FLOOD CELL 6 & 7 SNAPE TO LANGHAM BRIDGE BENEFIT COST RATIO (BCR) 10.6

Appendi	x 12
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	FEATURES The area in the flood plain is defined as all land below 5m contour which conforms to the EA's definition of the floodplain.	STATISTICS	SOURCE OF DATA	DATA REQUIRED/ACTION
Location and Size	At the top of the Alde estuary behind the 'horse- shoe' of defences that extend east from the tidal sluice at Snape.	412 hectares	Alde and Ore Futures (AOF)/EA	
	Total number of residential properties (As valued in 2009) (FC6 £3,250,000*) (FC7 £19,239,000) *Snape Maltings complex not valued in 2009 but at July 2014 approx £36Million	86	AOF/ EA	
Homes and other properties	Of which: Listed buildings Buildings in conservation area Holiday rentals	Abbey Farm Grade II Barn Grade 1 Snape Maltings		
	Number of residential properties protected by existing defences	13	AOF/EA	
	Number of other (non-residential) properties	68	AOF/EA	
	Number of other (non-residential) properties protected by existing defences of which: Businesses: e.g. boatyards, Storage, farm buildings	23 Ladybird Nursery, Stud Farm Gromford Lane	AOF/EA in all the above local knowledge may also be used	
Agricultural	Area of agricultural land inside flood cell Of which: Crops	406 ha ? looks low *	AOF/EA	

Land	Grazing	*		
	Surrounding land area irrigated by abstraction points inside flood cell		AOF/EA ESWAG	Abstraction point missing?
	1. Land area irrigated by abstraction points inside flood cell (ha) note:	some land may be irrigated from time to time such as to establish new grass seed in a dry season but crops are not regularly irrigated		
	2. Land irrigated outside any flood cell from abstraction point within cell	273 ha – low discuss Peter Youngs, Ropes, Wary, Kerr		
	Other economically useful land such as golf course, allotments Recreation grounds	Snape Allotments		
		*		
Wildlife and Habitat	FC6 A small area of scrub just west of the Snape Maltings complex runs into permanent wet grassland and further west semi-permanent wet grassland. Both areas are grazed by cattle and sheep. About 20% of the flood cell is in arable. Freshwater coarse fishing lake at Blaxhall. FC 7 is a complex mix of habitats including arable, semi-permanent and permanent wet grasslands, reedbed, water meadow and man-made freshwater lakes. The eastern end of the flood cell comprises of Snape Marshes with a mosaic of wetland habitats including cattle-grazed permanent wet grassland. Other habitats in this area include; herb-rich meadows, reedbed, scrub and wet woodland. Good populations of plants and butterflies are present. 14 species of dragonfly have been recorded.		EA? NE? EA?NE? ANOB SWT Wild life survey 2012 'Ecological assessment- Alde and Ore Estuaries' Snape Maltings Bats	
	The central area consists of some arable with at Botany Marshes new reedbed and freshwater marshes have recently (2014) been created as mitigation for losses of			

habitat elsewhere on the Suffolk coast. This helps the government comply with the habitat regulations which are part of UK law. Salt water flooding would damage these habitats and mean that alternative sites would need to be found. A long (2 km) northern arm of the flood cell follows the catchment area of the River Fromus as far north as Marsh Farm, Sternfield. This area contains a mix of arable, a small area of wet meadow and alder carr at Benhall Wadd, which contains a rich plant and insect population. At the northern extremity is Marsh Farm, a commercial caravan site with many freshwater lakes stocked with carp species. Some free-range pig farming at the extreme western edge of the flood cell.

The far eastern boundary of the flood cell, at Snape Marshes, abuts the River Alde/Ore which is part of the network of the Alde/Ore/Butley Estuaries, a designated SAC (Special Area of Conservation) and contains habitats of conservation concern (see the more detailed description at Annex 1).

There is also a country wildlife site and site of Special Scientific Interest (SSSI) and intertidal habitat in front of the defences is internationally designated. Designations:

- 1. Intertidal habitat in front of defences a. saltings
 - b. mudflats
- 2. Pilot schemes to renew Saltings
- 3. Land behind the defences. List special features/species e.g.

