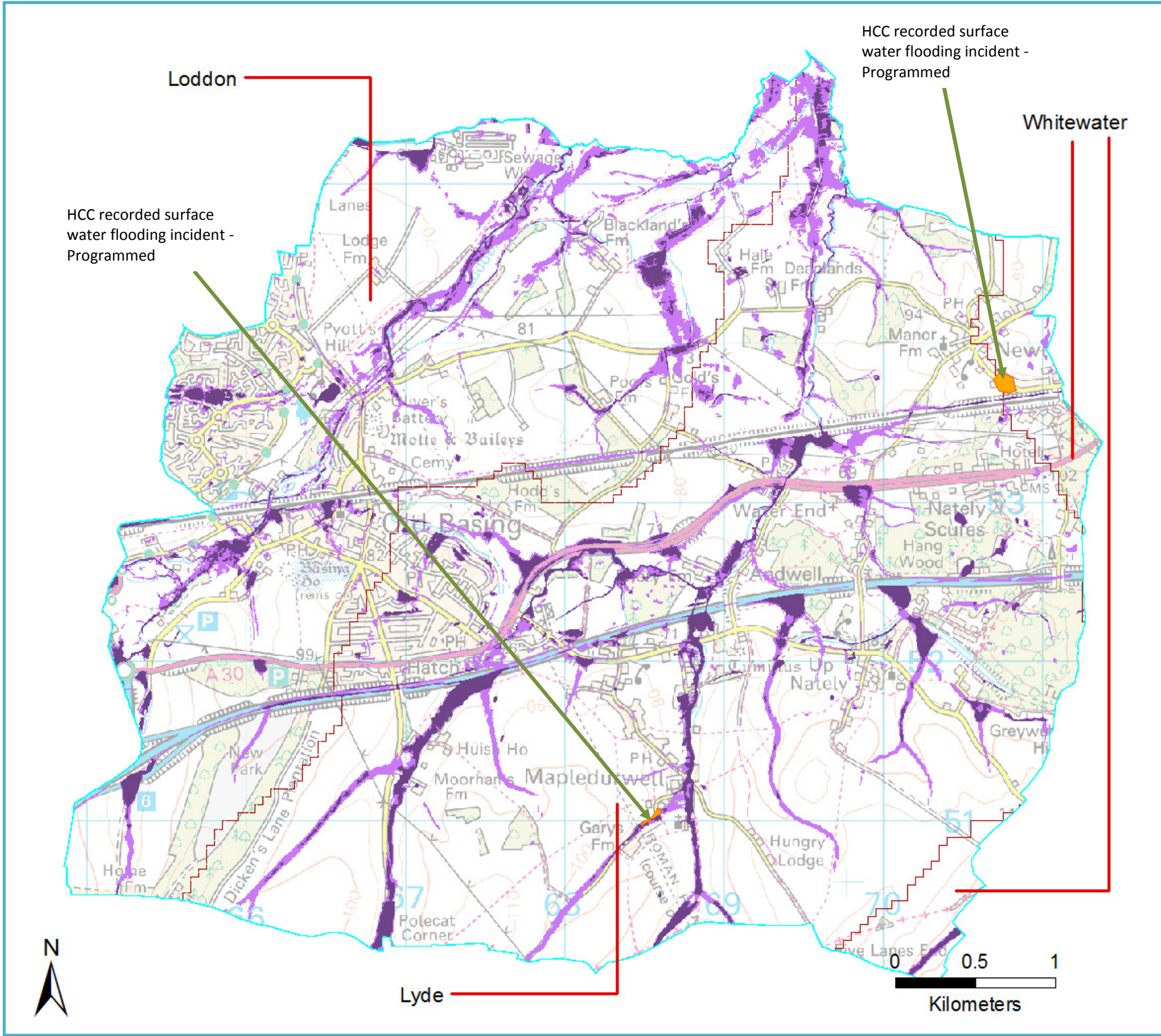
Summary
<p>Basing is in the north of Hampshire and contains the settlement of Old Basing. Infrastructure includes a railway line and the M3 motorway. Critical infrastructure includes electricity substations, schools, a doctor’s surgery, caravan parks and a sewage treatment works.</p> <p>Hampshire County Council has 2 records of surface water flooding that have works planned. There are no records of groundwater flooding in the ward. The Environment Agency Flood Map for Surface Water identifies wide areas at risk of flooding, mostly along watercourses.</p>

Current Risk
<p>There are no records of groundwater flooding in the ward.</p> <p>Hampshire County Council has 2 records of surface water flooding. The first is in Mapledurwell and involved internal flooding of properties due to a runoff and maintenance problem of a local ditch and pond. The second is in Newnham and involved internal flooding of properties due to two ponds linked by a culvert under a road that flood during heavy rain and due to rising groundwater.</p>

Potential surface water flood risk
<p>Even if properties haven’t experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water indicates that areas alongside water courses across the ward may be at risk from deep (greater than 0.3m depth) surface water flooding with a 1 in 30 and 1 in 200 year return period. This suggests the potential for surface water flooding affecting properties internally in these areas.</p> <p>The Environment Agency Flood Map for Surface Water indicates that a wider area of the ward could be at risk from shallow (0.1 – 0.3m deep) surface water flooding. Therefore there is some risk of shallow or nuisance flooding to roads, driveways and gardens throughout much of the ward.</p>

Measures already delivered to reduce risk
<p>The Flood in Newnham is thought to occur because groundwater and runoff from the highway causing a culvert between two ponds to flood. The culvert is the responsibility of HCC and works are programmed to jet the culvert and maintain capacity. The ponds are in private ownership. HCC are liaising with the owner to ensure private maintenance is carried out.</p> <p>At Mapledurwell flooding is thought to be caused by lack of capacity of the drainage system due to a maintenance problem. Ditch clearance is planned to resolve the problem</p>

Future measures needed to reduce risks
<p>HCC have identified those responsible for the surface water flood incidents that have occurred historically. Maintenance at both Mapledurwell and Newnham is planned to help reduce flood risk. Capital works to replace a gully at Newnham are also planned. HCC will ensure ongoing maintenance of the highway drainage system and work with the private riparian owner in Newnham to prevent any increase in risk. Should flooding occur again, HCC may need to review the effectiveness of the solution delivered and consider additional actions.</p> <p>Basing ward will be covered within the Basingstoke and Deane SWMP. The measures recommended here may therefore be amended by the findings of the SWMP.</p> <p>In addition to the historically recorded flooding, the ward also features highly in the risk assessment because of the potential for surface water flooding illustrated by the Environment Agency Flood Map for Surface Water. Therefore as well as the capital interventions identified at Mapledurwell and Newnham, we recommend measures to be delivered for this ward are based on monitoring and communication:</p> <ul style="list-style-type: none"> • Communication of the modelled risk of surface water flooding in this ward to the community • Ongoing monitoring and reporting of incidents to validate the risk • Actions recommended in the Basingstoke and Deane SWMP.



Legend

- River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Battins

About the Ward					
Ward area (km²)	2.9	District	Havant	Catchment	Hermitage Stream, River Lavant
No. Residential properties	2954	No. other buildings	232	Critical Infrastructure	32

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	98
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes. Battins contains part of East Havant, identified as a community of risk of fluvial flooding by the Environment Agency

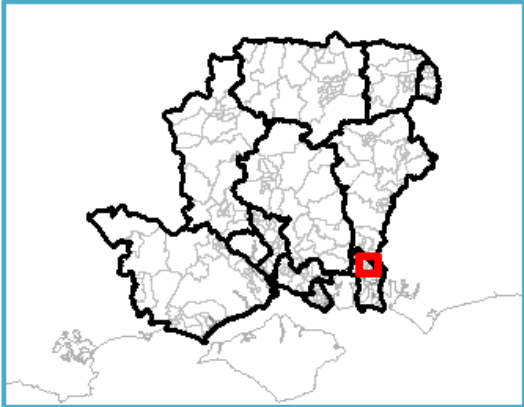
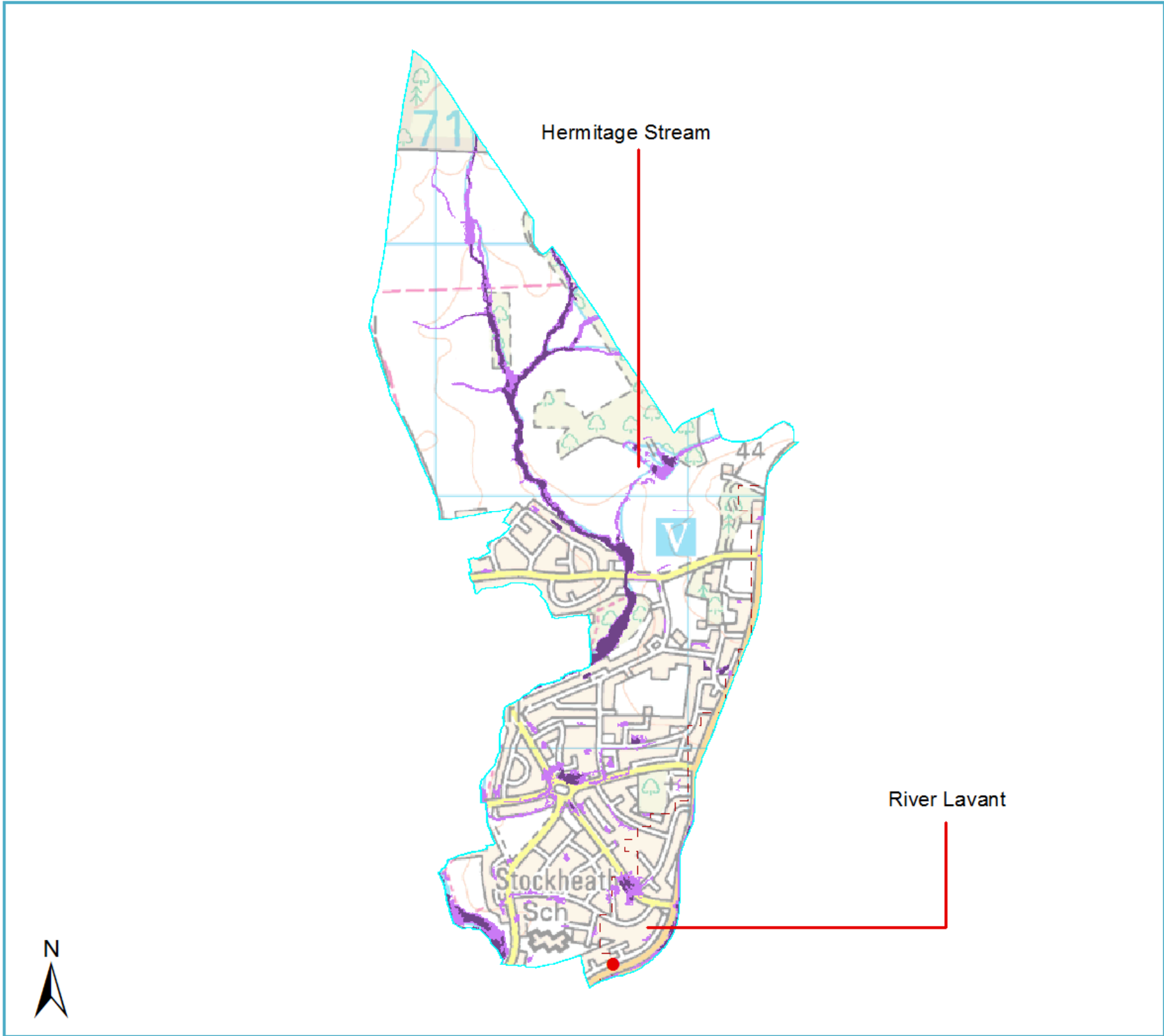
Summary
Battins is a small ward in the south of Hampshire, to the north of Havant. Critical infrastructure within the ward includes infant and junior schools, electricity sub stations, community centres and a medical centre.
Hampshire County Council has no records of internal surface water flooding within the ward. The Environment Agency Flood Map for Surface Water illustrates that there is the potential for surface water flooding to the centre and north of the ward. These areas of the ward may also be at risk from river flooding, as indicated by the Environment Agency Flood Map. The Environment Agency have identified East Havant, which falls within this ward, as a community at risk of fluvial flooding, and is the 14 th highest ranked community in Hampshire.
Groundwater flooding occurred to the south of the ward in Havant during the 2000/2001 event.

Current Risk
Groundwater flooding was reported in the ward of Battins in 2000/2001. In total 21 properties experienced flooding at ground floor level.
Hampshire County Council has no records of internal surface water flooding within the ward.

Potential surface water flood risk
Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.
The Environment Agency Flood Map for Surface Water flooding indicates that small areas to the centre and north of the ward may be at risk from deep (greater than 0.3m depth) surface water flooding with a 1 in 30 and 1 in 200 year return period. This suggests the potential for surface water flooding affecting properties internally in these areas.
The Environment Agency Flood Map for Surface Water indicates that a wider area of the ward could be at risk from shallow (0.1 – 0.3m deep) surface water flooding, and shows the potential for flooding in the south of the ward. Therefore there is some risk of shallow or nuisance flooding to roads, driveways and gardens throughout much of the ward.
The Environment Agency Flood Map indicates potential for river flooding in the centre of the ward in similar locations to the surface water flooding. In addition the flood map indicates the possibility of river flooding on the southern boundary of the ward with between 1% and 0.1% chance of occurring in any year. Surface water and river flooding may therefore interact in the centre of the ward.

Measures already delivered to reduce risk
Hampshire County Council has no records of internal property flooding in this ward, therefore measures to combat flood risk, beyond regular maintenance of drainage assets that are the responsibility of Hampshire County Council, have not been identified or delivered.

Future measures needed to reduce risks
This ward remains at a high risk of groundwater water flooding. The groundwater surface water management plan will be reviewing the pathways of groundwater flooding within this ward, and will consider future measure and actions to mitigate the risk. This will include reviewing maintenance regimes, the groundwater flood warning service, and potential capital schemes. However, this risk assessment identifies that there is a risk of combined flooding. Therefore Hampshire County Council should act as coordinating authority for a delivery team, which includes representation from the Water Company, the Environment Agency, the District Council and residents.
This delivery team should work alongside the GWSWMP and: <ul style="list-style-type: none"> • Ensure that residents are aware of the risk of flooding • Promote the groundwater flood warning system to residents • Ensure that residents are made aware of advice on how to protect themselves and their property in times of flooding • Ensure that RMAs, individuals and riparian owners maintain and manage their drainage systems and waterbodies • Undertake a detailed investigation into the sources, pathways and receptors of flooding, to assess the feasibility of a flood risk management scheme to reduce the risk in the ward. The Environment Agency will provide more detail resolution regarding actual properties at risk of fluvial of tidal flooding in East Havant, to allow the delivery team to understand and quantify the risk of flooding from combined sources.
Specific policies should be considered by the Local Planning Authority (Havant Borough Council) to control development within this risk area, ensuring suitable property resilience levels until such time as the source, pathways and receptors are understood at a detailed enough scale to ensure that new development is not at risk of flooding. Any new development must not increase flood risk elsewhere.



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Brookvale and Kings Furlong

About the Ward					
Ward area (km²)	1.3	District	Basingstoke and Dean	Catchment	Loddon
No. Residential properties	3010	No. other buildings	229	Critical Infrastructure	34

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	111
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, but not identified as an Environment Agency 'Community at Risk'

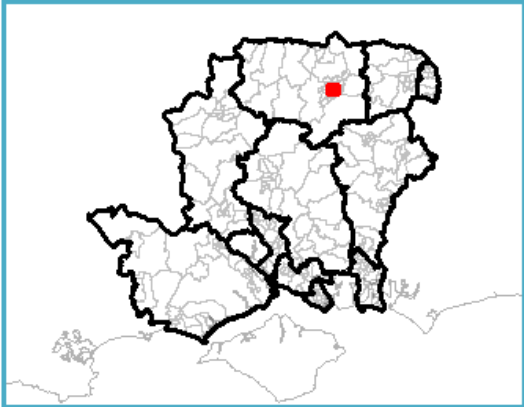
Summary
<p>The ward of Brookvale and Kings Furlong lies in central Basingstoke. Infrastructure within the ward includes a caravan park, electricity sub stations, pumping stations, a college and schools.</p> <p>There are no recorded occurrences of groundwater flooding and Hampshire County Council has no records of surface water flooding affecting properties internally. However the Environment Agency Flood Map for Surface Water indicates that roads and properties throughout the ward could be at risk from surface water flooding.</p> <p>The Environment Agency Flood Map indicates that areas to the north of the ward may also be at risk from river flooding.</p>

Current Risk
Hampshire County Council has no records of internal property flooding from surface water. In addition groundwater flooding has not been reported within the ward.

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>Despite having no reported current risk of flooding, modelled data suggests that there is a risk of surface water flooding in the ward. The Environment Agency Flood Map for Surface Water indicates small areas at risk of deep (greater than 0.3m deep) flooding with a 1 in 30 year return period in parts of the north and east of the catchment. The areas with a risk of deep flooding increase with a 1 in 200 year return period (less frequent) to cover greater parts of the south of the ward. These areas of deep flooding could be at risk of internal property flooding. The area that may be at risk of shallow flooding (0.1 - 0.3m depth) is slightly larger and these areas have a chance of nuisance flooding affecting roads, driveways and gardens</p> <p>The Environment Agency Flood Map indicates there is the potential for flooding from rivers in the north of the ward. Surface water and river flooding may therefore interact in this area.</p>

Measures already delivered to reduce risk
Hampshire County Council has no records of internal property flooding in this ward, therefore measures to combat flood risk, beyond regular maintenance of drainage assets that are the responsibility of Hampshire County Council, have not been identified or delivered.

