

	<p style="text-align: center;">FEATURES</p> <p style="text-align: center;">The area in the flood plain is defined as all land below 5m contour which conforms to the EA's definition of the floodplain.</p>	<p style="text-align: center;">STATISTICS</p>	<p style="text-align: center;">SOURCE OF DATA</p>	<p style="text-align: center;">DATA REQUIRED/ACTION</p>
<p style="text-align: center;">Location and Size</p>	<p>The town of Orford, (generally the area seaward of Broad Street) and the two extensive marshes to the north east and south west. This flood cell accounts for approximately one quarter of the total length of walls in the estuary running from a point about one third of the way up the Butley River to just round the bend in the river at Slaughden.</p>	<p>1273 hectares</p>	<p>Alde and Ore Futures (AOF)/EA</p>	<p>T</p>
<p style="text-align: center;">Homes and other properties</p>	<p>Total number of residential properties Of which:</p> <p style="padding-left: 40px;">Listed buildings Buildings in conservation area Holiday rentals</p>	<p>105 (Value in excess of £37,970,000 as at 2009) * Orford - 48</p>	<p>AOF/ EA</p>	<p>Michael Cordle – 5 + House and 7 at converted farm buildings. Firs Farm House and Holiday let at Firs Farm</p> <p>5 holiday lets at Valley & Ferry Farms. Recent change from residential to holiday</p>
	<p>Number of residential properties protected by existing defences</p>	<p>39</p>	<p>AOF/EA</p>	<p>These were all difficult to do as the figure 39 did not tell us which ones were already listed so we didn't know which extra ones to add??</p>
	<p>Number of other (non-residential) properties</p>	<p>97</p>	<p>AOF/EA</p>	
	<p>Number of other (non-residential) properties protected by existing defences of which :</p> <p>Businesses: e.g. boatyards, Storage, farm buildings</p>	<p>52 – this figure is very low needs amending –</p>	<p>AOF/EA in all the above local knowledge may also be used</p>	<p>Orford boatyard Smokehouse and coldstore at Pinney's house Butley Ferry hut Orford Sailing Club Businesses on Quay</p>

		<p>need to cross reference with what we know and new ones</p> <p>*</p> <p>*</p>		<p>Jolly Sailor Pump Street Bakery @ Gedgrave IDB pumps at Sudbourne, Gedgrave Sewage plant @ Orford Lady Florence 5 boats fishing into Orford National Trust Ferry Regardless river trips</p> <p>Other businesses incl Commercial shoots and commercial duck ponds.</p>
Agricultural Land	<p>Area of agricultural land inside flood cell</p> <p>Of which:</p> <p style="padding-left: 40px;">Arable</p> <p style="padding-left: 40px;">Permenant Grassland</p>	<p>1255 hectares</p> <p>*</p> <p>*</p>	AOF/EA	<p>Ferry Farm: 50ha arable, 155ha grassland, 25ha saltings P Wareing – 60ha production, 100ha grassland MCordle – 120 acres arable, 9 acres grassland. To add info from E Greenwell and J Grimsey</p>
	<p>Surrounding land area irrigated by abstraction points inside flood cell</p> <p>1. Land area irrigated by abstraction points inside flood cell (ha)</p> <p>2. Land irrigated outside any flood cell from abstraction point within cell</p> <p>3. Other economically useful land such as golf course, allotments</p> <p>4. Recreation grounds</p> <p>5. Winter Storage Water/Reservoir</p>	<p>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</p> <p>545 ha</p> <p>*</p> <p>*</p> <p>E Greenwell x2 Ferry Farm x1 40 million gallons – Wareing</p>	AOF/EA ESWAG	