Wildlife habitat in floodplains behind the walls including ditches with reed buntings, little grebe and kingfisher, fields with hares, flight area of barn and short eared owls, range of birds including lapwing, egret, swans, varieties of gulls (ref: Wild life/Hinterland survey on a section covering all the estuary although each FC may have its own special species). Mostly the species will be the same, but with certain exceptions,

Will EA/? have area by flood cell

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FC6 Priority species include;

Common toad Bufo bufo Common lizard Zootoca vivipara Grass snake Natrix natrix

Reed bunting Emberiza schoeniclus
Linnet Carduelis cannabina
Skylark Alauda arvensis

e.g. breeding avocets in FC5.	Brown hare Lepus europaeus
	European otter Lutra lutra
	Haropean otter Land mill
	Diada analas
	Black poplar opulus
	nigra
	Priority habitats include;
	Coastal and floodplain grazing
	marsh (including dykes)
	maton (mercanis dynes)
	Carra Manalara CW/T material
	Snape Marshes SWT nature reserve
	Abbey Marshes and Botany
	Marshes RSPB nature reserves
	Benhall Wadd a local PC run
	nature reserve
	FC7 contains several Priority
	Species and Habitats which
	are nationally and locally
	(Suffolk) important.
	Priority species include;
	Common toad Bufo bufo
	Adder Vipera berus
	Common Lizard Zootoca vivipara
	Grass Snake Natrix natrix
	Reed bunting Emberiza schoeniclus
	Linnet Carduelis cannabina
	Skylark Alauda arvensis
	Brown hare Lepus europaeus
	European otter Lutra lutra
	Water vole Arvicola terrestris
	Water shrew Neomys fodiens
	Priority habitats include;
	Coastal and floodplain grazing
	marsh (including dykes)
	Lowland meadows
4. Higher Level Stewardship Scheme	
Tagliot zerot oteratabilip oblicitie	* Not known ? Guy
5. Other?	Tiot Known . Guy
J. Ouler:	

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Defences A&O Futures Assessment 2011	Defences are earth embankments, concrete walls (some running thr form a horse-shoe shape defence system at the top of the estuary who some places are embankments are low and provide poor standard or	hich protects the land behind on both the north		
	Length of sea/estuary walls	1.7 kilometres		
	How soon will major work be required?	Any time now	AOF/EA 2011	
	Current Standard of Protection (the chance of flooding in any year)	<100% (1 in 1)		
	Currently managed by	Environment Agency (except quay at Snape Maltings managed by landowner)	AOF/EA	
Features dependent on the maintenance of the river walls	 Footpaths a) along river walls (km) b) providing access to river walls but in floodable area Allotments Boatyards for building, repairs, winter storage Public car parks Sailing clubs Utilities e.g. Sewage outlet (Anglian water, electricity station?) Wildlife Roads River management and moorings Employment: Jobs at risk if area is flooded 	in total FC6 .5Km FC7 7Km *km *km *km 1 acre at Snape * * Outlet at Snape * Some railway @ Beversham * Commercial complex at Snape Maltings and Aldeburgh Music (41 FTE and 59 part time) Farmers Markets – 30 local producers and ?others to be listed Sewage plant at Snape Village and Snape Maltings	AOF/ SCC Rights of Way Dept Local knowledge and SCC? Local Local Local knowledge Anglian, EON? SWT report Highways Dept? Crown Estates, sailing clubs, watermen Local knowledge	

	11. Other features to be invited in consultation	Pump to Blaxhall		
		High number of visitors to Snape		
Proposed Approach	A&O Futures Approach: National funding could be used to maintain the defences to their existing levels however this would only provide a low standard of protection to the communities and businesses and could put the environmental sites at risk of deterioration. Raising the defences on their existing alignment or a slightly straightened alignment would significantly reduce the impact of flooding and be a better use of money in this location so this is the proposed approach (A&O Futures) there are a number of major beneficiaries so a combination of public and private funding is being explored.			
	AOEP Approach: Major flooding resulted during the December 2013 surge with 27 houses flooded, the road closed for a week and considerable acreage inundated for some time. Cost to upgrade the walls as per design in Appendix 4 £167,908. The EA has received notification that they have secured funding from the 'national post flooding funds' that will allow them to progress preparatory investigation work for the Snape Village flood defence. Discussions with AOEP and all concerned locally will need to confirm the agreed design and costs. October 2015: A capital scheme is being progressed by the EA for both flood cells to include sluice upgrades (not costed in the figures above)			