Future measures needed to reduce risks
<p>The risk assessment for this ward is based entirely on modelled flooding. With no incidents to verify this modelling, we do not recommend that any capital interventions be considered for this ward. Measures to be delivered for this ward therefore are based on monitoring and communication:</p> <ul style="list-style-type: none"> • Communication of the modelled risk of surface water flooding in this ward to the community • Ongoing monitoring and reporting of incidents to validate the risk



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Buckskin

About the Ward					
Ward area (km²)	0.97	District	Basingstoke and Deane	Catchment	Loddon
No. Residential properties	2303	No. other buildings	96	Critical Infrastructure	21

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	High	Economic Cost (£k)	86
Current local risk assessment		Potential local flood risk	
Groundwater	None	Environment Agency Surface Water Maps	High
HCC incident database	Moderate	Flood risk from other sources (rivers/sea)	Yes, but not identified as an Environment Agency 'Community at Risk'

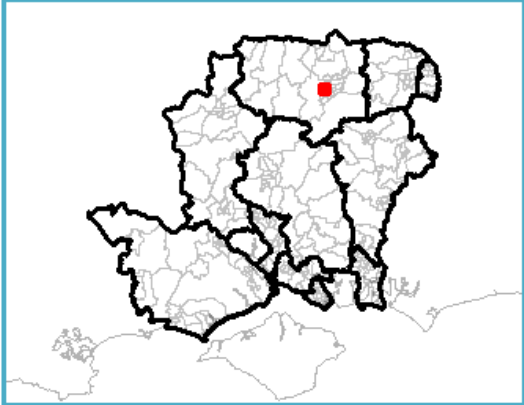
Summary
<p>Buckskin is located in the North of Hampshire and contains the settlement of Buckskin. Critical infrastructure includes 3 schools and numerous electricity substations.</p> <p>There are no records of groundwater flooding the ward and Hampshire County Council has 1 record of surface water flooding, for which an alleviation scheme has been delivered.</p> <p>The Environment Agency Flood Map for Surface Water indicates that roads and properties throughout the ward could be at risk of internal or external flooding.</p>

Current Risk
<p>There are no records of groundwater flooding in the ward.</p> <p>Hampshire County Council has 1 record of surface water flooding involving a large area in the centre of the ward. A programme has been delivered in this area.</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water flooding indicates that the centre of the ward may be at risk from deep (greater than 0.3m depth) surface water flooding with a 1 in 30 and 1 in 200 year return period. This suggests the potential for surface water flooding affecting properties internally in these areas.</p> <p>The Environment Agency Flood Map for Surface Water indicates that small areas all over the ward could be at risk from shallow (0.1 – 0.3m deep) surface water flooding. Therefore there is some risk of shallow or nuisance flooding to roads, driveways and gardens throughout much of the ward.</p>

Measures already delivered to reduce risk
The historical flooding in Buckskin was believed to be caused by lack of capacity resulting in flooding to a subway. Works were carried out and there have been no reports of flooding since 2000. The subway no longer exists.

Future measures needed to reduce risks
<p>The risk assessment for this ward is based very extensively on modelled flooding. Works have already been carried out to resolve known historical flooding. Additional capital interventions are not currently considered appropriate for this ward, based only on modelled data. However, the ward is being assessed as part of the Basingstoke and Deane SWMP. The measures recommended here may therefore be amended by the findings of the SWMP. Measures to be delivered for this ward are based on monitoring and communication:</p> <ul style="list-style-type: none"> • Communication of the modelled risk of surface water flooding in this ward to the community • Ongoing monitoring and reporting of incidents to validate the risk • Actions identified within the Basingstoke and Deane SWMP



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth



Loddon

Ward specific action plan Cheriton and Bishops Sutton

About the Ward					
Ward area (km²)	64.8	District	Winchester	Catchment	Itchen, River Itchen, River Alre, Bow Lake, Hamble
No. Residential properties	877	No. other buildings	1255	Critical Infrastructure	29

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	97
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes. Cheriton is identified as a 'Community at Risk' of Fluvial (Groundwater) flooding by the Environment Agency

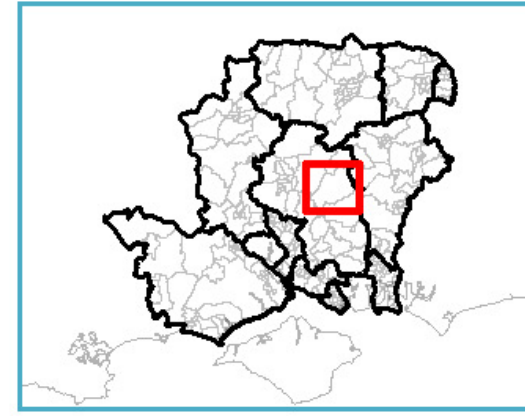
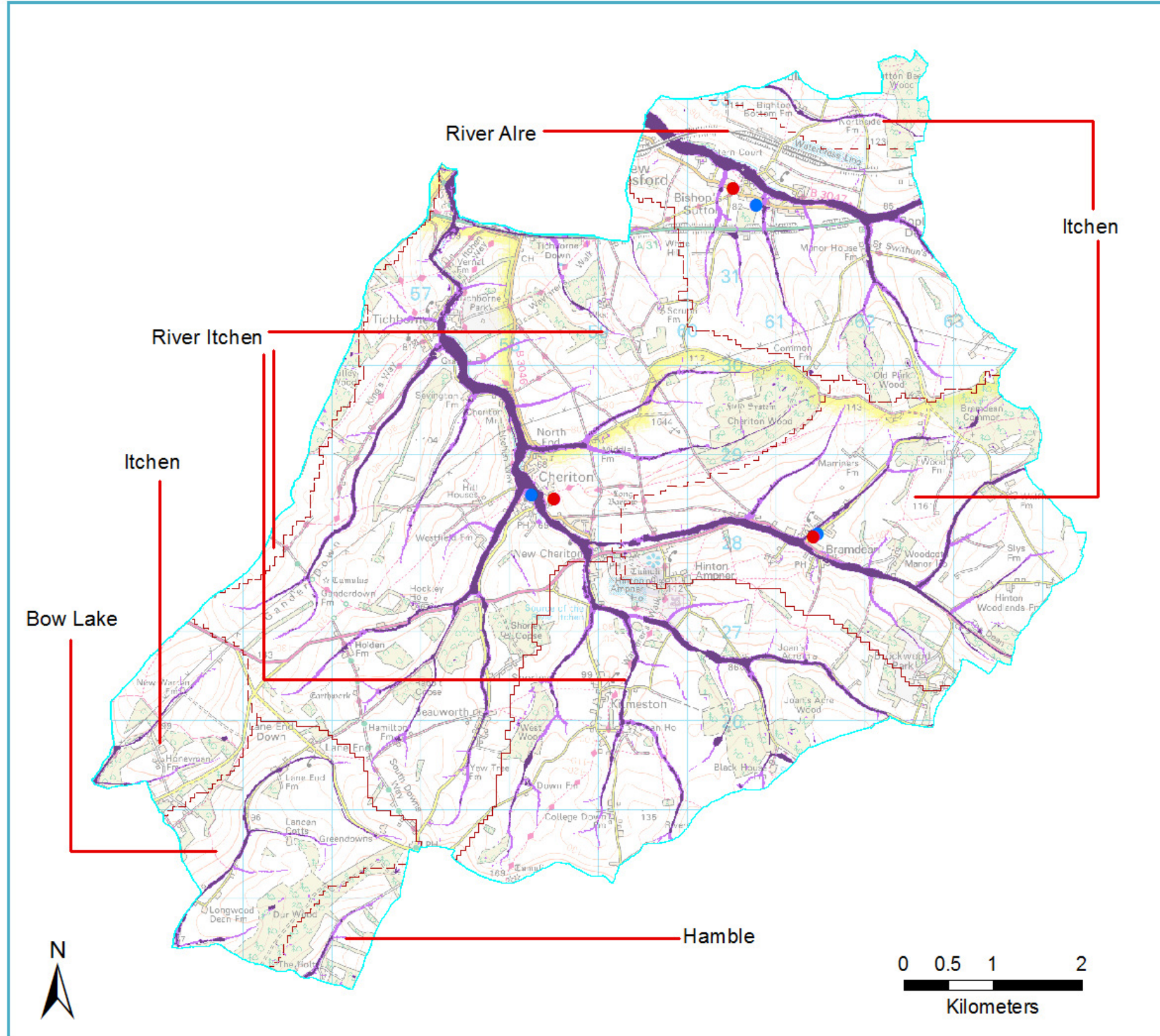
Summary
<p>Cheriton and Bishops Sutton is located in the centre of Hampshire, east of Winchester, in Winchester district. A number of towns and villages lie within the ward including Beauworth, Cheriton, New Cheriton, Kilmeston, Hinton Ampner, Bramdean and Bishop's Sutton.</p> <p>Critical infrastructure within the ward includes electricity sub stations, sewage works, water pumping stations, a telephone exchange and a school.</p> <p>In 2000/01 and 2002/03 groundwater flooding occurred in Cheriton, Bramdean and Bishop's Sutton. The 1994/95 dataset has no groundwater flood events in this area.</p> <p>The HCC database has not recorded any surface water flooding in the ward.</p> <p>The Environment Agency Flood Map for Surface Water and Environment Agency Flood Map indicate there may be a risk of combined surface water and river flooding in Tichborne, Cheriton, New Cheriton, Bramdean, Bishop's Sutton and Kilmeston. Surface Water flooding is also shown in Beauworth. A number of roads are also affected. Cheriton itself is identified as a Community of Risk of Fluvial (Groundwater) flooding by the Environment Agency, with 21 properties at significant or moderate risk of flooding. Cheriton is ranked 56th highest community at risk in Hampshire.</p>

Current Risk
<p>Hampshire County Council has no recorded incidents of internal surface water flooding to property in the ward. However, the ward is known to be at risk from groundwater flooding.</p> <p>Flooding from groundwater has been reported at 3 locations within the ward at Bishop's Sutton, Cheriton and Bramdean. Flooding in these areas occurred both in 2000/2001 and 2002/2003. Information about the 2000/2001 flood events indicates that 12 properties flooded in Bishop's Sutton, of which 4 experienced flooding to the ground floor, 7 to the cellar and 1 had external flooding only. In Bramdean 11 properties were flooded, 5 of which experienced internal flooding of the ground floor. In Cheriton 11 properties flooded and all experienced ground floor flooding.</p>

Potential surface water flood risk
<p>Hampshire County Council have records of a number of internal property flooding incidents as a result of groundwater flooding, however measures to combat flood risk beyond regular maintenance of drainage assets that are the responsibility of HCC have not been identified or delivered.</p> <p>The Environment Agency Flood Map for Surface Water indicate the potential for surface water flooding throughout the ward. The 'deep' flood risk extent (showing flooding of 0.3m or deeper) indicates that Bramdean, Hinton Ampner, New Cheriton, Cheriton, Tichborne and Bishop's Sutton could experience internal flooding to properties.</p> <p>The risk of shallow surface water flooding, modelled by the Environment Agency is greater, indicating that roads, gardens, driveways and paths could be affected by nuisance flooding of 0.1 - 0.3m depth throughout much of the ward.</p> <p>The Environment Agency Flood Map indicates that those areas at risk from deep surface water flooding may also be susceptible to flooding from rivers. Surface water flooding and river flood could therefore interact in areas around Tichborne, Cheriton, New Cheriton and Bishop's Sutton.</p>

Measures already delivered to reduce risk
<p>Hampshire County Council has no records of internal property flooding in this ward, therefore measures to combat flood risk, beyond regular maintenance of drainage assets that are the responsibility of Hampshire County Council, have not been identified or delivered.</p>

Future measures needed to reduce risks
<p>This ward remains at a high risk of groundwater water flooding. The groundwater surface water management plan will be reviewing the pathways of groundwater flooding within this ward, and will consider future measure and actions to mitigate the risk. This will include reviewing maintenance regimes, the ground water flood warning service, and potential capital schemes. However, this risk assessment identifies that there is a risk of combined flooding. Therefore Hampshire County Council should act as coordinating authority for a delivery team, which includes representation from the Water Company, the Environment Agency, the District Council and residents.</p> <p>This delivery team should work alongside the GWSWMP and:</p> <ul style="list-style-type: none"> • Ensure that residents are aware of the risk of flooding • Promote the groundwater flood warning system to residents • Ensure that residents are made aware of advice on how to protect themselves and their property in times of flooding • Ensure that RMAs, individuals and riparian owners maintain and manage their drainage systems and waterbodies • Undertake a detailed investigation into the sources, pathways and receptors of flooding, to assess the feasibility of a flood risk management scheme to reduce the risk in the ward. The Environment Agency will provide more detail resolution regarding actual properties at risk of fluvial of tidal flooding in Cheriton, to allow the delivery team to understand and quantify the risk of flooding from combined sources. <p>Specific policies should be considered by the Local Planning Authority (Winchester City Council) to control development within this risk area, ensuring suitable property resistance levels until such time as the source, pathways and receptors are understood at a detailed enough scale to ensure that new development is not at risk of flooding. Any new development must not increase flood risk elsewhere.</p>



Legend

- River catchments (dashed red line)

Groundwater flooding

- 2002/2003 (blue dot)
- 2000/2001 (red dot)
- 1994/1995 (green dot)

Recorded surface water flooding and status of measure

- Delivered (cyan)
- Programmed (orange)
- Identified (yellow)
- Not identified (pink)

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth (dark purple)
- > 0.1 m depth (light purple)

Ward specific action plan Clanfield and Finchdean

About the Ward					
Ward area (km²)	21.87	District	East Hampshire	Catchment	River Lavant, Potwell tributary, Wallington
No. Residential properties	2020	No. other buildings	637	Critical Infrastructure	24

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	High	Economic Cost (£k)	100
Current local risk assessment		Potential local flood risk	
Groundwater	High	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, part of Finchdean and Rowlands Castle Community at Risk of Fluvial (Groundwater) flooding.

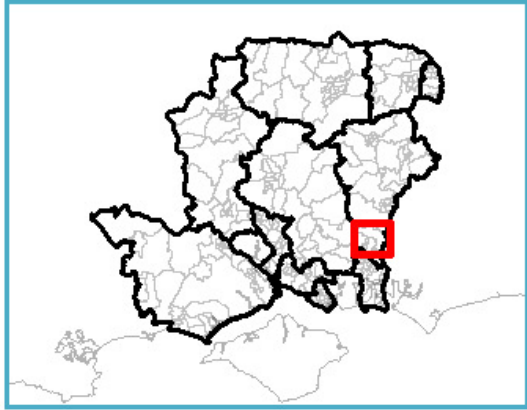
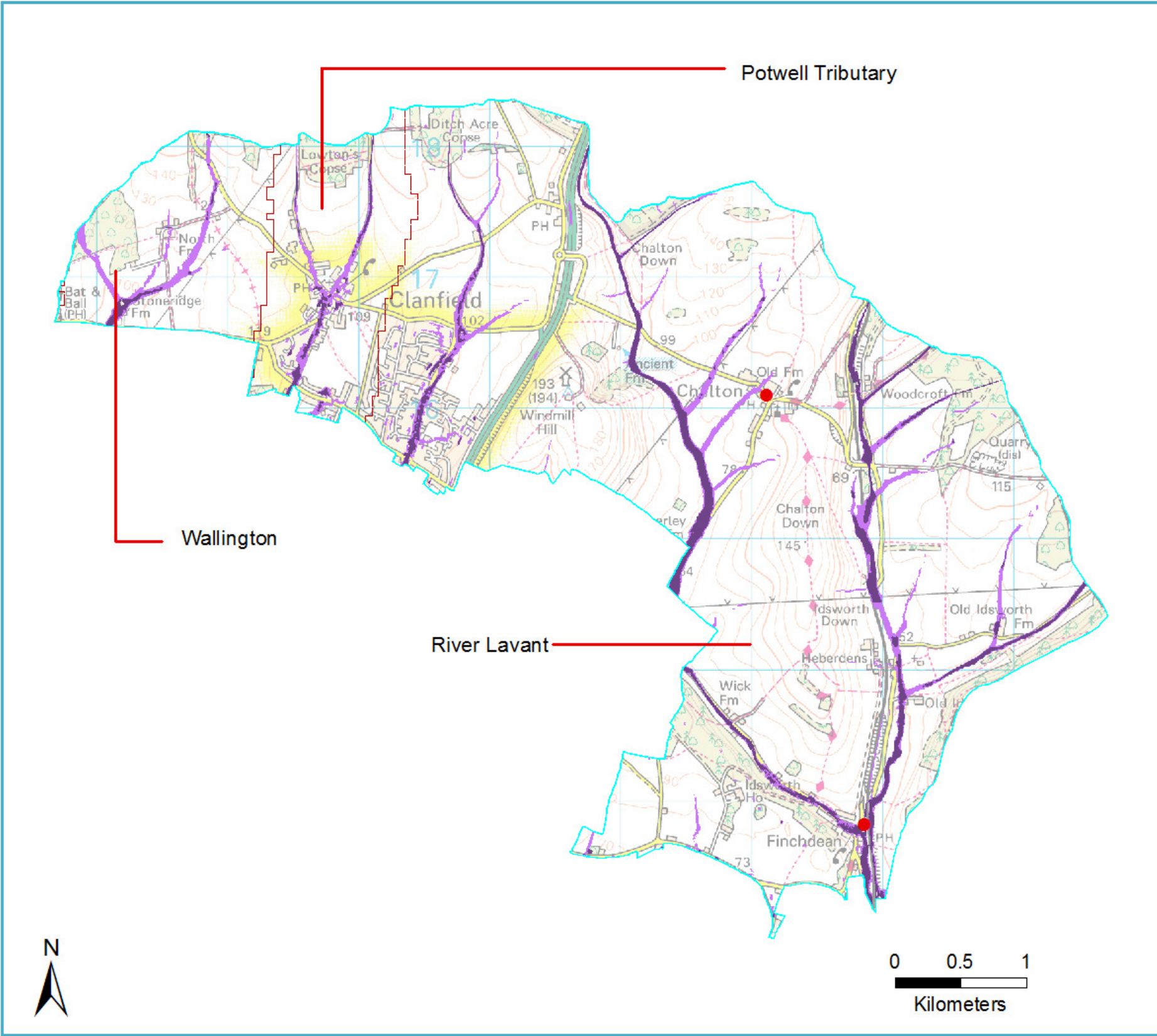
Summary
<p>The ward of Clanfield and Finchdean is in the south east of Hampshire. Settlements include Clanfield, Finchdean and Chalton, however most of the ward is rural.</p> <p>Critical infrastructure includes several schools, a doctor's surgery and numerous electricity substations.</p> <p>There are 2 records of groundwater flooding during the 2000/2001 event. Hampshire County Council has no records of surface water flooding in the ward.</p> <p>The Environment Agency Flood Map for Surface Water indicates numerous areas of the ward are at risk of flooding, mostly along valleys containing watercourses. The Environment Agency has identified that there are two properties at risk of significant or moderate fluvial (groundwater) flooding in Finchdean and Rowlands Castle.</p>

Current Risk
<p>There are 2 records of groundwater flooding during the 2000/2001 event.</p> <p>Hampshire county Council has no records of surface water flooding in the ward.</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water flooding indicates that areas along watercourses may be at risk from deep (greater than 0.3m depth) surface water flooding with a 1 in 30 and 1 in 200 year return period. This suggests the potential for surface water flooding affecting properties internally in these areas.</p> <p>The Environment Agency Flood Map for Surface Water indicates that slightly larger areas along watercourses could be at risk from shallow (0.1 – 0.3m deep) surface water flooding. Therefore there is some risk of shallow or nuisance flooding to roads, driveways and gardens throughout much of the ward.</p>

Measures already delivered to reduce risk
<p>Hampshire County Council have record of an internal property flooding incident, however measures to combat flood risk beyond regular maintenance of drainage assets that are the responsibility of Hampshire County Council, have not been identified or delivered.</p>