		<p>40 million gallons – P Cooke 12 million gallons Orford well points</p>		
<p>Wildlife and Habitat</p>	<p>Incorporating Town Marshes and Sudbourne Marshes, the land use of three-quarters of this large flood cell is made up of permanent and semi-permanent wet grasslands. Grazed by sheep, cattle and horses with some areas in HLS (Higher Level Stewardship – see www.naturalengland.org.uk). The existing field pattern through much of the Crag Farm section is medieval in origin and ‘Roper’s Marsh’ is designated as a possible medieval harbour site. Most dykes are choked reed-filled and contain a freshwater flora and fauna of interest.</p> <p>Town Marshes at the southern end of this flood cell is primarily arable with an irrigation system, but still contains breeding lapwings, yellow wagtail and skylark. South of Orford are the Gedgrave Marshes which is principally arable with some semi-permanent grassland in the south-west corner. A freshwater reservoir sometimes holds interesting bird species in winter. The eastern boundary of the flood cell 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).</p> <p>Intertidal habitat in front of the defences is internationally designated. There is a County Wildlife site in the north of the cell near Slaughden bend.</p> <p>Designations:</p> <ol style="list-style-type: none"> 1. Intertidal habitat in front of defences <ol style="list-style-type: none"> a. saltings b. mudflats 2. Pilot schemes to renew Saltings 3. Land behind the defences. List special features/species e.g. 	<p>Will EA/? have area by flood cell?</p> <p>*</p> <p>Ferry Farm 25ha Saltings Orford 3 acres Cordle Crag Farm will have some as well</p> <p>Completed At Ferry Point and Orford Quay</p>	<p>EA? NE? EA?NE? ANOB SWT Wild life survey 2012 ‘Ecological assessment- Alde and Ore Estuaries’</p>	<p>Orford Wild Flower Meadow</p> <p>Captains Wood</p> <p>Other species people thought should have value:-</p> <p>Woodcock Shoveler Pink Feet Geese Greylag Geese Teal Widgeon Snipe Gadwill Barn Owls Oyster Catchers Bittern Marsh Harrier Shelduck Sparrow Hawk Merlin Egrets Curlew Redshank Lapwing/Plover Godwit Grey Partridge Mute Swans</p>

	<p>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, e.g. breeding avocets in FC5.</p> <p>4. Higher Level Stewardship Scheme</p> <p>5. Other?</p>	<p>Flood Cell 4 contains several Priority Species and Habitats which are nationally and locally (Suffolk) important. Priority species include:</p> <p>Common toad <i>Bufo bufo</i> Adder <i>Vipera berus</i> Common lizard <i>Zootoca vivipara</i> Grass snake <i>Natrix natrix</i> Yellow wagtail <i>Motacilla flava</i> Northern lapwing <i>Vanellus vanellus</i> Reed bunting <i>Emberiza schoeniclus</i> Linnet <i>Carduelis cannabina</i> Skylark <i>Alauda arvensis</i> Brown hare <i>Lepus europaeus</i> European otter <i>Lutra lutra</i> Water vole <i>Arvicola terrestris</i> Water shrew <i>Neomys fodiens</i> European eel <i>Anguilla anguilla</i></p> <p>Priority habitats include; Coastal and floodplain grazing marsh (including dykes) Hedgerows (abutting the 5m contour)</p> <p>Winter assemblages of birds include; European golden plover <i>Pluvialis pricaria</i> Eurasian curlew <i>Numenius arquata</i></p> <p>Ferry Farm Hailes Cooke Get total hectarage from Keith Luxford</p> <p>*</p>		
<p>Defences</p>	<p>Most defences are earth embankments in fair condition although the riverward face is relatively steep in places. There are also some short sections of concrete defences that pass through and around the properties between Orford Quay and the town itself. Over all, the defences provide a low standard of protection due to some particularly low sections.</p>	<p>15.9 kilometres</p>		

