

Location: Ahascragh, Co. Galway		Unique ID: 263,234 (from PFRA database)	
Initial OPW Designation	APSR <input type="checkbox"/>	AFRR <input checked="" type="checkbox"/>	IRR <input type="checkbox"/>
Co-ordinates	Easting: 178,025	Northing: 239,014	
River / Catchment / Sub-catchment	Ahascragh River / Bunowen River / River Suck		
Type of Flooding / Flood Risk (identify all that apply)	Fluvial non-tidal <input checked="" type="checkbox"/> Fluvial tidal <input type="checkbox"/> Coastal <input type="checkbox"/>		

Stage 1: Desktop Review	
1.1 Flood History (include review of Floodmaps.ie)	<p>River Flow Path The Ahascragh River flows through Ahascragh and meanders south-easterly. The river is located on the southwest side of the town. The Ahascragh River is crossed by an unnamed road leading to Lisnascreena.</p> <p>Flood Event Records Recurring floods are recorded on floodmaps.ie relating to inadequate road drainage at times of heavy rain.</p>
1.2 Relevant information on flooding issues from OPW and LA staff	<p>PFRA database comments (<i>in italics</i>):</p> <p>OPW comments <i>Not designated APSR as failed to reach predictive analysis threshold or receive strong LA support. Minor works scheme has been approved. Risk review requested by LA at second workshop</i></p> <p>LA comments <i>Premises flooded-Houses under threat-Roads flooded-Scheme approved-Minor flood mitigating works approved. Needs risk review</i></p> <p>Meeting / discussion summary comments:</p> <p>OPW comments</p> <ul style="list-style-type: none"> Despite recent works to the channel here, OPW are concerned that flood risk issues still remain. The Local Council was concerned that the completed works were limited to clearing the channel here. <p>LA comments</p> <ul style="list-style-type: none"> Hardware store on left bank flooded in November 2009. Following the November 2009 event, works to improve channel conveyance on the Bunowen River were completed through Ahascragh and for a 22km reach up- and down-stream of the village. The works were completed under an OPW Minor Works Scheme in 2010, and included the removal of vegetation and restoration of channel to original dimensions and conveyance. No improvements were made to any bridge conveyance.

1.4 PFRA Data			
1.4.1 PFRA hazard mapping	PFRA mapping available in GIS layer:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	PFRA mapping included on FRR map:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1.4.2 Summary of Principal Receptors	Type	FRI score (if available)	
	Receptors not considered as part of the PFRA process. FRI score not calculated in PFRA.		
1.7 Stage 1 Evaluation	Aspect	Clearly APSR	Uncertain
	Flood History (1.1)		X
	OPW / LA Information (1.2)		X
	PFRA Evaluation (1.4)		X
	Overall Desktop Evaluation (if any above aspect is uncertain then overall designation is uncertain)		X
1.8 Proposed level of assessment for Stage 2 site visits	Level A Site Visit		X
	Level B Site Visit		

