

Location: Kilfenora, Co. Kerry		Unique ID: 232681 (from PFRA database)	
Initial OPW Designation	APSR <input type="checkbox"/>	AFRR <input checked="" type="checkbox"/>	IRR <input type="checkbox"/>
Co-ordinates	Easting: 75499	Northing: 115485	
River / Catchment / Sub-catchment	North Kerry Tralee Bay		
Type of Flooding / Flood Risk (identify all that apply)	Fluvial non-tidal <input type="checkbox"/> Fluvial tidal <input type="checkbox"/> Coastal <input checked="" type="checkbox"/>		

Stage 1: Desktop Review	
1.1 Flood History (include review of Floodmaps.ie)	General Area <p>Kilfenora is a coastal townland. There is a small watercourse which drains from Ballygarann woodland and flows west to discharge to the Tralee Estuary southeast of the townland of Kilfenora (this is not recorded on the EPA Blueline Network).</p> Flood event records <p>There are no OPW flood records.</p>
1.2 Relevant information on flooding issues from OPW and LA staff	PFRA database comments (<i>in italics</i>): OPW comments <i>LA note flooding occurs, but no indication of risk (Predictive, Historic or OPW) - Include for Risk Review only.</i> LA comments <i>Low lying area, tidal flood risk. LA asked it ot be included.</i> <i>Low lying area, tidal flood risk.</i> Meeting / discussion summary comments: OPW comments No comments LA comments <ul style="list-style-type: none"> Tidal flooding problem identified. Flooding problems in Kilfenora are related to a small number of low lying properties.

1.4 PFRA Data			
1.4.1 PFRA hazard mapping	PFRA mapping available in GIS layer:		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	PFRA mapping included on FRR map:		Yes <input type="checkbox"/> No <input checked="" 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: 24/0511		
		Time: 16:00		
Names of inspection team (including OPW/LA staff if present)		Iain Blackwell		
		Kelly Kasperczyk		
2.1 Ground-truthing of Hazard Mapping	Fluvial non-tidal <input type="checkbox"/> Fluvial tidal <input type="checkbox"/> Coastal <input type="checkbox"/> Not available <input checked="" type="checkbox"/>			
	Coastal mapping was not available at time of review.			
2.2 Spot check ground-truthing of selected receptor vulnerability	Receptor Type	Location description (if not obvious)	Exists?	Overall Vulnerability / Risk (L / M / H)
(also note any key receptors noted during visit that are not identified by PFRA)	Residential		Yes	L
	Road		Yes	L
2.3 Local knowledge - on-site comments (OPW, LA and any info volunteered by local residents during visit)	Residents (two houses) indicated that a high tide once a month (i.e. a typical spring tide) would reach the bottom of the steps on to the beach. Note: this is consistent with high tide marks on the beach. No problems with flooding. Residents recognise that erosion is a bit of a problem in places; hence people have put in rock armour in various frontages.			
2.4 Comments on hydraulic constrictions (bridges, etc.) and conveyance routes	No hydraulic restrictions noted. Not relevant to this area being considered for coastal flood risk.			

2.5 SVRS Assessment Matrix

Weightings:

A - x1 - reasonable expectation of flooding

B - x2 - high expectation of flooding
or flooding is tidal (any risk)

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		X		100				200			
Property (small retail or business)	20				200				400			
Property (large retail or business)	50				500				1000			
Road or Rail Infrastructure	30				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									20			

2.6 Defence Assets

Formal and Informal Flood Defence Assets

(include effective and ineffective assets to inform asset survey and potential mitigation measures)

Open Channel Watercourses

Man-made river channel ☐ Flood relief channel ☐ Canal ☐
Mill leat ☐ Drainage channels / back drains ☐

Bridges and Culvert crossings

Single Arch bridge ☐ Multi-Arch bridge ☐
Single Span bridge ☐ Multi-Span bridge ☐
Box culvert(s) ☐ Pipe culvert(s) ☐ Arch Culvert(s) ☐

Culverted Watercourses (culvert length is greater than just a crossing)

Box culvert(s) ☐ Pipe culvert(s) ☐ Arch Culvert(s) ☐ Irregular Culvert(s) ☐

Walls and Embankments

Embankment(s) ☐ Raised wall(s) ☐ Retaining wall(s) ☐

Control Structures – weirs, gates, dams

Fixed crest weir ☐ Adjustable weir ☐ Dam / Barrage ☐
Sluice gates ☐ Lock gates ☐ Radial gates ☐

Storage

On-line storage (natural) ☐ On-line storage (artificial) ☐ Off-line storage ☐

Outfalls

Flapped outfall(s) into watercourse ☐ Unflapped outfall(s) into watercourse ☐
i.e. from smaller watercourses, drains etc. into river / estuary / sea

	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): Only defence asset is various formal and informal defences along the frontage. Primarily rock armour, but also a large concrete gravity retaining wall (constructed from placing large concrete blocks to form a stepped wall) adjacent to the road which is potentially vulnerable to erosion.
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 type="checkbox"/> Individual property protection <input 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 type="checkbox"/> Channel works <input type="checkbox"/> Floodplain <input type="checkbox"/> Flood defences: Walls <input type="checkbox"/> Embankments <input type="checkbox"/> Localised works: Defence raising <input 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) Erosion protection along frontage. Main area of concern is the road, although remedial works have been done here. Rock armour may be a possible solution, but other alternatives could be considered. Other (describe):

Outcomes				
PFRA Designation	APSR <input type="checkbox"/> not an APSR <input type="checkbox"/> IRR <input type="checkbox"/>		FRI Score: N/a	
Site Ground-truthing of PFRA Assessment (hazard mapping and receptors)	High Confidence (good)	Uncertain	Low Confidence (poor)	Not available
				X
Site Visit Review Score	20			
Recommended Designation	APSR <input type="checkbox"/> not an APSR <input checked="" type="checkbox"/> IRR <input type="checkbox"/>			
Summary Comments (if required)	Possible coastal erosion risk but not a clear coastal / tidal flooding risk. There are around 10 properties in Kilfenora, most of which are typically 4m plus above high spring tide level. Three properties are lower at around 2m above high spring tide level. There are insufficient properties at risk for the location to be designated as an APSR.			



Photo 1: Main road through Kilfenora with properties on the south of the road located on the coastline



Photo 2: Erosion protection at the western end of Kilfenora adjacent to the road



Photo 3: Erosion protection at the end of property gardens (1)



Photo 4: Erosion protection at the end of property gardens (2)



Photo 5: Properties towards the western end of Kilfenora. The properties are above coastal flood risk levels



Photo 6: Two lower lying properties (on the right) at the eastern end of Kilfenora