Future measures needed to reduce risks
<p>This ward remains at a high risk of groundwater water flooding. The groundwater surface water management plan will be reviewing the pathways of groundwater flooding within this ward, and will consider future measure and actions to mitigate the risk. This will include reviewing maintenance regimes, the ground water flood warning service, and potential capital schemes. However, this risk assessment identifies that there is a risk of combined flooding. Therefore Hampshire County Council should act as coordinating authority for a delivery team, which includes representation from the Water Company, the Environment Agency, the District Council and residents.</p> <p>This delivery team should work alongside the GWSWMP and:</p> <ul style="list-style-type: none"> • Ensure that residents are aware of the risk of flooding • Promote the groundwater flood warning system to residents • Ensure that residents are made aware of advice on how to protect themselves and their property in times of flooding • Ensure that RMAs, individuals and riparian owners maintain and manage their drainage systems and waterbodies • Undertake a detailed investigation into the sources, pathways and receptors of flooding, to assess the feasibility of a flood risk management scheme to reduce the risk in the ward. The Environment Agency will provide more detail resolution regarding actual properties at risk of fluvial of tidal flooding in Finchdean and Rowlands Castle, to allow the delivery team to understand and quantify the risk of flooding from combined sources. <p>Specific policies should be considered by the Planning Authority to control development within this risk area, ensuring suitable property resilience levels until such time as the source, pathways and receptors are understood at a detailed enough scale to ensure that new development is not at risk of flooding. Any new development must not increase flood risk elsewhere.</p>



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Cowplain

About the Ward					
Ward area (km²)	2.86	District	Havant	Catchment	Hermitage Stream, Potwell Tributary
No. Residential properties	4005	No. other buildings	421	Critical Infrastructure	51

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	High	Economic Cost (£k)	103
Current local risk assessment		Potential local flood risk	
Groundwater	None	Environment Agency Surface Water Maps	High
HCC incident database	Moderate	Flood risk from other sources (rivers/sea)	Yes, but not identified as an Environment Agency 'Community at Risk'

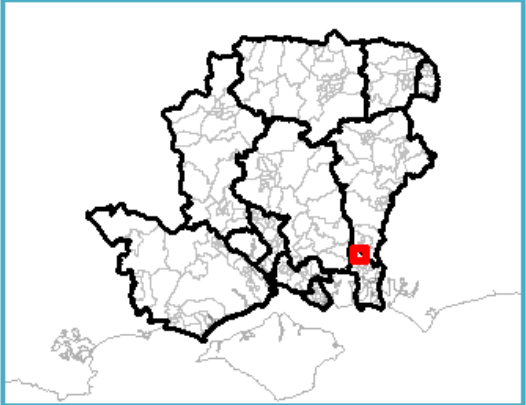
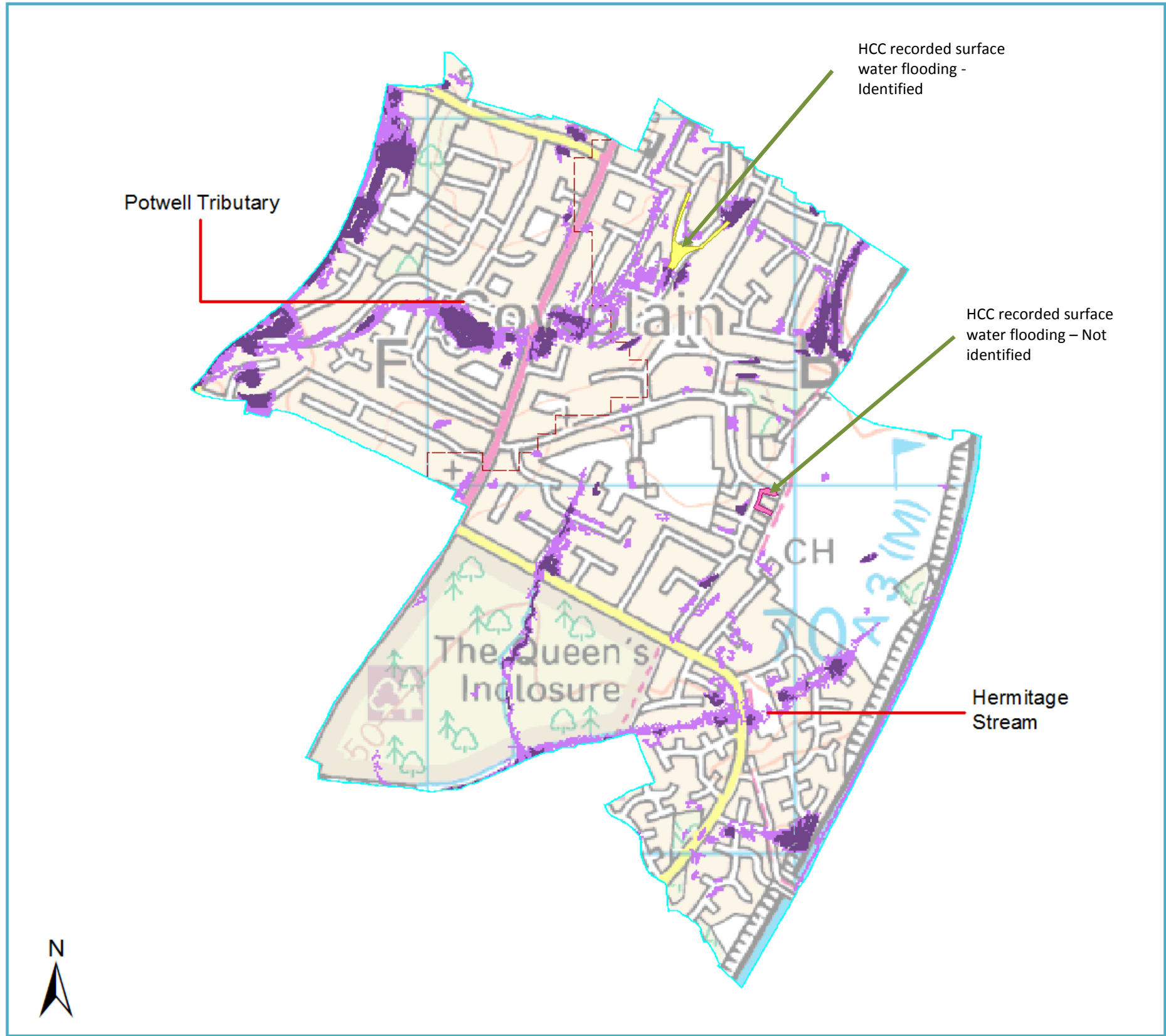
Summary
<p>Cowplain is a small ward located in the south east of Hampshire. The ward is predominantly covered by the settlement of Cowplain, although there is also an area of forest to the south west of the ward. Critical infrastructure includes several schools, a doctor's surgery, an activity centre and numerous electricity substations.</p> <p>There are no records of ground water flooding in the ward. Hampshire County Council has 2 records of surface water flooding; an alleviation programme has been identified for one of these.</p> <p>The Environment Agency Flood Map for Surface Water indicates the risk of flooding to the north and south of the ward.</p>

Current Risk
<p>There are no records of groundwater flooding in the ward.</p> <p>Hampshire County Council has 2 records of surface water flooding. The first is in Cherry Tree Avenue, as the cause is currently unknown measures to address this have not been identified. The second is in Spring Vale and Cotwell Avenue, where flooding is thought to be due to a lack of capacity. An alleviation programme has been identified for this location.</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water flooding indicates that areas in the north and some localised areas in the south of the ward may be at risk from deep (greater than 0.3m depth) surface water flooding with a 1 in 30 and 1 in 200 year return period. This suggests the potential for surface water flooding affecting properties internally in these areas.</p> <p>The Environment Agency Flood Map for Surface Water indicates that larger areas in the north and south of the ward could be at risk from shallow (0.1 – 0.3m deep) surface water flooding. Therefore there is some risk of shallow or nuisance flooding to roads, driveways and gardens throughout much of the ward.</p>

Measures already delivered to reduce risk
<p>The flooding reported at Spring Vale and Cotwell Avenue is a third part responsibility (Southern Water). Hampshire County Council has installed larger gullies and raised kerbs to reduce the impact of flooding.</p>

Future measures needed to reduce risks
<p>The risk assessment for this ward is based predominantly on modelled flooding. As such, we do not recommend that any capital interventions be considered for this ward. Measures to be delivered for this ward therefore are based on monitoring and communication:</p> <ul style="list-style-type: none"> • Communication of the modelled risk of surface water flooding in this ward to the community • Ongoing monitoring and reporting of incidents to validate the risk



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth



Ward specific action plan Droxford, Soberton and Hambledon

About the Ward					
Ward area (km2)	40.9	District	Winchester	WFD Catchment	Hamble, River Meon, River Wallington
No. Residential properties	880	No. other buildings	1032	Critical Infrastructure	17

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	194
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes. Hambledon is identified as a 'Community at Risk' of Fluvial (Groundwater) flooding.

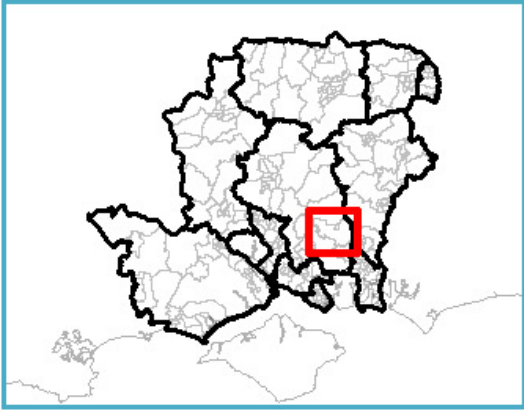
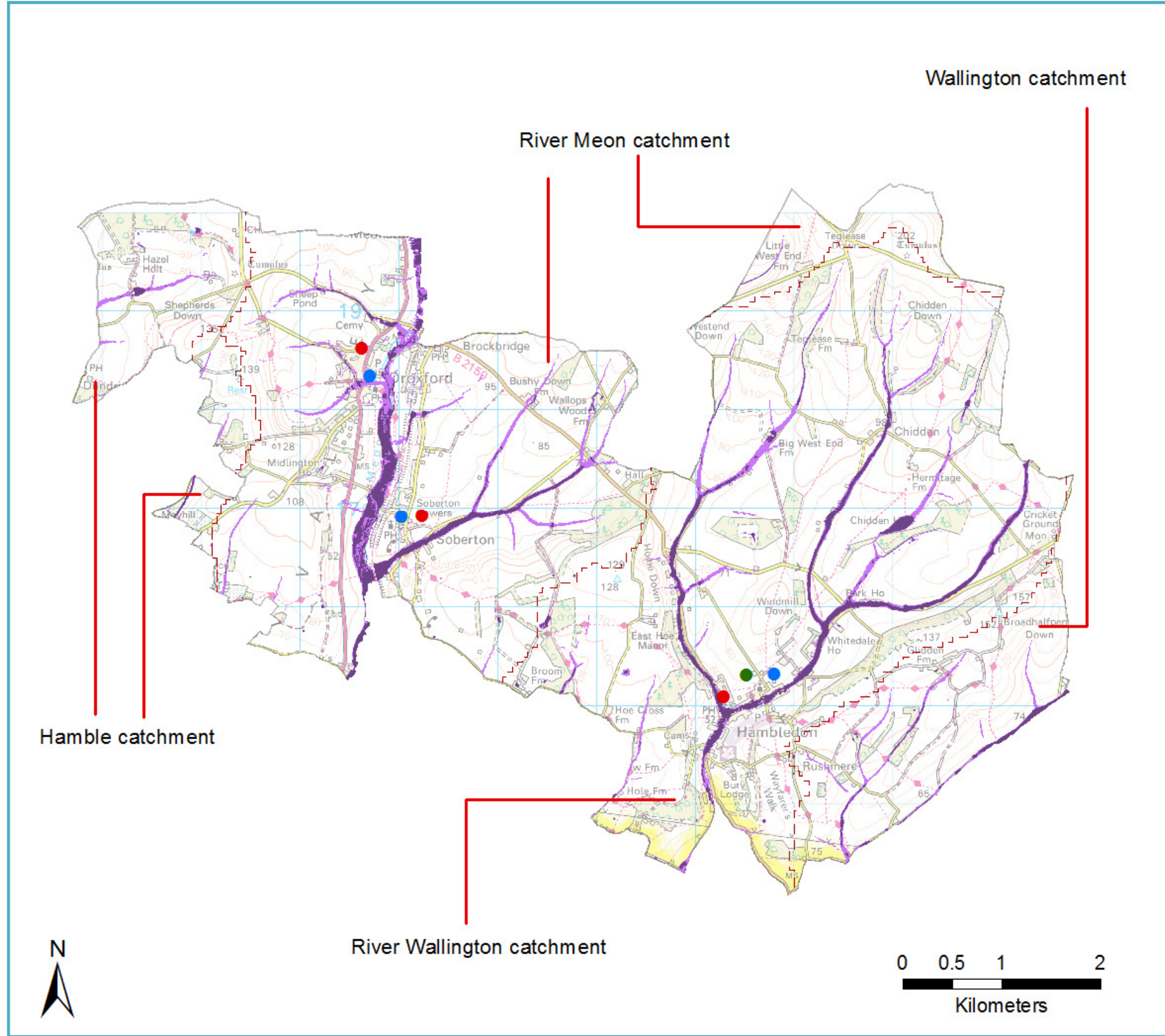
Summary
<p>The ward of Droxford, Soberton and Hambledon lies towards the south of the county. The main towns and villages within the ward are Hambledon, Chidden, Soberton and Droxford.</p> <p>Critical infrastructure within the ward includes: schools, fire station, electricity sub stations, water pumping stations and telephone exchange.</p> <p>No reported surface water flooding has been recorded by HCC in this ward. There are however 3 occurrences of groundwater flooding in 1994/95, 2000/01 and 2002/03. About 90 properties were affected in Hambledon, 5 in Soberton and 3 in Droxford</p> <p>The Environment Agency Flood Map for Surface Water shows the potential for surface water flooding in Hambledon, Soberton and Droxford, with the A32 potentially at risk. The Environment Agency Flood Map, shows the potential for river flooding in similar locations. Therefore the risk of flooding from combined sources is high. Hambledon is identified as a 'Community at Risk' of Fluvial (Groundwater) flooding, with 172 properties at significant or moderate risk. Hambledon is ranked 18th highest risk in Hampshire.</p>

Current Risk
<p>The Hampshire County Council incident database does not record any internal property flooding from surface water within this ward. However, groundwater flooding is a known risk within the ward, with reported incidents in Droxford (2000/01 and 2002/03), Soberton (2000/01 and 2002/03) and Hambledon (1994/95, 2000/01 and 2002/03).</p> <p>Records of the 2000/01 groundwater flooding indicate that 3 properties flooded internally in Droxford, 1 at ground floor level and 2 in cellars. In Soberton, 5 properties were affected by flooding, 4 with internal flooding and 1 with external flooding. Hambledon experienced extensive groundwater flooding in 2000/01, with 96 properties thought to have flooded internally, 50 at a ground floor level and 46 in the cellar.</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>Although Hampshire County Council has no reported incidents of internal property flooding from surface water in this ward, the Environment Agency Flood Map for Surface Water indicates a risk of deep flooding (greater than 0.3m) to properties in and around Droxford, Soberton, Hambledon and Chidden. In addition there is a risk of shallow, or nuisance, flooding (between 0.1 and 0.3m deep) that could affect external areas of properties including gardens, driveways and roads.</p> <p>The Environment Agency Flood Map indicates there could be interaction between flooding from surface water and rivers around Droxford, Soberton and Hambledon and on the roads leading between the villages.</p>

Measures already delivered to reduce risk
<p>Hampshire County Council hold no record of internal property flooding in this ward from surface water, and measures to address flood risk, beyond those identified in the Halcrow 2002 report on groundwater flooding have not been identified or delivered. A surface water drainage scheme to manage groundwater flows was proposed in the Halcrow 2002 report, but this has not been delivered.</p>

Future measures needed to reduce risks
<p>This ward remains at a high risk of groundwater water flooding, with Hambledon being a continued focus for concern. The groundwater surface water management plan will be reviewing the pathways of groundwater flooding within this ward, and will consider future measure and actions to mitigate the risk. This will include reviewing maintenance regimes, the ground water flood warning service, and potential capital schemes. However, this risk assessment identifies that there is a risk of combined flooding. Therefore Hampshire County Council should act as coordinating authority for a delivery team, which includes representation from the Water Company, the Environment Agency, the District Council and residents.</p> <p>This delivery team should work alongside the GWSWMP and:</p> <ul style="list-style-type: none"> • Ensure that residents are aware of the risk of flooding • Promote the groundwater flood warning system to residents • Ensure that residents are made aware of advice on how to protect themselves and their property in times of flooding • Ensure that RMAs, individuals and riparian owners maintain and manage their drainage systems and waterbodies • Undertake a detailed investigation into the sources, pathways and receptors of flooding, to assess the feasibility of a flood risk management scheme to reduce the risk in the ward. The Environment Agency will provide more detail resolution regarding actual properties at risk of fluvial flooding in Hambledon, to allow the delivery team to understand and quantify the risk of flooding from combined sources. <p>Specific policies should be considered by the Local Planning Authority (Winchester City Council) to control development within this risk area, ensuring suitable property resilience levels until such time as the source, pathways and receptors are understood at a detailed enough scale to ensure that new development is not at risk of flooding. Any new development must not increase flood risk elsewhere.</p> <p>The calculated annualised costs of flooding are approximately £200k, and this ward ranks highest in Hampshire for the combined risk.</p>



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Eastrop

About the Ward					
Ward area (km²)	2.2	District	Basingstoke and Deane	Catchment	Loddon
No. Residential properties	2859	No. other buildings	1149	Critical Infrastructure	122

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	121
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, but not identified as an Environment Agency 'Community at Risk'

