

King's Lynn and West Norfolk Borough Strategic Flood Risk Assessment Level 2 Community Level Guidance Tables



Community details	Community	West Winch			
	Flood Risk Summary	Highest risk flooding mechanism	Surface Water		
		Most likely source of flooding	Surface Water		
Sources of flood risk	Existing drainage features	There are numerous small areas of open watercourse between culverts mainly concentrated along the western community boundaries.			
	Fluvial	Flood Zone 1			
	Tidal	Flood Zone 1			
	Surface Water	Impact from 3.3% AEP event and above.			
	Residual Risk	Small residual risk from tidal breach on the River Great Ouse in the western parts of the community.			
	IDB watercourse present?	<ul style="list-style-type: none"> • East of Ouse Polver & Nar IDB which are under the administration area of Downham Market Group of IDBs. • Puny Drain and its associated tributaries run parallel to the community along the western boundary. 			
	Flood history	<ul style="list-style-type: none"> • Norfolk County Council flood investigations show that in Summer 2014 a property on Main Road was flooded from surface water • There are records of sewer flooding in this community (date of flood unknown). 			
Flood risk management infrastructure	Defences	Defence Type	Flooding Type	Standard of Protection	Condition
		Embankment (x4)	Fluvial	50	3 (Fair)
		The areas benefiting from defences information mainly benefits areas to the west of the community with some encroachment into the western boundary of the community.			
Opportunities for sustainable development	Asset management	No EA pipeline schemes at or near this community.			
	Capital investment policy and regeneration	No current schemes identified for this community.			

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	Higher level policy	<ul style="list-style-type: none"> This area is within the Great Ouse Catchment Flood Management Plan and sub area 10, the Fens. Within this sub-area the current flood risk is appropriately managed. However, the risk is expected to significantly rise in the future with impacts from climate change. Actions should be taken to manage the increase in risk. West Winch is designated as low-lying fenland in the hinterland of the Wash Shoreline Management Plan (SMP) 2 is protected by defences along the wash coastline and is therefore relevant to the SMP. The policy within this area (PDZ1) is to maintain the current defences into the future, considering an 'envelope of potential developments' for all future scenarios. CFMP/ SMP policies set the high level and strategic direction for flood risk and coastal change management. There is no guarantee that funding will be available from national, regional or local sources to implement the policy. More detailed strategy and scheme work considers funding needs and availability at a community level. 	
Emergency planning	Flood warning	The community is partially in the 'Tidal River Great Ouse east bank breach from Watlington to south King's Lynn' Flood Warning Area and two Flood Alert Areas: 'King's Lynn, West Lynn and the Wash Frontage' and 'North West Norfolk'.	
	Access and egress	<ul style="list-style-type: none"> All routes are possible during a fluvial or tidal event. Issues with access and egress in some areas of the community in the 1% and 0.1% AEP surface water events. 	
Climate Change	Implications for the community	<ul style="list-style-type: none"> There is a small increase in the impact of surface water when taking into account the future effects of climate change. Climate change modelling does not show any impact to the defended tidal scenario (which assumes no breach occurs). However, it may have a significant impact on the frequency and severity of storm surges which have not been modelled for the SFRA. 	

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Requirements for drainage control and impact mitigation	Broad scale assessment of possible SuDS	Bedrock Geology	Central area: Mudstone Eastern area: Sand
		Superficial Geology	Western area: Clay and silt Central area: Clay, silt, sand and gravel; diamicton; gravel
		Soil Type	Freely draining
		Groundwater Source Protection Zone	No
		Historic Landfill Site	No
		<ul style="list-style-type: none"> • Further investigation SuDS on a site-specific basis due to the variety or levels of risk from groundwater identified for this community in the Areas Susceptible to Groundwater flooding dataset. • Source control techniques are likely to be suitable for this community. • Mapping suggest groundwater flooding may be an issue in this community, providing the site is not at medium to high risk from groundwater flooding infiltration techniques may be suitable. • Detention features may be feasible providing site slopes are <5% at the location of the detention feature. If groundwater is a risk to the site, then a liner may be required to mitigate against potential contamination issues. • Filtration systems are probably suitable providing site slopes are <5% and the depth to the water table is >1m. If the site is at risk from groundwater, then a liner will be required. • All forms of conveyance features are likely to be suitable. Where slopes are >5%, features should follow contours or utilise check dams to slow flows. 	
		NPPF and planning implications	Existing Local Considerations

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	Requirements and guidance for site - specific Flood Risk Assessment	<ul style="list-style-type: none"> • Early consultation with Downham Market Group of IDBs is strongly recommended where relevant. • Further investigation SuDS on a site-specific basis due to the variety or levels of risk from groundwater identified for this community in the Areas Susceptible to Groundwater flooding dataset. Consider the impact of a tidal or fluvial breach by sequentially placing the highest vulnerability part of the development in the areas of lowest flood risk, applying the Councils Flood Risk Design Guidance and creating a site-specific emergency plan for flood events. • Detailed hydraulic modelling will need to consider any drains within and surrounding the community that are likely to affect the site to assess fluvial flood risk in the community (including IDB drains). Hydraulic modelling should also seek to understand the impact of residual risk from culvert blockage to any proposed site from structures along these watercourses. • Should explain how surface water drainage will be managed. • Consider the impacts of climate change on all flooding mechanisms and breach scenarios. 		
Conclusions and recommendations		Tidal and Coastal	Fluvial	Surface Water
		Breach	Low Risk	3.3% AEP
		<ul style="list-style-type: none"> • All of the community is within Flood Zone 1. • The Borough Council's Local Plan has designated this area as a strategic 'urban expansion' area allocating at least 1,600 new homes to West Winch. • Consider the impact of tidal defence breach. • Early consultation with Downham Market Group of IDBs is strongly recommended where relevant. 		
Mapping Information				
Flood Zones		<ul style="list-style-type: none"> • Flood Zone 3b is comprised of Environment Agency supplied outlines from the fluvial Fenland, 2016 model, the tidal Wash, 2018 model and the fluvial Eastern Rivers MP2 – Nar, 2016 model. • Flood Zone 3a is comprised of Environment Agency supplied outlines from the tidal Wash, 2018 model, the fluvial Eastern Rivers MP2 – Nar, 2016 model and from Environment Agency Flood Zones 3 containing tidal outlines. • Flood Zone 2 is comprised of Environment Agency supplied outlines from the tidal Wash, 2018 model, the fluvial Eastern Rivers MP2 – Nar, 2016 model and from Environment Agency Flood Zones 2 containing tidal outlines. 		