Stage 2: Site Inspection		Level A Assessment		
Date and Time of Inspection		Date: 26/05/11		
		Time: 10:45		
Names of inspection team (including OPW/LA staff if present)		Alan Dew		
		Peter Smyth		
2.1 Ground-truthing of Hazard Mapping	Fluvial non-tidal <input checked="" type="checkbox"/> Fluvial tidal <input type="checkbox"/> Coastal <input type="checkbox"/> Not available <input type="checkbox"/>			
	PFRA mapping limited to River Bunowen west of village centre. Road (R358) bridge (6 arch) may provide a constraint to flow which is not picked up on PFRA mapping. Generally good though.			
2.2 Spot check ground-truthing of selected receptor vulnerability (also note any key receptors noted during visit that are not identified by PFRA)	Receptor Type	Location description (if not obvious)	Exists?	Overall Vulnerability / Risk (L / M / H)
	Greene's Hardware warehouses	Left bank of Ahascragh River, downstream of R358	Yes	H
	Residential properties	On right bank of Mill Race, by Greene's Hardware	Yes	M
	Residential property	Right bank of Ahascragh River, upstream of R358	Yes	M
2.3 Local knowledge - on-site comments (OPW, LA and any info volunteered by local residents during visit)	<p>The manager at a local hardware store indicated that the flooding in 2009 resulted from a lack of capacity downstream which was backing up. No flow was observed bypassing the R358 road bridge upstream of the warehouse units.</p> <p>The flood level was in excess of the current informal embankment level at the rear of the lowest unit (~1.50m above bank level). The embankments were constructed by the owner some years prior to 2009. No works have been completed to the embankments since the 2009 event.</p>			
2.4 Comments on hydraulic constrictions (bridges, etc.) and conveyance routes	<p>The R358 bridge has 6 arches, of which 2 are used by the main channel. The remaining arches are partly blocked by fences to prevent livestock access and would easily block during flood events. However, no flooding was recalled upstream of the bridge in 2009 by Dermot at Greene's Hardware.</p> <p>Possible flood embankments upstream (formal or informal) noted on plans; however these could not be inspected.</p> <p>The soffit level of the Mill Race culvert beneath the R358 is below the channel walls on both banks.</p>			

2.5 SVRS Assessment Matrix

Weightings:

A - x1 - reasonable expectation of flooding

B - x2 - high expectation of flooding

C - x5 - risk to life

Approx. Number	1 to 4				5 to 20				>20			
Weighting		A	B	C		A	B	C		A	B	C
Property (domestic)	10				100	X			200			
Property (small retail or business)	20	X			200				400			
Property (large retail or business)	50	X			500				1000			
Road or Rail Infrastructure	30	X			300				600			
Critical Infrastructure (local) [hospital, school, police/fire/ambulance station, substation, WTW/WWTW, gov bldg, other (specify)]	50				500				1000			
Critical Infrastructure (national importance)	250				1000				2000			
Cultural Heritage Site	20				200				400			
Environmental Designated Site	20				200				400			
Hazardous Substances Site	50				500				1000			
Total SVRS									200			

2.6 Defence Assets

Formal and Informal Flood Defence Assets <i>(include effective and ineffective assets to inform asset survey and potential mitigation measures)</i>	Open Channel Watercourses Man-made river channel <input type="checkbox"/> Flood relief channel <input type="checkbox"/> Canal <input type="checkbox"/> Mill leat <input checked="" type="checkbox"/> Drainage channels / back drains <input type="checkbox"/>			
	Bridges and Culvert crossings Single Arch bridge <input type="checkbox"/> Multi-Arch bridge <input checked="" type="checkbox"/> Single Span bridge <input type="checkbox"/> Multi-Span bridge <input type="checkbox"/> Box culvert(s) <input checked="" type="checkbox"/> Pipe culvert(s) <input type="checkbox"/> Arch Culvert(s) <input type="checkbox"/>			
	Culverted Watercourses (culvert length is greater than just a crossing) Box culvert(s) <input type="checkbox"/> Pipe culvert(s) <input type="checkbox"/> Arch Culvert(s) <input type="checkbox"/> Irregular Culvert(s) <input type="checkbox"/>			
	Walls and Embankments Embankment(s) <input checked="" type="checkbox"/> Raised wall(s) <input checked="" type="checkbox"/> Retaining wall(s) <input type="checkbox"/>			
	Control Structures – weirs, gates, dams Fixed crest weir <input checked="" type="checkbox"/> Adjustable weir <input type="checkbox"/> Dam / Barrage <input type="checkbox"/> Sluice gates <input type="checkbox"/> Lock gates <input type="checkbox"/> Radial gates <input type="checkbox"/>			
	Storage On-line storage (natural) <input checked="" type="checkbox"/> On-line storage (artificial) <input type="checkbox"/> Off-line storage <input type="checkbox"/>			
	Outfalls Flapped outfall(s) into watercourse <input type="checkbox"/> Unflapped outfall(s) into watercourse <input type="checkbox"/> <i>i.e. from smaller watercourses, drains etc. into river / estuary / sea</i> Tidal flap(s) <input type="checkbox"/> Tidal sluice(s) <input type="checkbox"/> <i>i.e. from main watercourse into estuary / sea</i>			