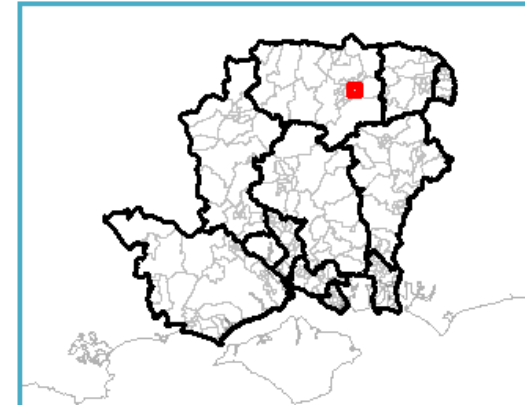
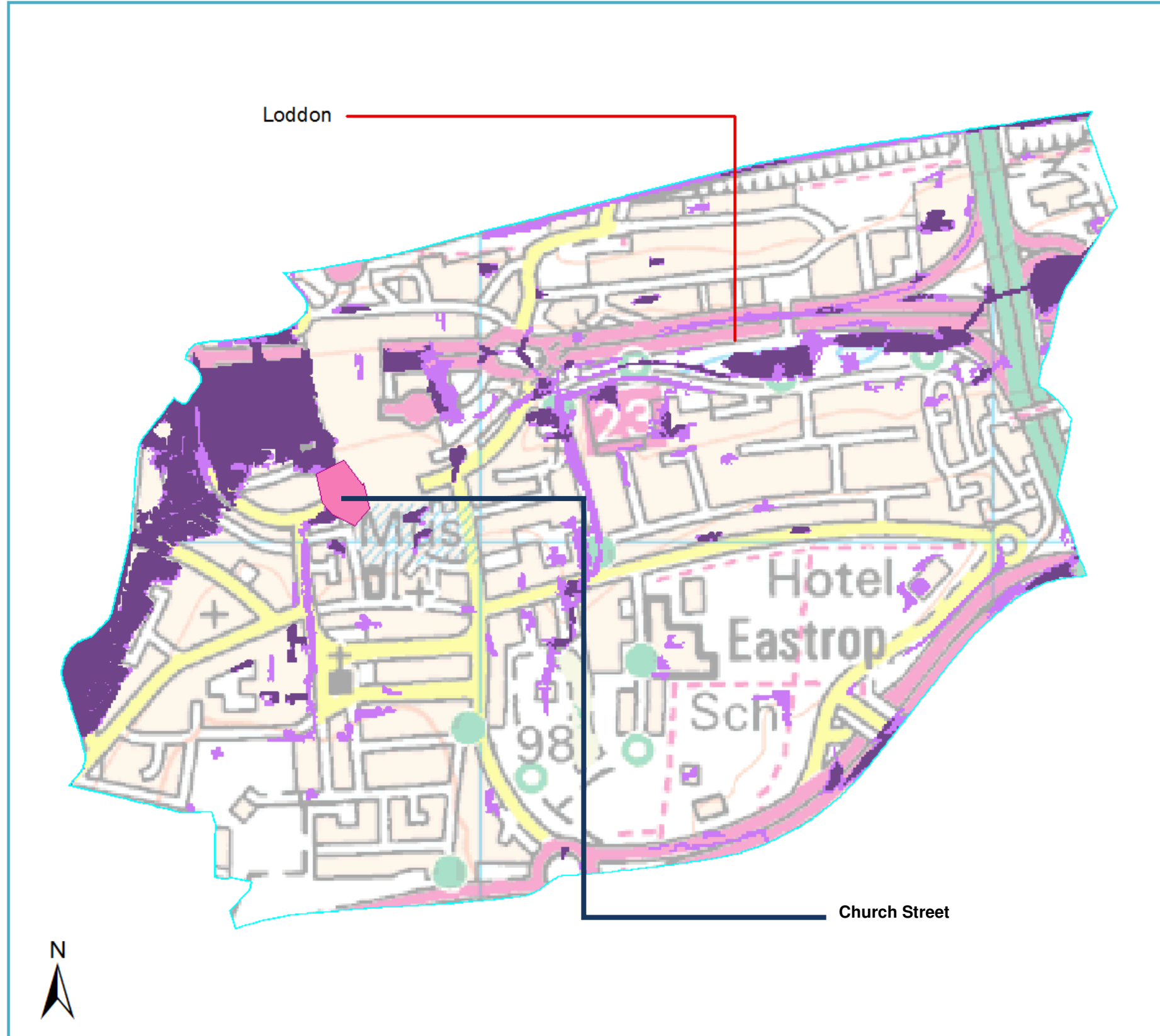
Summary
<p>The ward of Eastrop lies to the east of Basingstoke, north of the M3 motorway. The ward contains a number of residential social or mental care homes, a homeless hostel, medical centre, college, schools, businesses with hazardous substances, electricity substations, police stations and a telephone exchange.</p> <p>Groundwater flooding has not been recorded in the ward. Hampshire County Council has recorded surface water flooding which affected residential properties in the north west of the ward. The Environment Agency Flood Map for Surface Water indicates that properties and roads to the north and west of the ward are probably at risk of surface water flooding. The north of the ward may also be at risk of flooding from rivers.</p>

Current Risk
<p>The ward is known to be a risk from surface water flooding. Hampshire County Council has recorded incidents of flooding in Church Street, Chineham. The flooding appears to be caused to be due to surface water flowing rapidly down a hill and flooding a number of shops, although only one residential property is affected by flooding. It is thought inadequate or blocked drains exacerbate the problem as they cannot carry the flow resulting from heavy rainfall. The frequency of flooding is more frequent than 1 in every five years, and the risk of flooding can be exacerbated by local drainage ditches not be cleaned / maintained.</p> <p>Groundwater flooding is not known to have occurred within the ward.</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water for 'deep' surface water flooding illustrates that a wider area may be at risk from internal flooding to property than is known to have experienced flooding in the past. In particular, areas to the west of the ward and scattered areas towards the north of the ward appear to be at risk from surface water flooding greater than 0.3m depth.</p> <p>The Flood Map for Surface Water indicates that there is a possibility of shallow flooding (0.1 - 0.3m deep) in much of the ward. This suggests there is a chance of flooding affecting roads, and external areas of homes and buildings.</p> <p>There is also a chance of interaction between surface water flooding and river flooding in the north of the ward.</p>

Measures already delivered to reduce risk
<p>The flooding recorded by Hampshire County Council appears to be a result of heavy rainfall overwhelming the existing drainage network. Measures to manage the risk have not been identified, although this ward falls within the Basingstoke SWMP.</p>

Future measures needed to reduce risks
<p>The high combined risk for this ward is driven by the high risk presented by the Flood Map for Surface Water. Although there is reported property flooding in the area of Church Street, this only represents a small component of the economic costs. With limited incidents to verify the Flood Map for Surface Water, we do not recommend that any capital interventions be considered for this ward. This recommendation may be amended by the Basingstoke SWMP. Measures to be delivered for this ward therefore are based on monitoring and communication:</p> <ul style="list-style-type: none"> • Communication of the modelled risk of surface water flooding in this ward to the community • HCC to establish ownership of local drainage ditches through the SWMP and agree or enforce a maintenance plan with the owner • Ongoing monitoring and reporting of incidents to validate the risk • Further risk review and measures identification through the Basingstoke SWMP



Legend

- River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Eversley

About the Ward

Ward area (km²)	44.5	District	Hart	Catchment	Blackwater, Whitewater, Hart, Loddon
No. Residential properties	1090	No. other buildings	1582	Critical Infrastructure	28

About the Local Flood Risk

Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding

Over all local flood risk	Highest	Economic Cost (£k)	38
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, Eversley Cross is identified as a 'Community at Risk' of Fluvial Flooding by the Environment Agency

Summary

The ward of Eversley lies to the north East of Basingstoke. The A33 runs through the north western part of the ward and the A327 in the eastern part of the ward. The towns and villages within the ward include Riseley, Bramshill, Eversley, Eversley Cross, Hazeley, Mattingley and Hound Green. Two caravan parks are located in the north of the ward, near Riseley. Other infrastructure within the ward includes sewage works, telephone exchange, water pumping station, electricity substation and schools.

There are no records of groundwater flooding in 1994/95, 2000/2001 or 2002/2003 within the ward. HCC has recorded surface water flooding in the vicinity of Mattingley and Hound Green. The Environment Agency Flood Map for Surface Water also indicates the potential for surface water flooding in the areas surrounding Hound Green and Mattingley.

The Flood Map for Surface Water indicates a risk of river flooding from the River Hart and its tributaries, which may affect the B3011.

Current Risk

There have been no recorded incidents of flooding from groundwater within the ward.

There is a recorded risk of surface water flooding within Eversley. Hampshire County Council has records of internal flooding affecting between 1 and 4 properties between Mattingley and Hound Green in the south of the ward, with up to 30 properties being affected by external flooding. The flooding was thought to be caused by inadequate drainage, with tree root ingress into the drainage system exacerbating the problem..

Potential surface water flood risk

Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding.

Therefore this section reviews the risk of future flooding.

The Environment Agency Flood Map for Surface Water indicates that there is a risk of deep (greater than 0.3m) flooding throughout the ward, but particularly near Mattingley, Hound Green, Baseley and Bramshill. This risk of surface water could result in internal flooding to properties. The Environment Agency Flood Map for Surface Water also indicates that extensive parts of the ward could be at risk of shallow (0.1 - 0.3m) surface water flooding. There is therefore a risk of flooding affecting areas such as roads, gardens, pathways and drives within the ward.

The Environment Agency Flood Map indicates risk of fluvial flooding along the River Hart and its tributaries. There may be a risk of interaction between river and surface water flooding in these areas.

Measures already delivered to reduce risk

The recorded flooding near Mattingley and Hound Green is thought to be a result of rainfall overwhelming inadequate drainage systems. Hampshire County Council has recently carried out high pressure water jetting of drains in the area and it was found that the carrier drain appears to have been affected by tree roots. In 2011/2012 a scheme was developed to bypass the current outfall point, and to provide additional capacity.

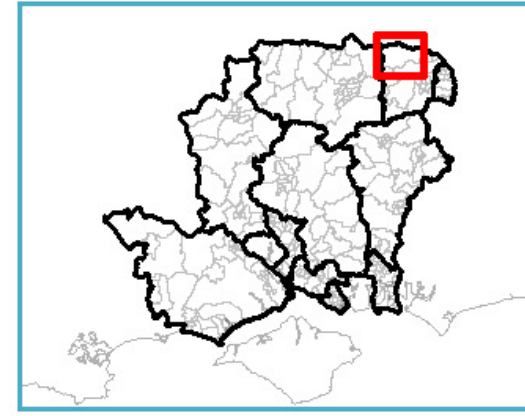
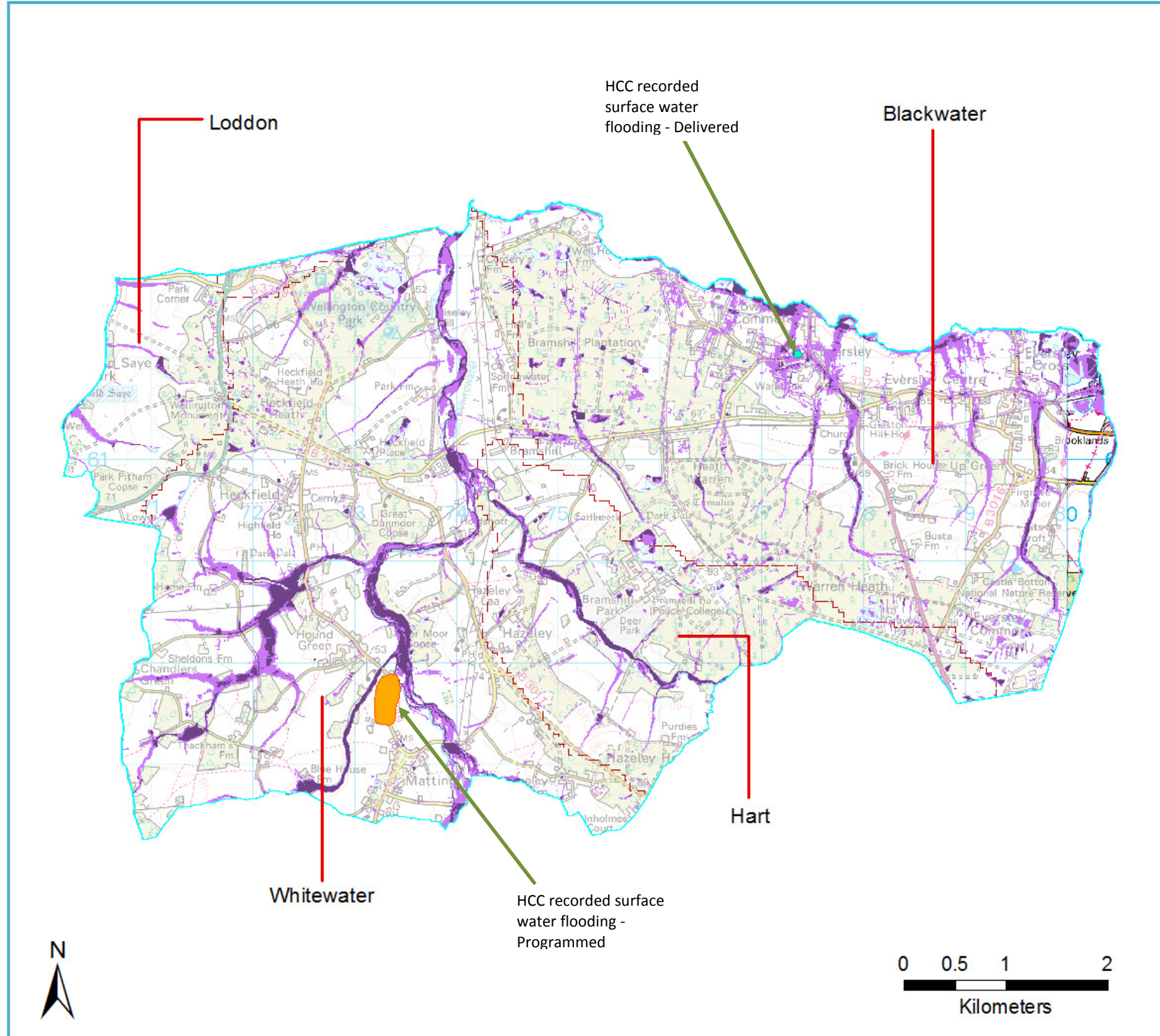
In response to reported flooding in the north of the ward works were carried out to provide additional culverts to take water away from homes and the Parish Council has undertaken to ensure landowners keep water courses through private land clear and property maintained.

Future measures needed to reduce risks

A measure has been delivered to reduce the risk of surface water flooding, therefore further intervention is not recommended at this stage. The success of the scheme will be determined by the presence or absence of property flooding in coming years.

However activities to increase community awareness are recommended:

- Local residents should be made aware of the flood reporting and investigation mechanism, and made aware of the importance of reporting flooding through this mechanism.
- Local residents should sign up for the Environment Agency flood warnings.



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Fareham East

About the Ward					
Ward area (km²)	9.4	District	Fareham	Catchment	River Meon, River Wallington, Wallington
No. Residential properties	3294	No. other buildings	1264	Critical Infrastructure	111

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	153
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes. South Fareham and Wallington are identified as 'Communities at Risk' of Fluvial and Tidal flooding by the Environment Agency

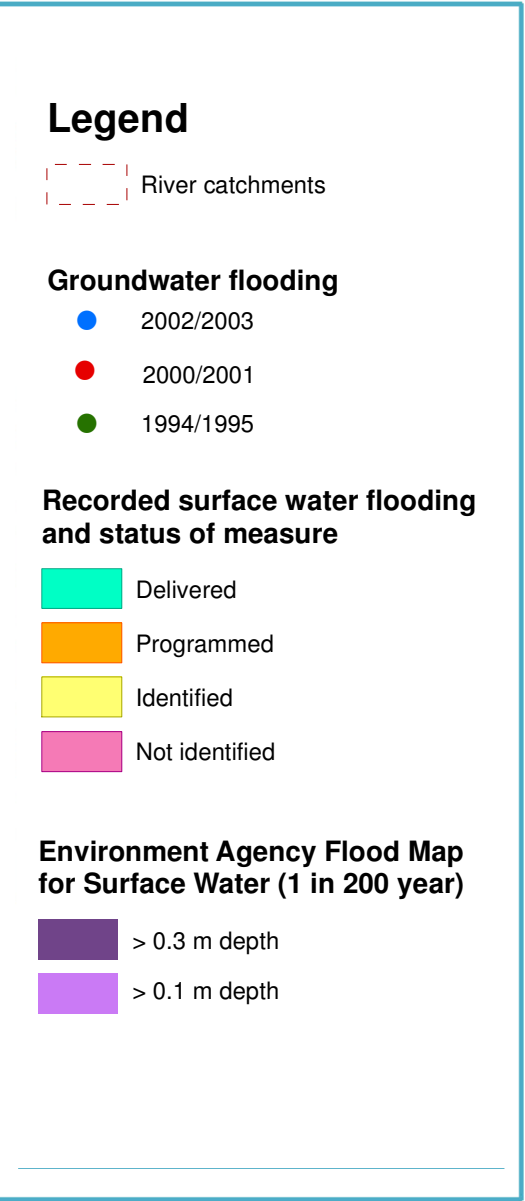
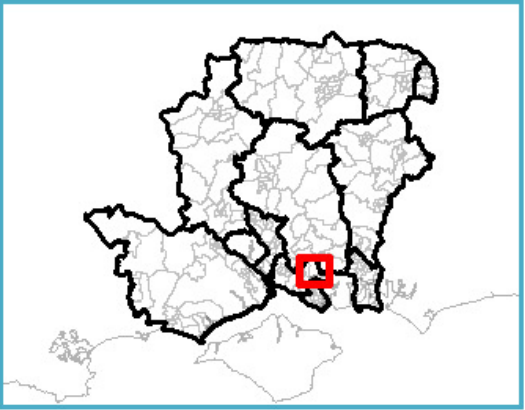
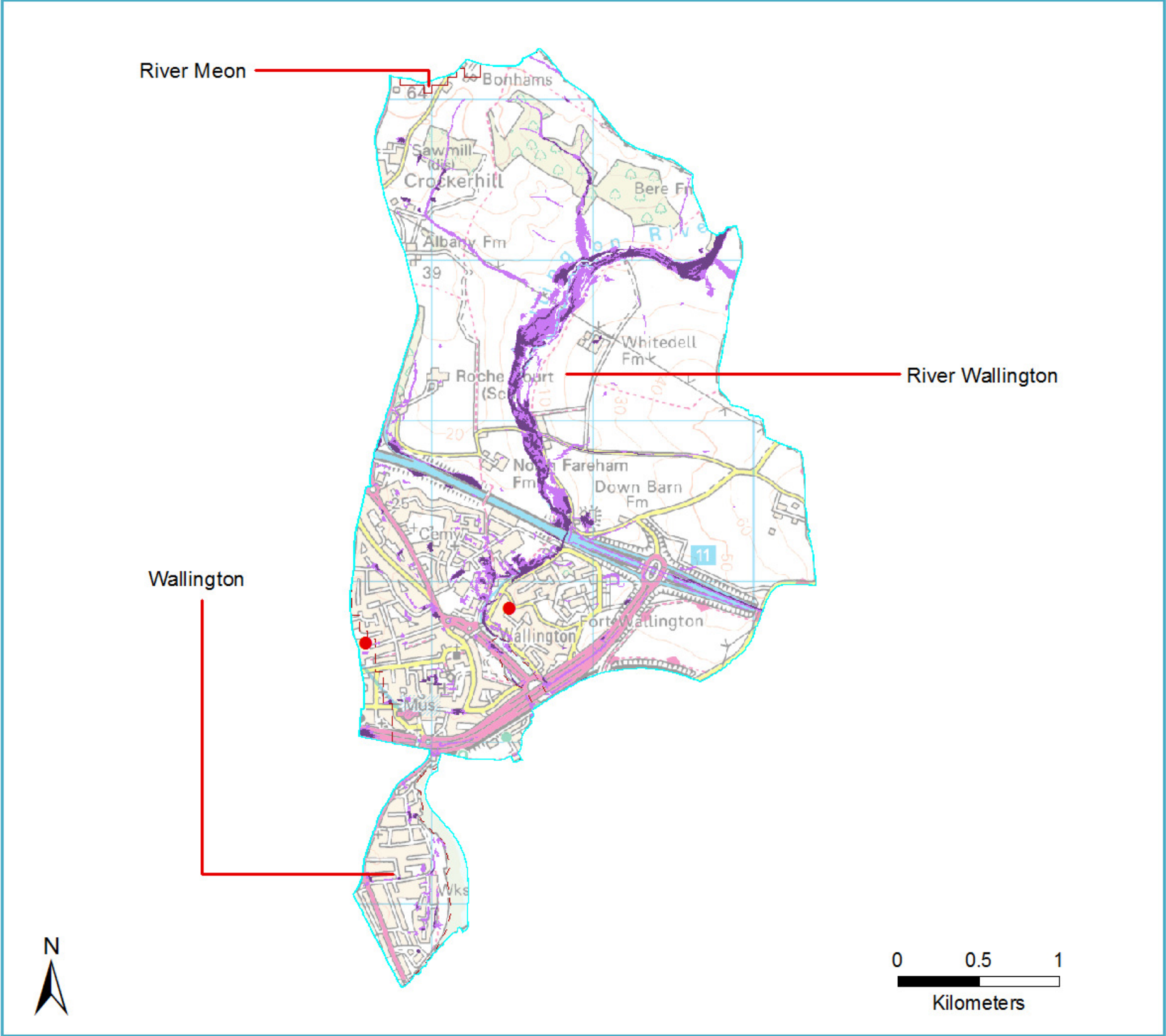
Summary
<p>Fareham East covers an area of 9.4 km² to the east of Fareham in the south of Hampshire. The area of Wallington lies to the south of the ward. Critical infrastructure within the ward include a telephone exchange, health centre, residential mental health and social care centres, a caravan/camping centre, primary school, water pumping stations and electricity sub stations</p> <p>Groundwater flooding was recorded in two areas in 2000/01. In Wallington at total of 65 properties were affected.</p> <p>Hampshire County Council has no recorded incidents of internal surface water flooding to properties in the ward. However the Environment Agency Flood Map for Surface Water indicates that surface water flooding could occur in central Wallington and further north within the ward. Historic records indicate that combined groundwater, surface water and fluvial flooding have affected around 40 properties in the centre of Wallington.</p> <p>The Environment Agency Flood Map indicates there is a risk of flooding from rivers or the sea through central Wallington and further north in the ward at similar locations to the potential surface water flooding. The M27 runs through the ward and this may be affected by river flooding between junction 10 and 11.</p> <p>Wallington is identified as a 'Community at Risk' of Fluvial and Tidal flooding by the Environment Agency. There are 116 properties at significant or moderate risk, and the community is ranked 25th highest risk in Hampshire.</p> <p>South Fareham is identified as a 'Community at Risk' of Tidal flooding by the Environment Agency. There are 78 properties at significant or moderate risk, and the community is ranked 34th highest risk in Hampshire.</p>