A&O Futures Assessment 2011	How soon will major work be required?	Generally within 10 years but now in some places	AOF/EA 2011	
	Current Standard of Protection (the chance of flooding in any year)	<20% (1 in 5)		
	Currently managed by	EA	AOF/EA	
Features dependent on the maintenance of the river walls	<ol style="list-style-type: none"> 1. Footpaths <ol style="list-style-type: none"> a) along river walls (km) b) providing access to river walls but in floodable area 2. Allotments 3. Boatyards for building, repairs, winter storage 4. Public car parks 5. Sailing clubs 6. Utilities e.g. Sewage outlet (Anglian water, electricity station?) 7. Wildlife 8. Roads 9. River management and moorings 10. Employment: Jobs at risk if area is flooded 11. Other features to be invited in consultation 	<p>in total 26bKm</p> <p>Other things to be included in River Management:-</p> <p>Wildfowlers</p> <p>Speedboats</p> <p>Angling</p> <p>Yachtsmen</p> <p>Site seeing boats/Ferries</p> <p>Moorings – 270 boats</p> <p>Roads – Gedgrave Rd, Quay Street, Ferry Lane, Broad Street, Daphne Rd</p> <p>Other things that we thought should be taken into account:-</p> <p>Farm Chemical stores that will be secure but may well be below 5m?</p> <p>Domestic Burning Oil tanks near or below 5m?</p> <p>Gas Tanks near or below 5m??</p>	<p>AOF/ SCC Rights of Way Dept</p> <p>Local knowledge and SCC?</p> <p>Local</p> <p>Local</p> <p>Local knowledge</p> <p>Anglian, EON?</p> <p>SWT report</p> <p>Highways Dept?</p> <p>Crown Estates, sailing clubs, watermen</p> <p>Local knowledge</p>	<p>Cesspits – concern that there are a lot of private cesspits that may well be near or below 5m and we don't know how many?</p> <p>Info from Orford:-</p> <p>1) There are 44 allotments owned by NOTT bringing in £1200 per year</p> <p>2) There are 15 riverside plots with sheds etc bringing in £6000 per year.(8 more plots will be created this summer)</p> <p>Both 1 and 2 are let to local residents.</p> <p>3)There are 124 moorings on the river bringing in £38,000 per year.</p> <p>4) Income from daily moorings ie foreign boats etc is £5000 per year.</p> <p>5) There are 480 residents in Orford and 42 in Gedgrave but there is also an unquantifiable but increasing number of seasonal visitors who stay a week or two at</p>

				<p>most and also a significant number of weekenders with their own houses .</p> <p>6) The number of businesses in Orford is not known but there are a lot of businesses apparently run from home beside the big ones like the Bakery and The Lady Florence etc. I spoke to Barry Leach about it and he said that his group probably only know about 30% of them.</p> <p>7) Additionally the village car parks (especially the Quay Car Park) bring in probably £60,000 to the village annually</p>
<p>Proposed Approach</p>	<p>A&O Futures Approach: In short, existing defences could provide greater protection if the low spots are raised and erosion hot-spots repaired. This work can be supported by national funds...however it is expected that continuing to maintain these defences in the future will become increasingly expensive as sea levels rise and the aging defences need major work more frequently. At some point it will be a more efficient use of national funds to adapt to a new line of defence closer to the town of Orford where most of the properties at risk of flooding are located (approx 17 years time). Unlikely that all costs will be met by central government. But the remaining lengths of wall could only be maintained if the costs were met by the community including landowners, recreational river users and local businesses who may also have an interest in maintaining the existing configuration of the river.</p> <p>AOEP Approach: A 100m stretch of the Orford Chantry wall was upgraded as a trial in 2013 and will be the basis of further upgrading in the estuary of similar sections. Cost to upgrade the walls £1,743,774.00 as per designs in Appendix 4</p> <p>River produces income for the trust to run the village approx £200K Pollution – concern over sewage plants /cesspits etc 900 Million Gallons of fresh water is pumped out a year by just one of the IDB pumps in Flood Cell 4. This water should be secured during the winter for storage for summer use. The Clay dug out of the ground to build the winter fill water storage could be stored and used for the river wall works.</p> <p>Flood Cell 4 table were not happy with the idea of a separate wall protecting Orford and leaving land either side unprotected. Orford and its surrounding land are dependant upon each other and want to be protected together as per the AOEP approach.</p>			