

Location: Roscommon, Co. Roscommon		Unique ID: 260468 (from PFRA database)	
Initial OPW Designation	APSR <input checked="" type="checkbox"/>	AFRR <input type="checkbox"/>	IRR <input type="checkbox"/>
Co-ordinates	Easting: 187349	Northing: 264501	
River / Catchment / Sub-catchment	River Jiggy / Hind / Shannon		
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</p> <p>The source of the River Jiggy is within the Roscommon boundary. It flows east and then south to it's confluence with River Hind which then flows into the Shannon at Lough Ree.</p> <p>Flood Event Records</p> <p>Five flood records are listed in floodmaps.ie. The most significant of which relates to flooding in Roscommon from the River Jiggy in 2009.</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>Designated APSR on the basis of predictive analysis and LA comments.</i></p> <p>LA comments <i>Businesses 4,5 Nursing Home Mapping produced by LA as part of main drain scheme Private housing cut off but not flooded (Jiggy minor works)</i></p> <p>Meeting / discussion summary comments:</p> <p>OPW comments</p> <ul style="list-style-type: none"> • Roscommon flooded in November 2009 • A Local Authority report provided recommendations for culvert replacements, channel maintenance/widening and the culverting of the river through the town centre. <p>LA comments</p> <ul style="list-style-type: none"> • River Jiggy is heavily polluted. • There is a history of flooding in the town and there has been a study into flood risk along the River Jiggy. • River Jiggy is maintained by Roscommon CC. • There has been a lot of upsizing works to culverts recently carried out. The railway bridge is a constriction to flow, the bed level should be lowered by 600mm.

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)	
	Monument_LV	10	
	Total	1583.1	
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: 11/05/11		
		Time: 14:00		
Names of inspection team (including OPW/LA staff if present)		Peter Smyth		
		James Murray		
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 hazard mapping is generally accurate, but there are some overestimations to flood risk, particularly north of the town centre.			
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)
	Large retail	On the right bank of the Jiggy below the town centre	Yes	Medium
2.3 Local knowledge - on-site comments (OPW, LA and any info volunteered by local residents during visit)	No on-site comments.			
2.4 Comments on hydraulic constrictions (bridges, etc.) and conveyance routes	<p>Small rivers flow through the town itself. One is almost entirely culverted but would benefit from improvements to its inlet which is currently almost entirely blocked.</p> <p>The Jiggy river has had significant improvement works carried out on it in recent years, including culvert upsizing and channel clearance and potentially widening.</p> <p>The bridge at railway is not an ideal shape for flow conveyance. It is narrow and has pipes running through it. However it has a very high soffit and should be able to convey more flow than those bridges upstream.</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				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							180					
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 checked="" type="checkbox"/> Flood relief channel <input type="checkbox"/> Canal <input type="checkbox"/> Mill leat <input type="checkbox"/> Drainage channels / back drains <input type="checkbox"/>											
	Bridges and Culvert crossings Single Arch bridge <input type="checkbox"/> Multi-Arch bridge <input type="checkbox"/> Single Span bridge <input checked="" type="checkbox"/> Multi-Span bridge <input type="checkbox"/> Box culvert(s) <input type="checkbox"/> Pipe culvert(s) <input checked="" 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 checked="" type="checkbox"/> Arch Culvert(s) <input type="checkbox"/> Irregular Culvert(s) <input type="checkbox"/>											
	Walls and Embankments Embankment(s) <input type="checkbox"/> Raised wall(s) <input type="checkbox"/> Retaining wall(s) <input type="checkbox"/>											
	Control Structures – weirs, gates, dams Fixed crest weir <input 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 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>											

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

Outcomes				
PFRA Designation	APSR <input checked="" type="checkbox"/> not an APSR <input type="checkbox"/> IRR <input type="checkbox"/>		FRI Score: 1583.1	
Site Ground-truthing of PFRA Assessment (hazard mapping and receptors)	High Confidence (good)	Uncertain	Low Confidence (poor)	Not available
	X			
Site Visit Review Score	180			
Recommended Designation	APSR <input checked="" type="checkbox"/> not an APSR <input type="checkbox"/> IRR <input type="checkbox"/>			
Summary Comments (if required)	Roscommon has a history of flooding. Although recent improvement works have been carried out to improve the channel conveyance, there remains a sufficient number of critical receptors at significant risk of flooding to warrant designation as an APSR.			



Photo 1: River Jiggy in Roscommon, looking downstream.



Photo 2: River Jiggy in Roscommon, looking downstream.



Photo 3: Culvert over the River Jiggy in Roscommon, looking downstream.



Photo 4: Railway line culvert over the River Jiggy in Roscommon, looking downstream.