Current Risk
<p>Hampshire County Council has no records of internal surface water flooding within the ward.</p> <p>In 2000/2001 there were 2 reported incidents of groundwater flooding in Wallington with a total of 45 properties affected by ground floor flooding and 20 by external flooding.</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water flooding indicates that a small area through the centre of the ward along the river may be at risk from deep (greater than 0.3m depth) surface water flooding with a 1 in 30 and 1 in 200 return period. This suggests the potential for surface water flooding affecting properties internally in these areas.</p> <p>The Environment Agency Flood Map for Surface Water indicates that shallow (0.1 – 0.3m deep) surface water flooding may pose a risk to slightly larger areas around the main river channel. Therefore there is a risk of shallow or nuisance flooding to roads, driveways and gardens in these areas.</p> <p>The Environment Agency Flood Map indicates potential for river flooding in similar locations to potential surface water flooding. Surface water and river flooding may therefore interact along the river channel.</p>

Measures already delivered to reduce risk
<p>41 properties in Wallington have benefited from property level protection funded through a funding mechanism no longer open for applications. Other measures to address flood risk, beyond those identified in the Halcrow 2002 report on groundwater flooding, have not been identified or delivered.</p>

Future measures needed to reduce risks
<p>Although property level protection has been implemented for 41 properties at highest risk of river and surface water flooding, this ward remains at a high risk of groundwater water flooding. Hampshire groundwater surface water management plan will be reviewing the pathways of groundwater flooding within this ward, and will consider future measure and actions to mitigate the risk. This will include reviewing maintenance regimes, the ground water flood warning service, and potential capital schemes. However, there is a residual risk of combined flooding within this ward. Therefore Hampshire County Council should act as coordinating authority for a SWMP team, which includes representation from the Water Company, the Environment Agency, the District Council and residents.</p> <p>This delivery team should work alongside the GWSWMP and:</p> <ul style="list-style-type: none"> • Ensure that residents are aware of the risk of flooding • Promote the groundwater flood warning system to residents • Ensure that residents are made aware of advice on how to protect themselves and their property in times of flooding • Ensure that RMAs, individuals and riparian owners maintain and manage their drainage systems and waterbodies • Undertake a detailed investigation into the sources, pathways and receptors of flooding, to assess the feasibility of a flood risk management scheme to reduce the risk in the ward. The Environment Agency will provide more detail resolution regarding actual properties at risk of fluvial flooding in South Fareham and Wallington, to allow the delivery team to understand and quantify the risk of flooding from combined sources. <p>Specific policies should be considered by the Local Planning Authority (Fareham Borough Council) to control development within this risk area, ensuring suitable property resilience levels until such time as the source, pathways and receptors are understood at a detailed enough scale to ensure that new development is not at risk of flooding. Any new development must not increase flood risk elsewhere.</p> <p>The calculated annualised costs of groundwater flooding are approximately £150k, and this ward ranks second highest in Hampshire for the combined risk.</p>



Ward specific action plan Hart Plain

About the Ward					
About the Ward area (km²)	2.1	District	Havant	Catchment	Potwell Tributary and Hermitage Stream
No. Residential properties	4208	No. other buildings	329	Critical Infrastructure	55

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	106
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, but not identified as an Environment Agency 'Community at Risk'

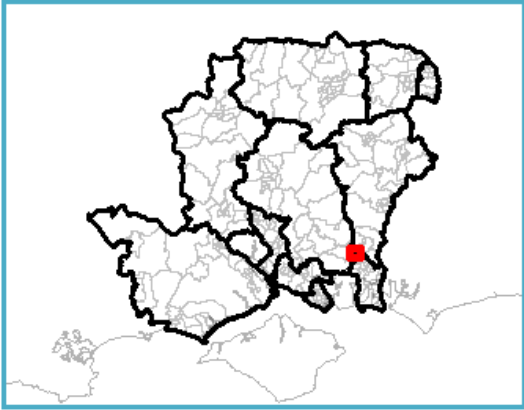
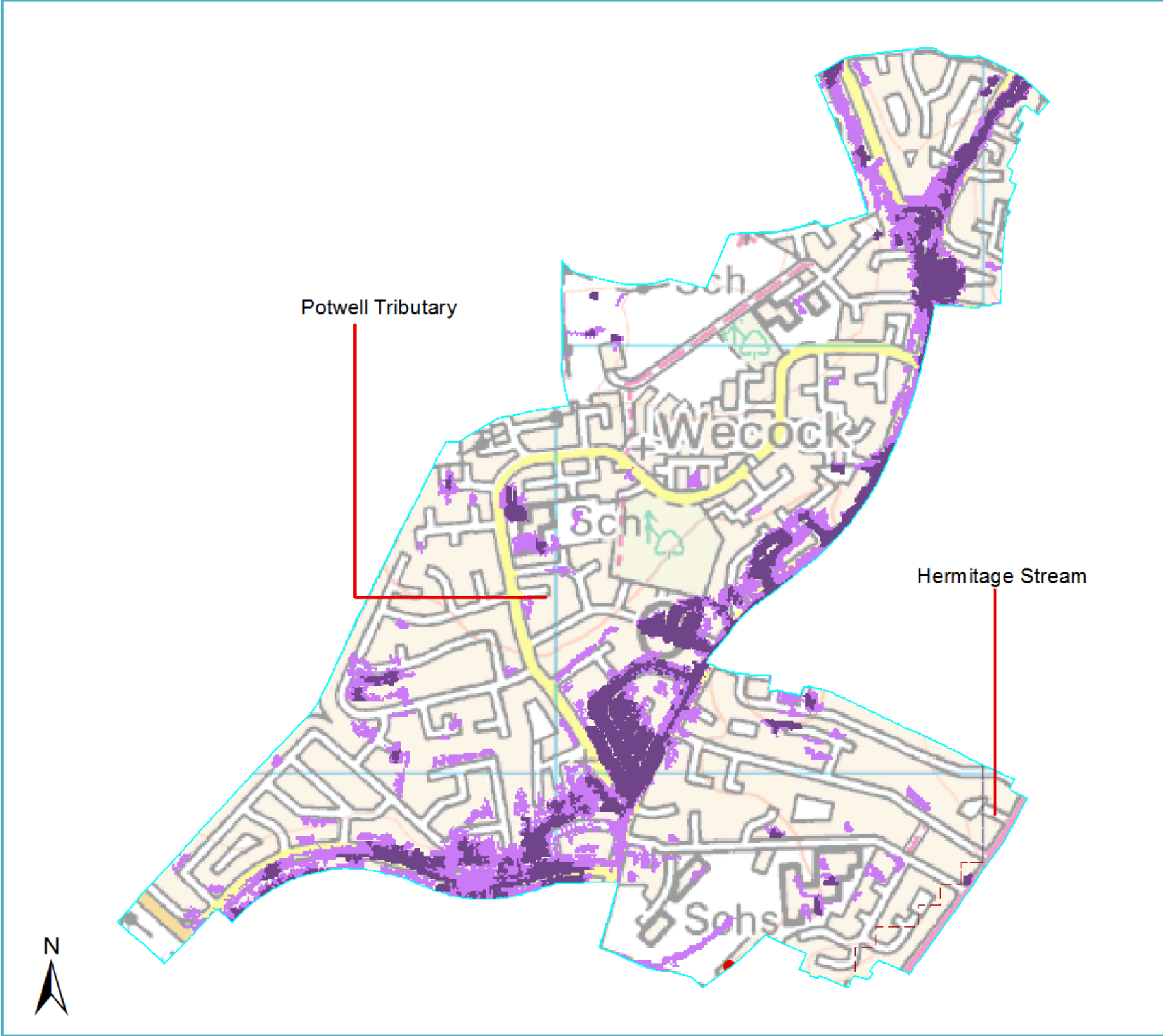
Summary
Hart Plain ward lies within south Hampshire in the borough of Havant. It covers a predominantly urban area of 2.1km ² . Critical infrastructure within the ward includes numerous electricity substations and a number of schools.
Hampshire County Council has no record of internal flooding to properties from surface water within the ward. Groundwater flooding was reported in 2000/2001 in the south of the ward, this affected 1 property.
The Environment Agency Flood Map for Surface Water indicates a risk of surface water flooding through the centre of the ward. The Environment Agency modelled data also indicates that these areas may also be at risk from river flooding.

Current Risk
The single groundwater flooding incident occurred in 2000/2001, and was on the border of the Waterloo ward to the south of Hart Plain.

Potential surface water flood risk
Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.
The Environment Agency Flood Map for Surface Water flooding indicates that an area through the centre of the ward along the river may be at risk from deep (greater than 0.3m depth) surface water flooding with a 1 in 30 and 1 in 200 return period. This suggests the potential for surface water flooding affecting properties internally in these areas.
The Environment Agency Flood Map for Surface Water indicates that shallow (0.1 – 0.3m deep) surface water flooding may pose a risk to slightly larger areas around the main river channel. Therefore there is a risk of shallow or nuisance flooding to roads, driveways and gardens in these areas.
The Environment Agency Flood Map indicates potential for river flooding in similar locations to potential surface water flooding. Surface water and river flooding may therefore interact along the river channel.
Therefore there is a risk of combined river flooding and surface water flooding. The incident of groundwater flooding does not appear in this risk area.

Measures already delivered to reduce risk
Hampshire County Council has no records of internal property flooding in this ward, therefore measures to combat flood risk, beyond regular maintenance of drainage assets that are the responsibility of Hampshire County Council, have not been identified or delivered.

Future measures needed to reduce risks
Other than one reported incident, the risk assessment for this ward is based entirely on modelled flooding. With limited incidents to verify this modelling, we do not recommend that any capital interventions be considered for this ward. Measures to be delivered for this ward therefore are based on monitoring and communication:
<ul style="list-style-type: none"> • Communication of the modelled risk of surface water flooding in this ward to the community • Ongoing monitoring and reporting of incidents to validate the risk



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Highclere and Bourne

About the Ward					
Ward area (km²)	58.2	District	Basingstoke and Deane	Catchment	Hollingtonstand Milford Lake, Enborne, Earlstone Stream and Burghclere Brook, River Test, Bourne Rivulet, River Anton
No. Residential properties	1293	No. other buildings	1513	Critical Infrastructure	36

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	High	Economic Cost (£k)	111
Current local risk assessment		Potential local flood risk	
Groundwater	Moderate	Environment Agency Surface Water Maps	High
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes. St Mary Bourne and Stoke are identified as 'Communities at Risk' of Fluvial (Groundwater) flooding by the Environment Agency

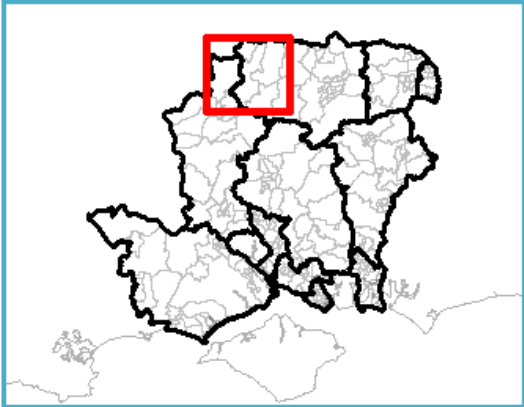
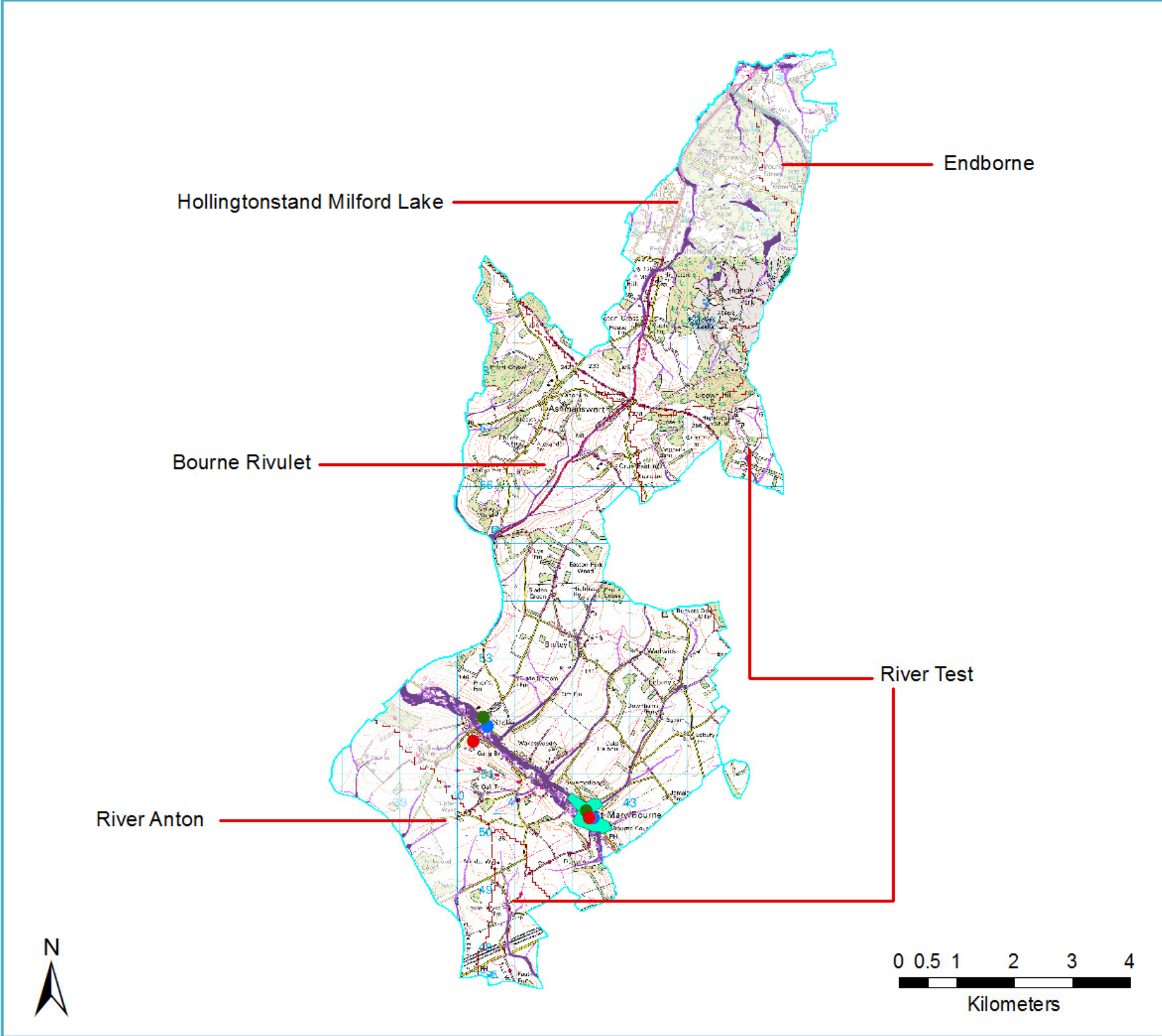
Summary
<p>Highclere and Bourne ward covers an area of 58.2 km². This ward lies to the east of Basingstoke and Deane district, and is located to the south of Newbury. A number of towns and villages lie within the ward including Broad Layings, Highclere, Binley and St Mary Bourne.</p> <p>Within the ward, the following types of critical infrastructure assets may be at risk from surface water flooding (they lie within or close to the Environment Agency deep surface water flood extents): electricity sub-stations, a school and a sewage treatment works.</p> <p>Historical data shows that the ward was affected by groundwater flooding on three occasions: 1994/95, 2000/01 and 2002/03. During the 2000/01 event, a total of 4 properties in Stoke and two properties in St Mary Bourne were affected by groundwater flooding.</p> <p>St Mary Bourne is identified as a 'Community at Risk' of Fluvial and Tidal flooding by the Environment Agency. There are 128 properties at significant or moderate risk, and the community is ranked 21st highest risk in Hampshire.</p> <p>Stoke is identified as a 'Community at Risk' of Tidal flooding by the Environment Agency. There are 6 properties at significant or moderate risk, and the community is ranked 71st highest risk in Hampshire.</p> <p>The HCC database has recorded surface water flooding in St Mary Bourne. A flood prevention measure has been identified and delivered.</p>

