LOCATION: NGR Various locations within the Win				in the Wirral	REFERE	NCE	W/15 8	12/01-35				
Area/street name						NO.						
Start date 15/08/12 End date			ate & 16/08/12		Data collection date			20/8 – 18	20/8 – 18/9/12			
& time		time				Observer			J.H. Bake	J.H. Baker		
Management Authority United U				ty (LLFA),	** Have RMA responded			ed Yes				
			tilities, Dwr Cymru Vater) & Environment		appropriately?							
		/	,		Main contact (name& no)) Various c	Various contacts were made			
Maximum depth (m) 150mm			mm			History of flooding?			had flood particular	A number of the locations had flooded before, particularly during the incident 2 days earlier.		
SOURCE OF FLO	ODIN	IG			CAUSE OF F	LOODING	3					
River: Main (EA)			Y		drainage capacity exceeded							Υ
Sea (EA)			N		mechanical failure							N
Drainage: sewer (UU, WW)			Υ		operational failure/ breach of defence							N
River: Ordinary			Y		system 'tide locked' (ie drain can not discharge due to high river lev						el)	Y
Drainage: highway			Υ		blockage of bridge N blockage in culvert/pipe					ipe		N
						_						
Surface water			Y		blockage in c	hannel	N	blockage	of screen			N
			Y		blockage in c unknown/othe	•		blockage	e of screen			N
Surface water Ground water Other/unknown (g			Y	flo	unknown/oth	er (give de	etails)			the W	irral o	
Ground water Other/unknown (g Additional comme Wednesday 15 Au	nts on	the cau 2012.	Y use of		unknown/otho	er (give de	etails)	nt (1 in 12	Pyr event) hit	the W		
Ground water Other/unknown (g Additional comme Wednesday 15 Au Is level survey req	nts on	the cau 2012.	Y use of		unknown/otho	er (give de	etails)	nt (1 in 12		the W	'irral oi N/A	n the
Ground water Other/unknown (g Additional comme Wednesday 15 Au Is level survey req	nts on igust 2 uired?	the cau 2012.	Y use of		unknown/otho	er (give de	etails)	nt (1 in 12	Pyr event) hit	the W		
Ground water Other/unknown (g Additional comme Wednesday 15 Au Is level survey req EFFECT Properties flooded	nts on igust 2 uired?	the cau 2012. (mark dential)	y y use of		unknown/othe	er (give de ficant stori	etails) m evei	nt (1 in 12 Sui	Pyr event) hit Eveyed	the W		n the
Ground water Other/unknown (g Additional comme Wednesday 15 Au Is level survey req EFFECT Properties flooded	uired?	the cau 2012. (mark dential)	y y y y y y	/ate	unknown/otheoding: A signifer level/wrack) internal internal	er (give de ficant storn	etails) m ever	Sui	event) hit eveyed 9 N/K	the W	N/A	n the
Ground water Other/unknown (g Additional comme Wednesday 15 Au Is level survey req	uired?	the cau 2012. (mark dential)	y y y Y Y rec blc de	ublic A :	unknown/other oding: A signification of the significant of the signifi	er (give de ficant storn N 26 0 n and high of roads versatitis not	etails) m ever ex ex way d were comed. A knowr	Suncternal cternal rainage not number if these	everet) hit veyed N/K etwork flood water voluments of locations were cause	which is had ed by		n the

ACTION TAKEN: All properties visited and details of flooding noted. Road gullies in vicinity of the properties checked and no problems identified. Residents advised to contact Water Company to report flooding.

ACTION REQUIRED: Water Companies to investigate public sewers in vicinity of flooded properties.

FURTHER INVESTIGATION: Investigations of locations were gullies are connected to a highway drain rather than a public sewer. However, the existing drainage systems as a whole were unable to deal with the amount of surface water generated by the storm event. Once storm had abated all flooding drained away.

OTHER INFO: It is unlikely that any improvements/additions to the highway drainage system would prevent future flooding from storm events of this magnitude. The Water Companies design new sewers not to flood during this type of event they will however surcharge, which will prevent gullies connected to them from discharging. Some public sewers are believed to surcharge more frequently during less intense rainfall.

PHOTOS						
Ref	Description				Direc	tion of view
PERSONS	AFFECTED - INI	DIVIDUAL FLOOD LEVELS				
Address		Contact Name	Contact Number	Flood Level (approx m)		Threshold / Floor Level
				(арріо	,	Floor Level
lo there e ==	noidonto cresso	YES / NO / PENDING				
is there a re	esidents group?	YES / NO / PENDING				