	Other Pumping Station <input type="checkbox"/> Erosion Protection <input type="checkbox"/> Sand Dunes <input type="checkbox"/> Additional notes (if required):		
2.8 Initial Potential Mitigation Measures			
Non-structural measures	Planning and Development control <input checked="" type="checkbox"/> Sustainable Urban Drainage Systems <input type="checkbox"/> Flood forecasting / warning <input type="checkbox"/> Change in Operating Procedures for water level control: <input type="checkbox"/> Public awareness campaign <input checked="" type="checkbox"/> Individual property protection <input checked="" type="checkbox"/> Land use management <input type="checkbox"/>		
Structural measures	Strategic development management for floodplain development: <input type="checkbox"/> <i>(integration of measures into strategic development proposals)</i> Storage: On-line <input type="checkbox"/> Off-line <input type="checkbox"/> Flow diversion: Flood relief channel <input type="checkbox"/> Flood relief culvert <input type="checkbox"/> Increase conveyance: Bridge works <input checked="" type="checkbox"/> Channel works <input checked="" type="checkbox"/> Floodplain <input type="checkbox"/> Flood defences: Walls <input checked="" type="checkbox"/> Embankments <input checked="" type="checkbox"/> Localised works: Defence raising <input checked="" type="checkbox"/> In-fill gaps <input type="checkbox"/> Trash screen <input type="checkbox"/> Maintenance works: Culvert / channel clearance <input type="checkbox"/> Asset maintenance <input type="checkbox"/> Relocation of properties: <input type="checkbox"/> Improve existing defences: <input checked="" type="checkbox"/> (describe) Improve embankments at Greene's Hardware store Other (describe):		

Outcomes				
PFRA Designation	APSR <input type="checkbox"/> not an APSR <input checked="" type="checkbox"/> IRR <input type="checkbox"/>		FRI Score: Not scored	
Site Ground-truthing of PFRA Assessment (hazard mapping and receptors)	High Confidence (good)	Uncertain	Low Confidence (poor)	Not available
	X			
Site Visit Review Score	200			
Recommended Designation	APSR <input checked="" type="checkbox"/> not an APSR <input type="checkbox"/> IRR <input type="checkbox"/>			
Summary Comments (if required)	Local works completed in 2010 have increased channel capacity which was the cause of flooding at the hardware store in 2009. These works have reduced the risk of flooding at the village. However, the embankments around the hardware store are insufficient to fully protect the warehouse units and adjacent properties.			



Photo 1: Main road bridge over the Ahascragh River looking downstream from the right bank.

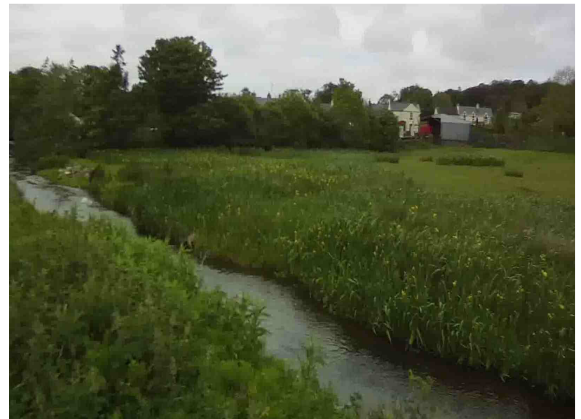


Photo 2: Right bank of the mill race looking upstream from the hardware store site.



Photo 3: View from the main road bridge over the Ahascragh River towards the hardware store site.



Photo 4: Mill race crossing