Current Risk
<p>The ward is under moderate risk of groundwater flooding, with records of flooding made in 1994/95, 2000/01 and 2002/03. During the 2000/01 event 4 properties in Stoke were affected by groundwater flooding, of which 3 had internal flooding, and a total of 2 properties in St Mary Bourne were affected, of which 1 had internal flooding.</p> <p>An incident of surface water flooding has been recorded in St Mary Bourne (1 in 100 year return period), which affected 1 - 4 properties and was thought to be due to the height of the road in relation to the riverbed. Flood prevention measures have been identified and delivered in this location. The ward is under moderate risk of surface water flooding.</p>

Potential surface water flood risk
<p>The Environment Agency Flood Map for Surface Water indicate that the ward is at the highest risk of surface water flooding, particularly along the B3048 (1 in 30 year and 1 in 200 year events), Highclere (1 in 30 year and 1 in 200 year events) and Broad Layings (1 in 200 year event).</p> <p>The Environment Agency flood maps indicate that the ward may be affected by fluvial flooding, particularly along the B3048 and in the vicinity of Highclere. Therefore surface water and river water flooding may interact in these areas.</p>

Measures already delivered to reduce risk
<p>Southern Water have carried out a sewer lining scheme to prevent pollution problems from ingress of water into the sewer however when the water table is high, sewer ingress is still an issue. Southern Water is working with a multi-agency group, including the County Council to address this. Other measures will be considered as part of the groundwater SWMP.</p>

Future measures needed to reduce risks
<p>This ward remains at moderate risk of groundwater water flooding. The groundwater surface water management plan will be reviewing the pathways of groundwater flooding within this ward, and will consider future measure and actions to mitigate the risk. This will include reviewing maintenance regimes, the ground water flood warning service, and potential capital schemes. However, this risk assessment identifies that there is a risk of combined flooding. Therefore Hampshire County Council should act as coordinating authority for a delivery team, which includes representation from the Water Company, the Environment Agency, the District Council and residents.</p> <p>This delivery team should work alongside the GWSWMP and:</p> <ul style="list-style-type: none"> • Ensure that residents are aware of the risk of flooding • Promote the groundwater flood warning system to residents • Ensure that residents are made aware of advice on how to protect themselves and their property in times of flooding • Ensure that RMAs, individuals and riparian owners maintain and manage their drainage systems and waterbodies <p>Undertake a detailed investigation into the sources, pathways and receptors of flooding, to assess the feasibility of a flood risk management scheme to reduce the risk in the ward. The Environment Agency will provide more detail resolution regarding actual properties at risk of fluvial flooding in St Mary Bourne and Stoke, to allow the delivery team to understand and quantify the risk of flooding from combined sources.</p> <p>Specific policies should be considered by the Local Planning Authority to control development within this risk area, ensuring suitable property resilience levels until such time as the source, pathways and receptors are understood at a detailed enough scale to ensure that new development is not at risk of flooding. Any new development must not increase flood risk elsewhere.</p>



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Penton Bellinger

About the Ward					
Ward area (km²)	47.9	District	Test Valley	Catchment	River Anton, Pillhill Brook, Bourne, Nine Mile River
No. Residential properties	1928	No. other buildings	1305	Critical Infrastructure	61

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	148
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, Appleshaw and Thruxton are identified as 'Communities at Risk' of Fluvial (groundwater) flooding by the Environment Agency

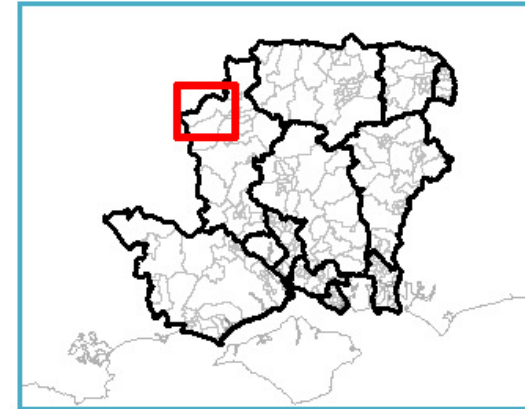
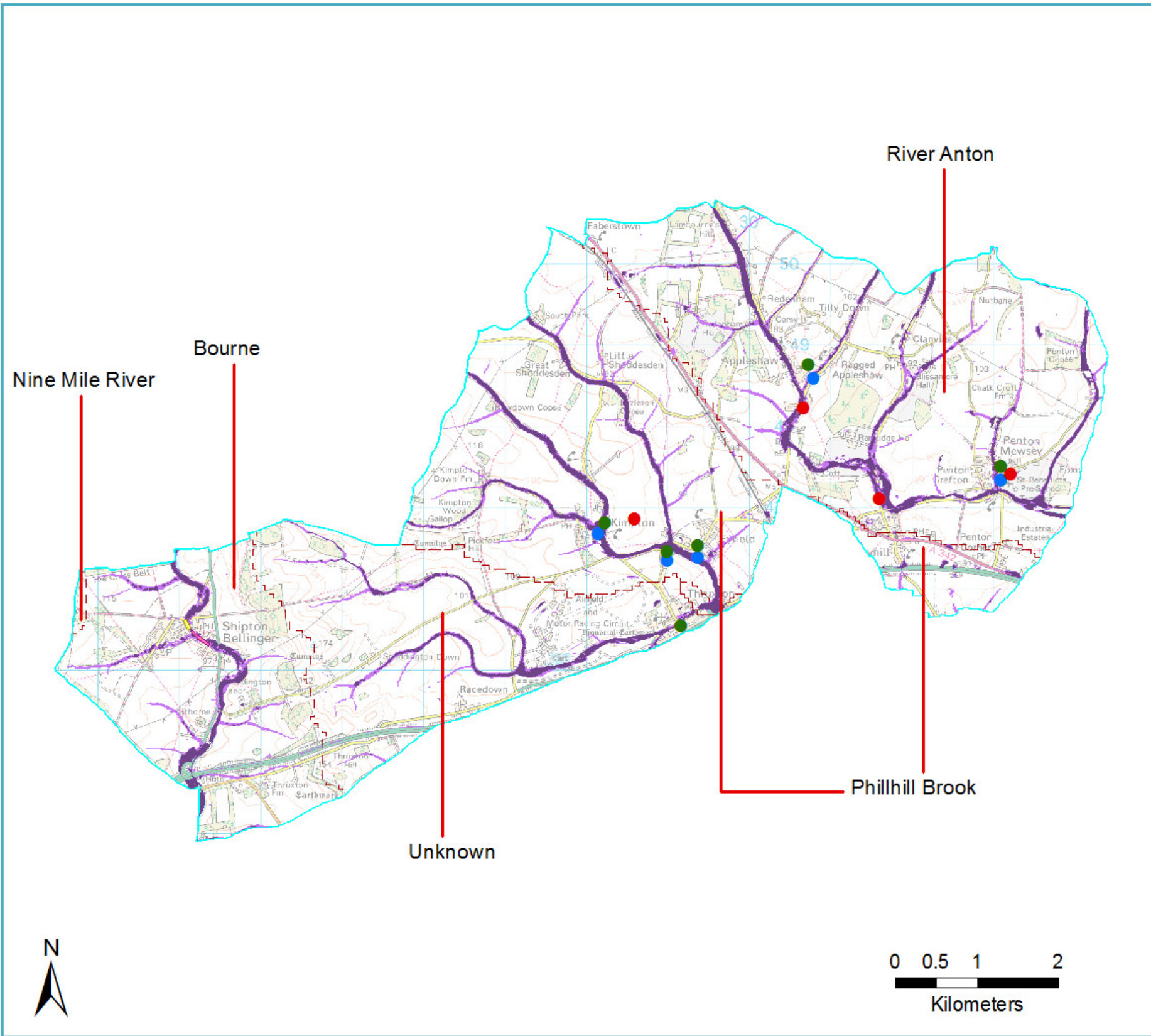
Summary
<p>Penton Bellinger is located in the north west of Hampshire, just west of Andover, in Test Valley district. A number of towns and villages lie within the ward including Shipton Bellinger, Kimpton, Fyfield, Appleshaw, Clanville, Weyhill and Penton Mewsey.</p> <p>Critical infrastructure within the ward includes Visit Britain Assessed properties, electricity sub stations, sewage works, water pumping stations and schools.</p> <p>In 1994/95 and 2002/03 groundwater flooding occurred in Kimpton, Thruxton, Fyfield, Appleshaw and Penton Mewsey. In 2000/01 groundwater flooding occurred in Kimpton, Appleshaw, Weyhill and Penton Mewsey.</p> <p>The HCC database has recorded surface water flooding in two areas of Shipton Bellinger.</p> <p>The Environment Agency Flood Map for Surface Water and Environment Agency Flood Map indicate there may be a risk of surface water and river flooding in Shipton Bellinger, Kimpton, Fyfield, Thruxton, Appleshaw, Clanville, Weyhill and Penton Mewsey. A number of roads are also affected.</p> <p>Appleshaw is identified as a 'Community at Risk' of Fluvial (Groundwater) flooding by the Environment Agency. There are 15 properties at significant or moderate risk, and the community is ranked 61st highest risk in Hampshire.</p> <p>Thruxton is identified as a 'Community at Risk' of Fluvial (Groundwater) flooding by the Environment Agency. There are 27 properties at significant or moderate risk, and the community is ranked 52th highest risk in Hampshire.</p>

Current Risk
<p>The reported surface water flooding in Shipton Bellinger is thought to be due to a combination of fluvial and pluvial flooding. It is believed that the cause of pluvial flooding is poorly designed highway drainage. In total up to 10 properties have been affected by internal flooding from the highway.</p> <p>In 1994/95 and 2002/03 groundwater flooding occurred in Kimpton, Thruxton, Fyfield, Appleshaw and Penton Mewsey, although property level flooding data is not available.</p> <p>In 2000/01 groundwater flooding occurred in Kimpton (16 properties), Appleshaw (12 properties) Weyhill (2 properties) and Kimpton (7 properties)</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Waters and Environment Agency Flood Map indicate there may be a risk of combined surface water and river flooding in Shipton Bellinger, Kimpton, Fyfield, Thruxton, Appleshaw, Clanville, Weyhill and Penton Mewsey. A number of roads are also affected.</p> <p>The Environment Agency Flood Map for Surface Water follows the lines of valleys and show flood risk in approximately the same places as the fluvial Flood Zone maps. The shallow water Environment Agency Flood Map for Surface Water show similar patterns, but with a greater extent of flooding. Therefore there may be a risk of flooding due to a combination of sources.</p>

Measures already delivered to reduce risk
<p>No measures have yet been delivered to reduce the flood risk, but it has been identified that changes to the drainage system could improve the pluvial flooding problem.</p>

Future measures needed to reduce risks
<p>Minor highway drainage remodelling (approximate cost £10k – 50k) would reduce the risk in Shipton Bellinger. However, given the combined risks from groundwater, surface and fluvial flooding, a more detailed investigation is recommended before capital works are considered.</p> <p>This ward remains at a high risk of flooding from all sources. The groundwater surface water management plan will be reviewing the pathways of groundwater flooding within this ward, and will consider future measure and actions to mitigate the risk. This will include reviewing maintenance regimes, the ground water flood warning service, and potential capital schemes. However, this risk assessment identifies that there is a risk of combined flooding. Therefore Hampshire County Council should act as coordinating authority for a delivery team, which includes representation from the Water Company, the Environment Agency, the District Council and residents.</p> <p>This delivery team should work alongside the GWSWMP and:</p> <ul style="list-style-type: none"> • Ensure that residents are aware of the risk of flooding • Promote the groundwater flood warning system to residents • Ensure that residents are made aware of advice on how to protect themselves and their property in times of flooding • Ensure that RMAs, individuals and riparian owners maintain and manage their drainage systems and waterbodies • Undertake a detailed investigation into the sources, pathways and receptors of flooding, to assess the feasibility of a flood risk management scheme to reduce the risk in the ward. The Environment Agency will provide more detail resolution regarding actual properties at risk of fluvial flooding in Appleshaw and Thruxton, to allow the delivery team to understand and quantify the risk of flooding from combined sources. <p>Specific policies should be considered by the Local Planning Authority (Test Valley Borough Council) to control development within this risk area, ensuring suitable property resilience levels until such time as the source, pathways and receptors are understood at a detailed enough scale to ensure that new development is not at risk of flooding. Any new development must not increase flood risk elsewhere.</p> <p>The calculated annualised costs of flooding in this ward are approximately £150k.</p>



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Popley East

About the Ward					
Ward area (km²)	1.7	District	Basingstoke and Deane	Catchment	Loddon, Bow Brook, Vyne Stream
No. Residential properties	2083	No. other buildings	295	Critical Infrastructure	34

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	141
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	No

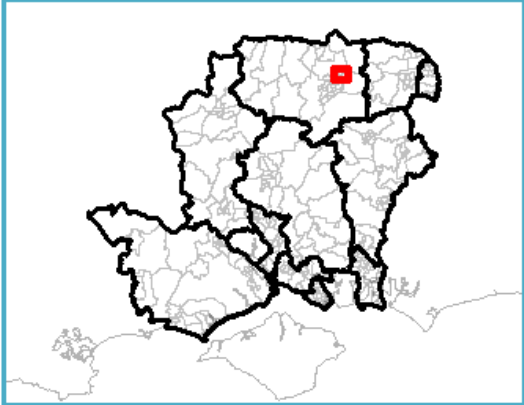
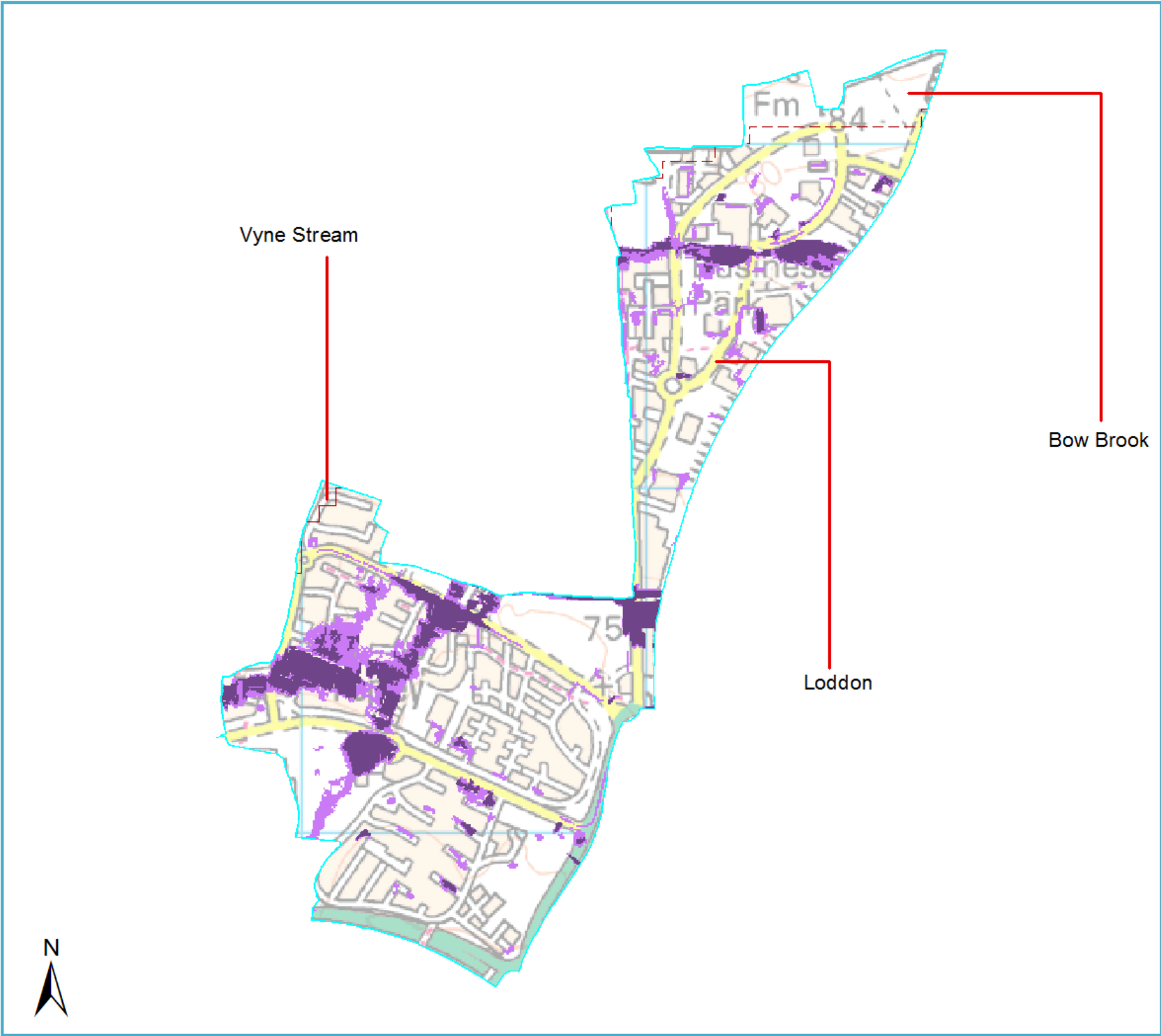
Summary
<p>The ward of Popley East lies to the north east of Basingstoke. It is bounded on the east by the railway line and to the west by Sherborne St John. Critical infrastructure within the ward includes a number of schools, electricity substations and a telephone exchange.</p> <p>There are no recorded incidents of groundwater flooding and Hampshire County Council has no recorded incidents of surface water flooding affecting properties internally. However the Environment Agency Flood Map for Surface Water indicates that there is a potential risk for surface water flooding of properties and roads throughout the ward.</p>

Current Risk
There is no record of groundwater flooding and Hampshire County Council has no records of internal surface water flooding within the ward.

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water indicates a large area in the south west of the ward that is at risk of deep surface water flooding (greater than 0.3m deep) with a return period of 1 in 30 and 1 in 200 years. There is also a small area at risk in the north of the ward as well as in the centre. Deep surface water flooding suggests the potential for flooding to affect properties internally in these areas.</p> <p>The Environment Agency Flood Map for Surface Water for shallow surface water flooding (0.1 – 0.3m deep) highlights slightly larger areas in the same locations in the ward as at risk. There is therefore the risk of shallow or nuisance flooding to roads, driveways and gardens throughout much of the ward.</p>

Measures already delivered to reduce risk
Hampshire County Council has no records of internal property flooding in this ward, therefore measures to combat flood risk, beyond regular maintenance of drainage assets that are the responsibility of Hampshire County Council, have not been identified or delivered. However, this ward falls within the Basingstoke SWMP, therefore the SWMP group will be assessing the risk and potential measures to be delivered in further detail.

Future measures needed to reduce risks
<p>The risk assessment for this ward is based entirely on modelled flooding. With no reported incidents to verify this modelling, we do not, at this stage, recommend that any capital interventions be considered for this ward. This recommendation may be amended by the Basingstoke SWMP. Measures to be delivered for this ward therefore are based on monitoring and communication:</p> <ul style="list-style-type: none"> • Communication of the modelled risk of surface water flooding in this ward to the community • Ongoing monitoring and reporting of incidents to validate the risk • Further risk review and measures identification through the Basingstoke SWMP.



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan St Mary's

About the Ward					
Ward area (km²)	6.8	District	Test Valley	Catchment	River Anton, River Test
No. Residential properties	3588	No. other buildings	1511	Critical Infrastructure	121

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	144
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, Andover is identified as a 'Community at Risk' of Fluvial flooding by the Environment Agency, and St Mary's falls within Andover.

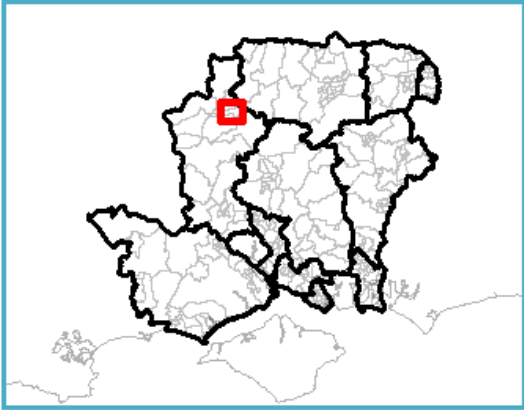
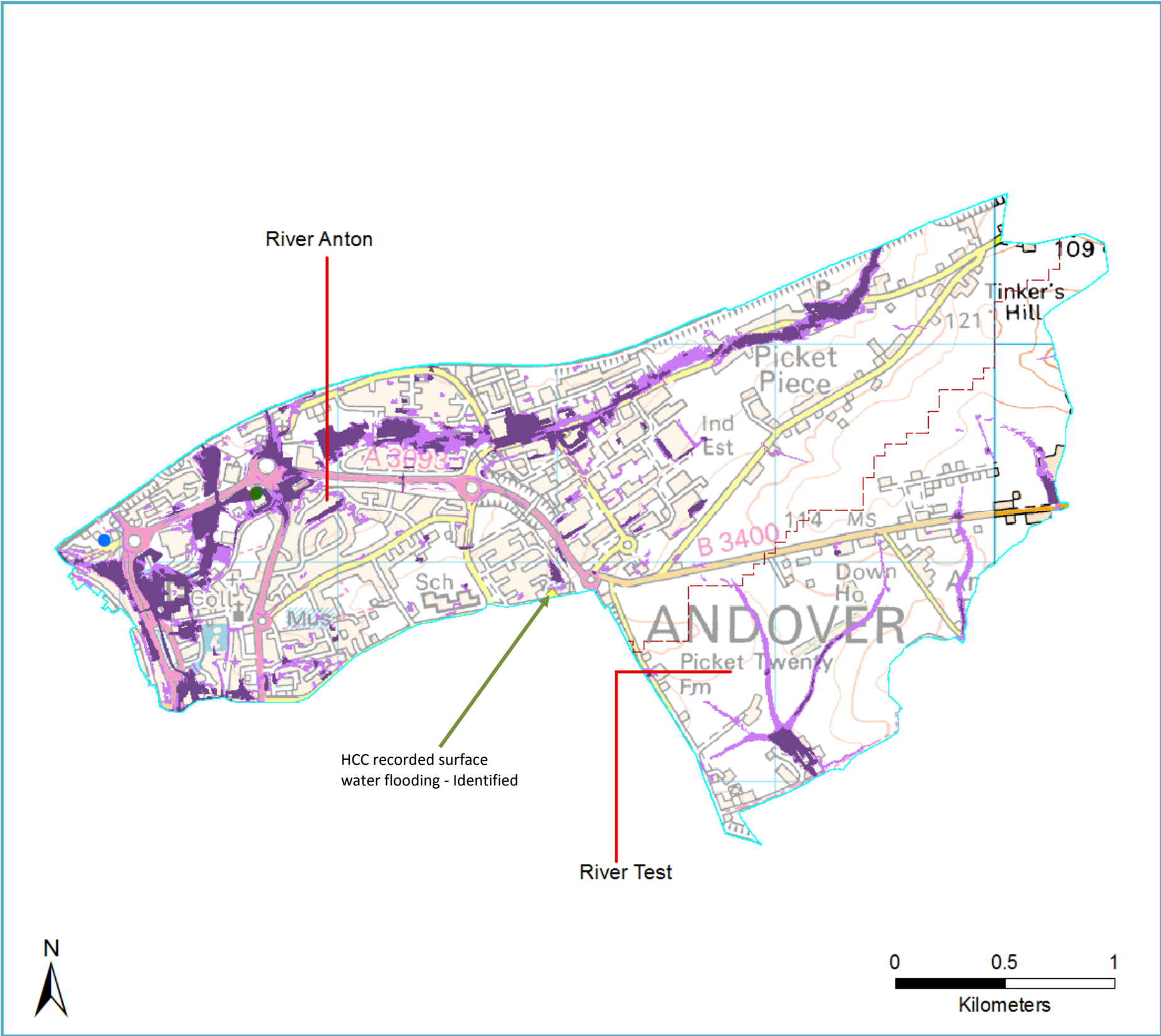
Summary
<p>The ward of St Marys is in the north of Hampshire and covers the urban area of central and west Andover. Infrastructure within the ward includes a day centre, caravan park, a number of schools, a pumping station, electricity sub stations, leisure centres and medical centres.</p> <p>Groundwater flooding was reported in the west of the ward in 1994/1995 and 2002/2003.</p> <p>Hampshire County Council has records of internal property flooding from surface water in the centre of the ward and has identified measures to address this. The Environment Agency Flood Map for Surface Water indicates that property and roads to the west and north of the ward may be at risk from surface water flooding. The Environment Agency Flood Map indicates that those areas with potential surface water flood risk may also be at risk from river flooding.</p> <p>Andover, of which St Mary's is a ward, is identified as a 'Community at Risk' of Fluvial flooding by the Environment Agency. There are 116 properties at significant or moderate risk, and the community is ranked 26th highest risk in Hampshire.</p>

Current Risk
<p>Groundwater flooding has been reported in the west of the ward in two locations, once in 1994/95 and once in 2002/03. Hampshire County Council also has one recorded incident of internal surface water flooding in the south of the ward, which affected 1 property and has an estimated return period of 1 in 30 years. The source of flooding was thought to be pluvial and caused by damage to pipework and unsuitable pipe sizes.</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water for deep surface water flooding (greater than 0.3m deep) indicates the possibility of surface water flooding with a return period of 1 in 30 or 1 in 200 years over small areas in the west of the ward as well as along the northern edge and in one small area in the south. This suggests the potential for surface water flooding affecting properties internally in these areas.</p> <p>The Environment Agency Flood Map for Surface Water for shallow surface water flooding (0.1 – 0.3m deep) indicates only slightly larger areas at risk of flooding than the deep surface water flooding map. This suggests a few areas around the edge of the deeper flooding zones could be at risk of shallow or nuisance flooding to roads, driveways and gardens.</p> <p>The Environment Agency Flood Map indicates potential for river flooding in the west and northern edge of the ward. In the west a large amount of this has a less than 0.1% chance of happening annually whilst the areas indicated in the north have between 1 and 0.1% chance of occurring in a year. These areas coincide with those identified as at risk of surface water flooding and therefore there is potential of these types of flooding interacting.</p>

Measures already delivered to reduce risk
<p>The one incident recorded by Hampshire County Council has only been identified as at risk of internal surface water flooding with no programmes planned. It has been identified that flood protection may be difficult because the property is below the level of the road, and hence individual property protection may be required (approximate cost of £20k).</p>

Future measures needed to reduce risks
<p>Other than one reported incident, the risk assessment for this ward is based entirely on modelled flooding. With limited incidents to verify this modelling, we do not recommend that any capital interventions be considered for this ward. Measures to be delivered for this ward therefore are based on monitoring and communication:</p> <p>Andover, of which St Mary's is a ward, is identified as a 'Community at Risk' of Fluvial flooding by the Environment Agency. There are 116 properties at significant or moderate fluvial flood risk, and the community is ranked 26th highest risk in Hampshire.</p>



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Tadley North

About the Ward

Ward area (km²)	2.8	District	Basingstoke and Deane	Catchment	Foudry Brook, West End Brook, Baughurst Brook
No. Residential properties	2625	No. other buildings	378	Critical Infrastructure	41

About the Local Flood Risk

Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding

Over all local flood risk	Moderate	Economic Cost (£k)	83
Current local risk assessment		Potential local flood risk	
Groundwater	Low	Environment Agency Surface Water Maps	Low
HCC incident database	Highest	Flood risk from other sources (rivers/sea)	Yes. Tadley is identified as a 'Community at Risk' of Fluvial flooding by the Environment Agency.

Summary

Tadley North lies in the north of the county. The main areas in the ward are Heather End and Tadley Common. Critical infrastructure includes numerous electricity substations and pumping stations, a community centre, health centre, fire station and primary school.

There are no records of groundwater flooding the ward. HCC has records of one reported incident of surface water flooding in the south of the ward.

The Environment Agency flood map indicates numerous pockets of flooding over the entire ward, particularly in north and central areas. Tadley itself is identified as a 'Community at Risk' of Fluvial flooding by the Environment Agency. There are 34 properties at significant or moderate risk, and the community is ranked 46th highest risk in Hampshire.

Current Risk

An incident of surface water flooding has been recorded by HCC on the southern edge of the ward. The flooding is thought to result from lack of capacity within the drainage system.

Potential surface water flood risk

The Environment Agency Flood Map for Surface Water indicates small areas in the centre and south of the ward which are at risk of deep surface water flooding (greater than 0.3m deep) with a return period of 1 in 200 years. Deep surface water flooding suggests the potential for flooding to affect properties internally in these areas.

The Environment Agency Flood Map for Surface Water also highlights slightly larger areas throughout the ward which are at risk from shallow surface water flooding (0.1 – 0.3m deep). There is therefore the risk of shallow or nuisance flooding to roads, driveways and gardens throughout much of the ward.

Measures already delivered to reduce risk

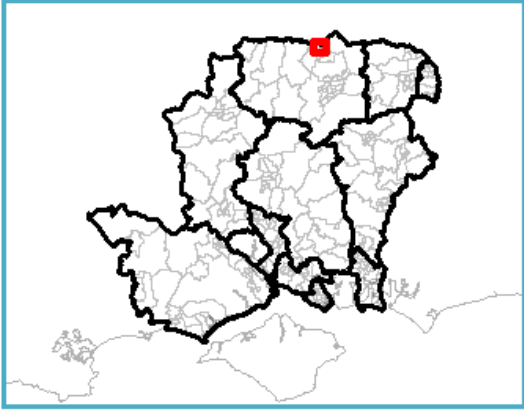
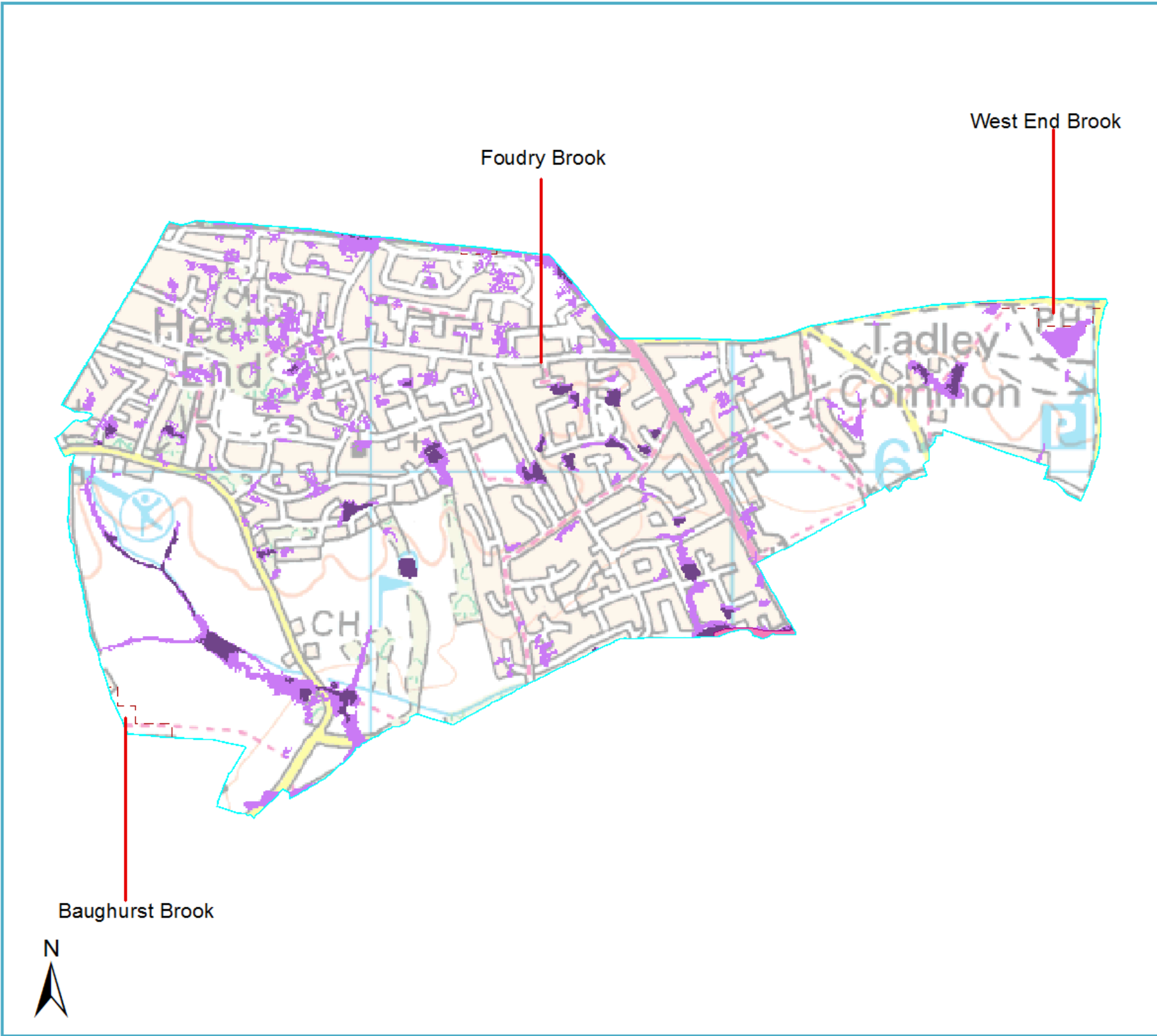
Flooding in the south of the ward, recorded within the HCC database, is thought to result from lack of capacity within the underground drainage system but notes that specific drainage works are unfeasible. However measures have been taken to mitigate flooding by resurfacing and altering the camber of the road, as well as identifying that more frequent gully cleaning would help reduce the flood risk.

Future measures needed to reduce risks

Other than one reported incident of flooding, the risk assessment for this ward is based entirely on modelled information. With limited incidents to verify the modelling, we do not recommend that any capital interventions be considered for this ward. Ongoing maintenance and gully clearing has been identified, beyond this the proposed measures for this ward are based on monitoring and communication:

- Communication of the modelled risk of surface water flooding in this ward to the community
- Ongoing monitoring and reporting of incidents to validate the risk
- Where we are communicating with the community, we will assist the Environment Agency in ensuring the community is aware of the risk of fluvial flooding
- Ongoing monitoring and reporting of incidents to validate the risk

Should the Environment Agency be considering delivering actions to reduce the fluvial risk, we will assist their investigations to ensure that other sources of flood risk are considered within those actions.



Legend

- River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

Ward specific action plan Totton East

About the Ward					
Ward area (km²)	2.7	District	New Forest	Catchment	River Test, Bartley Water
No. Residential properties	2740	No. other buildings	528	Critical Infrastructure	54

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	43
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, Totton is identified as a 'Community at Risk' of Fluvial and Tidal flooding by the Environment Agency, and Totton East is part of that community.

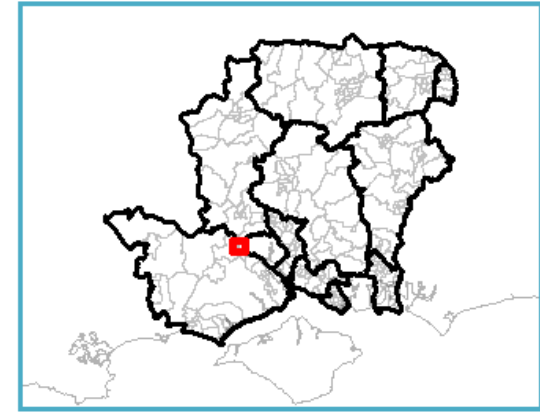
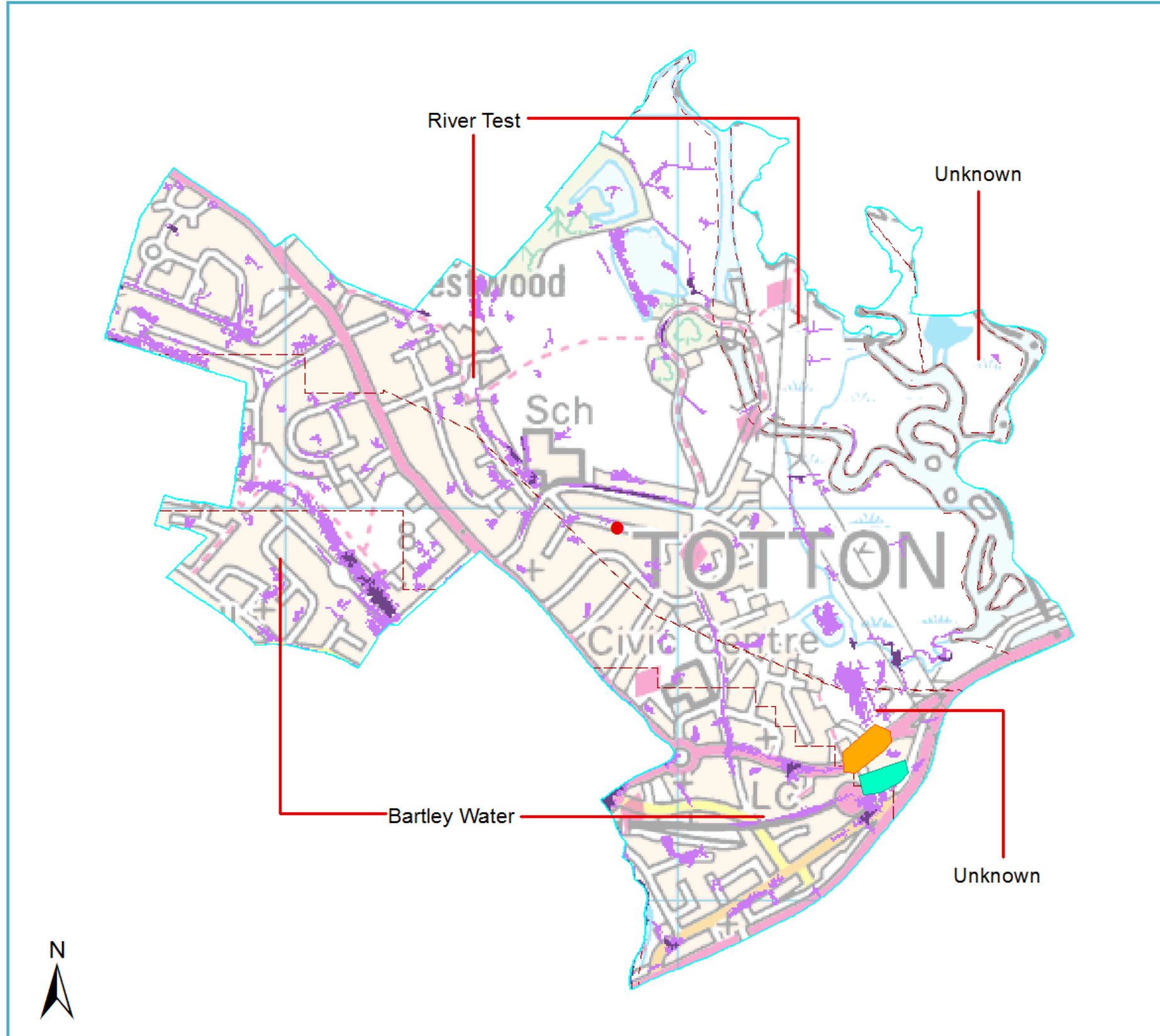
Summary
<p>Totton East is a small ward to the west of Southampton. Within the ward are Totton Fire Station and Health Centre, schools and colleges and electricity substations.</p> <p>Groundwater flooding has been recorded in 2000/2001 in the centre of the ward. In addition Hampshire County Council has recorded surface water flooding in the south east of the ward. The Environment Agency Flood Map for Surface Water indicates risk of surface water flooding in the west and south of the ward.</p> <p>The Environment Agency Flood Map indicates that a large area to the east of the ward is at risk of flooding from rivers or the sea.</p> <p>Based on the Environment Agency Communities at risk work, there are 592 properties at significant or moderate fluvial and / or tidal flood risk in Totton, therefore there is likely to be interaction between tidal, fluvial and surface water throughout Totton.</p>

Current Risk
<p>The groundwater flooding which affected the ward in 2000/01, affected 11 properties in total. Eight of these were flooded at ground floor level, some of which were also affected by foul water flooding.</p> <p>Surface water flooding is known to be a risk in this ward. Hampshire County Council has two records of surface water flooding, both affecting Totton. One affected about 2 properties but the source of the flooding was not identified. The other event affected about 10 properties and is thought to have been caused because an outflow pipe is too small, resulting in backing up into the system.</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water indicates there may be a risk of deep (greater than 0.3m depth) flooding, which could cause internal property flooding, in areas of the ward that do not currently have records of flooding. Areas of possible shallow surface water flooding (0.1 - 0.3m) also occur throughout the ward suggesting that nuisance flooding external to properties could occur.</p> <p>The Environment Agency Flood Map indicates there may be a risk of flooding in the east and south of the ward. There is limited mapped surface water flooding within these areas, although there is some potential for interaction between the flooding sources.</p>

Measures already delivered to reduce risk
<p>HCC has undertaken initial investigations of the causes of surface water flooding. It is believed that a lack of capacity in the outfall structures is the primary cause of the surface water flooding. Measures are in place to improve the outfall structures.</p>

Future measures needed to reduce risks
<p>Although this ward has a potential for combined sources of flooding, the overall combined risk from local sources is low, with this ward being ranked 87th overall. Therefore, we do not recommend that any further investigation is carried out on combined sources.</p> <p>Measures, beyond those already planned, to be delivered for this ward therefore are based on monitoring and communication:</p> <ul style="list-style-type: none"> • Communication of the modelled risk of surface water flooding in this ward to the community • Ongoing monitoring and reporting of incidents to validate the risk Where we are communicating with the community, we will assist the Environment Agency in ensuring the community is aware of the risk of fluvial and tidal flooding • Ongoing monitoring and reporting of incidents to validate the risk <p>Should the Environment Agency be considering delivering actions to reduce the fluvial risk, we will assist their investigations to ensure that other sources of flood risk are considered within those actions.</p>



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth



Ward specific action plan Upper Meon Valley

About the Ward					
Ward area (km²)	55.8	District	Winchester	Catchment	Itchen, River Meon, River Wallington, River Itchen, Hamble, Caker Stream, Bow lake
No. Residential properties	858	No. other buildings	1152	Critical Infrastructure	34

About the Local Flood Risk			
Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding			
Over all local flood risk	Highest	Economic Cost (£k)	123
Current local risk assessment		Potential local flood risk	
Groundwater	Highest	Environment Agency Surface Water Maps	Moderate
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, but not identified as an Environment Agency 'Community at Risk'

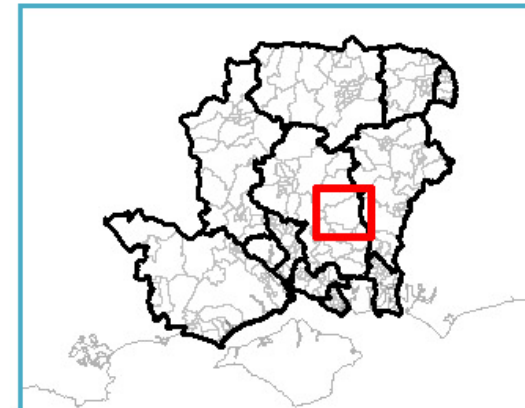
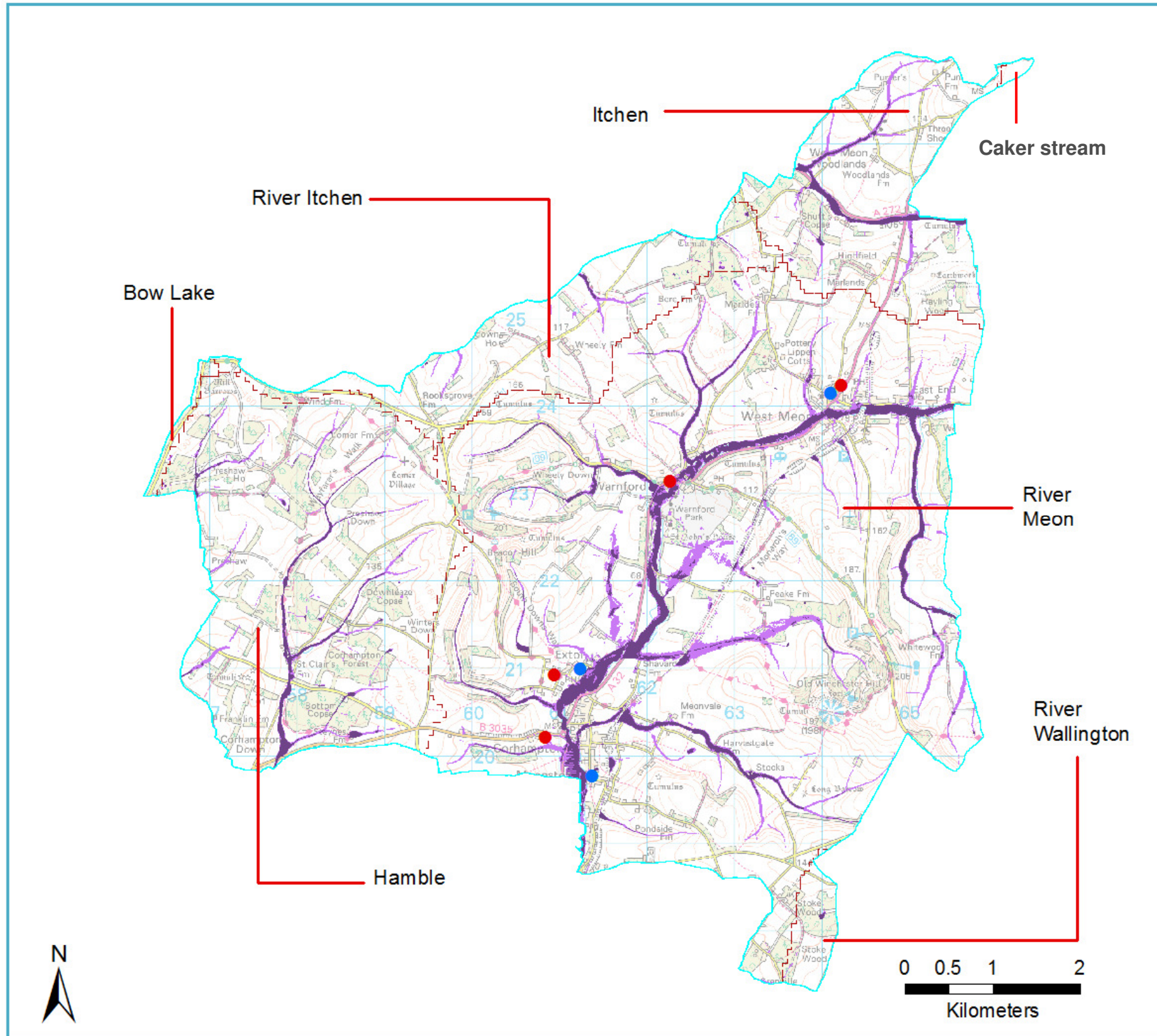
Summary
<p>The Upper Meon Valley ward lies in the centre of Hampshire. It contains a number of towns and villages including West Meon, Warnford, Exton, Corhampton and Meonstoke, which lie along the A32 in the centre of the ward.</p> <p>Critical infrastructure within the ward includes pumping stations, sewage treatment works, doctors surgery, primary school, electricity sub stations, telephone exchanges and a mobile home park</p> <p>Hampshire County Council has no record of internal flooding to properties from surface water within the ward. Groundwater flooding, was reported in 2000/01 and 2002/03. In 2000/01 properties were affected in West Meon, Warnford, Exton, Corhampton and Meonstoke. In 2002/03 groundwater flooding was reported in Meonstoke, Exton and West Meon.</p> <p>The Environment Agency Flood Map for Surface Water indicates the risk of surface water flooding in the vicinity of the A32. This may affect the road as well as the villages of West Meon, Warnford, Exton, Corhampton and Meonstoke. Environment Agency modelled data also indicates these areas may also be at risk from river flooding.</p>

Current Risk
<p>The ward of the Upper Meon Valley is known to be at risk from groundwater flooding. In 2000/01 four locations flooded: West Meon, Warnford, Exton and Corhampton/Meonstoke area. In 2002/03 groundwater flooding was reported in West Meon, Exton and the Corhampton/Meonstoke area.</p> <p>During the 2000/01 event 12 properties were affected in Corhampton and Meonstoke, 11 suffered internal flooding. In Exton, 7 properties were flooded internally and another 7 suffered external flooding. Four properties were flooded internally in Warnford and in West Meon 16 properties were affected, with 14 flooding internally.</p>

Potential surface water flood risk
<p>Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.</p> <p>The Environment Agency Flood Map for Surface Water indicates there is a risk of deep (greater than 0.3m) surface water flooding in the vicinity of the A32. Properties within West Meon, Warnford, Exton, Corhampton and Meonstoke may therefore be at risk of internal flooding from surface water. The maps also show that extensive areas of the ward may be at risk from shallow (0.1 - 0.3m) surface water flooding, which could affect, for example, roads, gardens and driveways.</p> <p>The Environment Agency Flood Map also indicates there is a risk of flooding from rivers in the vicinity of the A34. This area may therefore be at risk from combined sources of flooding.</p>

Measures already delivered to reduce risk
<p>Hampshire County Council has no records of internal property flooding in this ward, therefore measures to combat flood risk, beyond regular maintenance of drainage assets that are the responsibility of Hampshire County Council, have not been identified or delivered.</p>

Future measures needed to reduce risks
<p>This ward remains at a high risk of groundwater water flooding. The groundwater surface water management plan will be reviewing the pathways of groundwater flooding within this ward, and will consider future measure and actions to mitigate the risk. This will include reviewing maintenance regimes, the ground water flood warning service, and potential capital schemes. However, this risk assessment identifies that there is a risk of combined flooding. Therefore Hampshire County Council should act as coordinating authority for a delivery team, which includes representation from the Water Company, the Environment Agency, the District Council and residents.</p> <p>This delivery team should work alongside the GWSWMP and:</p> <ul style="list-style-type: none"> • Ensure that residents are aware of the risk of flooding • Promote the groundwater flood warning system to residents • Ensure that residents are made aware of advice on how to protect themselves and their property in times of flooding • Ensure that RMAs, individuals and riparian owners maintain and manage their drainage systems and waterbodies • Undertake a detailed investigation into the sources, pathways and receptors of flooding, to assess the feasibility of a flood risk management scheme to reduce the risk in the ward. <p>Specific policies should be considered by the Local Planning Authority (Winchester City Council) to control development within this risk area, ensuring suitable property resilience levels until such time as the source, pathways and receptors are understood at a detailed enough scale to ensure that new development is not at risk of flooding. Any new development must not increase flood risk elsewhere.</p> <p>The calculated annualised costs of flooding are approximately £120k.</p>



Legend

River catchments

Groundwater flooding

- 2002/2003
- 2000/2001
- 1994/1995

Recorded surface water flooding and status of measure

- Delivered
- Programmed
- Identified
- Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

- > 0.3 m depth
- > 0.1 m depth

NAI coastal erosion extents (20-50yr)

- 95%-ile extent
- 50%-ile extent
- 5%-ile extent

Ward specific action plan Waterloo

About the Ward

Ward area (km²)	3.17	District	Havant	Catchment	Potwell Tributary, Hermitage Stream
No. Residential properties	4348	No. other buildings	1074	Critical Infrastructure	94

About the Local Flood Risk

Local Flood Risk defined in relative terms between wards using the relative rank of economic damages. Highest – top 5 wards, High -wards ranked 6 – 20, Moderate - wards ranked 20 to 50, Low – wards ranked less than 50, None – wards with no reported flooding

Over all local flood risk	High	Economic Cost (£k)	91
Current local risk assessment		Potential local flood risk	
Groundwater	None	Environment Agency Surface Water Maps	High
HCC incident database	None	Flood risk from other sources (rivers/sea)	Yes, but not identified as an Environment Agency 'Community at Risk'

Summary

The ward of Waterloo is located in the south east of Hampshire. The ward includes the settlement of Waterloo and the A3(M) runs through the south eastern edge. Critical infrastructure in the ward includes a school, a couple of telephone exchanges, a fire station and numerous electricity substations.

There is one record of ground water flooding in the north of the ward on the boundary with Hart Plain ward. Hampshire County Council has no records of surface water flooding.

The Environment Agency Flood Map for Surface Water indicates large areas in the north west of the ward as well as scattered areas in the rest of the ward are at risk of surface water flooding.

Current Risk

There is one record of ground water flooding in the north of the ward.

Hampshire County Council has no records of surface water flooding in the ward.

Potential surface water flood risk

Even if properties haven't experienced past flooding, it does not mean that they are not at risk of future flooding. Therefore this section reviews the risk of future flooding.

The Environment Agency Flood Map for Surface Water flooding indicates a large area in the north of the ward and some localised areas in the rest of the ward may be at risk from deep (greater than 0.3m depth) surface water flooding with a 1 in 30 and 1 in 200 year return period. This suggests the potential for surface water flooding affecting properties internally in these areas.

The Environment Agency Flood Map for Surface Water indicates that a larger area, particularly in the north of the ward, could be at risk from shallow (0.1 – 0.3m deep) surface water flooding. Therefore there is some risk of shallow or nuisance flooding to roads, driveways and gardens throughout much of the ward.

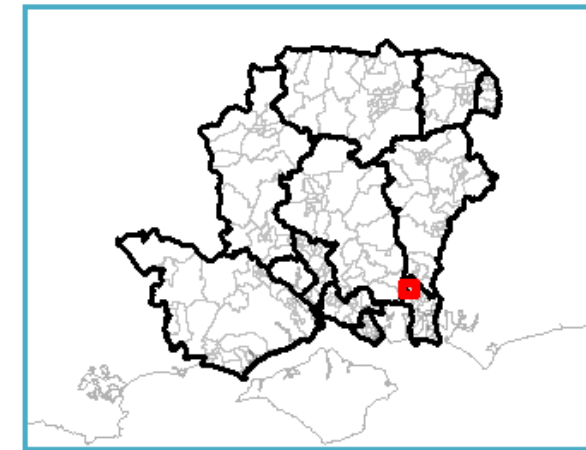
Measures already delivered to reduce risk

Hampshire County Council has no records of internal property flooding in this ward, therefore measures to combat flood risk, beyond regular maintenance of drainage assets that are the responsibility of Hampshire County Council, have not been identified or delivered.

Future measures needed to reduce risks

The risk assessment for this ward is based entirely on modelled flooding. With no incidents to verify this modelling, we do not recommend that any capital interventions be considered for this ward. Measures to be delivered for this ward therefore are based on monitoring and communication:




- Communication of the modelled risk of surface water flooding in this ward to the community
- Ongoing monitoring and reporting of incidents to validate the risk



Legend

 River catchments



Groundwater flooding

-  2002/2003
-  2000/2001
-  1994/1995

Recorded surface water flooding and status of measure

-  Delivered
-  Programmed
-  Identified
-  Not identified

Environment Agency Flood Map for Surface Water (1 in 200 year)

-  > 0.3 m depth
-  > 0.1 m depth

