Flood Risk Management

COUNTY SUMMARY

COUNTY: CORK

(Information correct as of 31/12/2017)

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1. OPW Capital Investment to 31 December 2017

MAJOR FLOOD RELIEF SCHEMES: 1995-2017

Historically, flood risk management focused on arterial drainage for the benefit of agricultural improvement. Arising from increasing flood risk, the Arterial Drainage Act, 1945, was amended in 1995 to permit the Office of Public Works (OPW) to implement localised flood relief schemes to provide flood protection for cities, towns and villages.

Some schemes have been carried out by the Local Authorities under their own powers using the Planning and Development legislative code. The OPW either works in association with the relevant Local Authorities or funds Local Authorities directly to undertake flood relief works.

COUNTY: CORK

No.	Scheme At Design/Planning	Scheme At Construction	Scheme Completed	Properties Protected	Budget (€)	Current Status (or Completion Date)
1	-	Bandon	-	Approx. 392, (177 residential)	25.5m	Anticipated Project Completion Date: July 2019
2	-	Skibbereen	-	Approx. 312, (181 residential)	33.2m	Anticipated Project Completion Date: December 2018
3	-	-	Mallow North	136	22.7m	Scheme Completed 2010
4	-	-	Mallow South & West	94	21.3m	Scheme Completed 2013
5	-	-	Fermoy North	77	9.9m	Scheme Completed 2011
6	-	-	Fermoy South	187	29.9m	Scheme Completed 2015
7	Clonakilty	-	-	296	22.7m	Scheme at Detailed Design Stage
8	Douglas (incl Togher)	-	-	231	13.2m	Scheme at Detailed Design Stage
9	Glashaboy	-	-	103	17.8m	Scheme at Detailed Design Stage
10	Lower Lee (Cork City)	-	-	2,100 (1,200 residential) plus c. 1,000 additional will indirectly benefit	140m	Scheme at Public Exhibition Stage
11	River Bride (Blackpool)	-	-	285 (216 residential)	16m	Scheme at Post Public Exhibition Stage, to be submitted for Confirmation in early 2018

COUNTY: CORK						
No.	**Scheme At Design/Planning**	**Scheme At Construction**	**Scheme Completed**	**Properties Protected**	**Budget (€)**	**Current Status (or Completion Date)**
12	-	-	Dunmanway	35	1.7m	Scheme Completed 2003
13	Midleton	-	-	246	20m	Scheme at outline design stage - Anticipated Project Completion Date: 2022
14	Ballymakeera / Ballyvourney	-	-	80	16.1m	Scheme at outline design stage - Anticipated Project Completion Date: 2022
15	Carrigaline	-	-	129	8.5m	Scheme being reviewed
16	Macroom	-	-	12	1.9m	Scheme at Feasibility Stage

MINOR FLOOD MITIGATION WORKS AND COASTAL PROTECTION SCHEME: 2009-2017

The Minor Flood Mitigation Works & Coastal Protection Scheme (the "Minor Works Scheme") was introduced by the Office of Public Works in 2009. The purpose of the scheme is to provide funding to Local Authorities to undertake minor flood mitigation works or studies to address localised flooding and coastal protection problems within their administrative areas. The scheme generally applies where a solution can be readily identified and achieved in a short time frame.

Under the scheme, applications are considered for projects that are estimated to cost not more than €750,000 in each instance. Funding of up to 90% of the cost is available from the OPW for approved projects. The commencement and progression of any works for which funding is approved is a matter for each Local Authority concerned.

COUNTY: CORK

No.	Local Authority	Project Location	Project Details	Approved Funding (€)	Year of Approval
1	Cork City Council	Cork City Walls	Repairs and upgrading of quay walls	900,000	2010
2	Cork County Council	Ballinacurra	Works-River Flood Protection from Coolea Road to downstream of Kilnamartyra Road Bridge Installation of debris screen	18,000	2009
3	Cork County Council	Gortroe, Youghal	Install new drain & deepen and clean existing one Deepening of existing stream channel for 900m	13,500	2009
4	Cork County Council	The Glen, Glenbrook, Passage West	Study & remedial works	99,000	2010
5	Cork County Council	Crookstown	Permanent flood walls & embankments	318,600	2010
6	Cork County Council	Clonakility	Channel capacity improvements	350,000	2010
7	Cork County Council	Youghal Front Beach (Coastal)	Phase 1A – Refurbish Sea Wall	18,000	2010
8	Cork County Council	Riverstick & Environs	Channel Capacity Improvements & Localised Permanent Flood Defences: Clear trees/scrub/gravel along river for 5 miles/ Clean and deepen river/ Construct embankments to protect water treatment plant	90,000	2010
9	Cork County Council	Ballybrack Stream, Douglas	Installation of trash screen and reinforced concrete substructure and ancillary works /Replacement of under sized culvert under Church Street	304,200	2010
10	Cork County Council	Skibbereen	Flood Risk Assessment & Management Study – Ilen Catchment	120,000	2010

COUNTY: CORK					
No.	**Local Authority**	**Project Location**	**Project Details**	**Approved Funding (€)**	**Year of Approval**
11	Cork County Council	Ballinacurra	Installation of debris screen	5,880	2010
12	Cork County Council	Gortroe, Youghal	Install new drain & deepen and clean existing one Deepening of existing stream channel for 900m	45,000	2010
13	Cork County Council	Ballingeary & Inchigeelagh	River cleaning & maintenance works	40,000	2011
14	Cork County Council	River Ilen, Skibbereen	River cleaning	10,000	2011
15	Cork County Council	Bandon River, Bandon Town	Tree Cutting	27,000	2011
16	Cork County Council	Carrigtohill	Carrigtohill Flood Risk Assessment Study	72,000	2011
17	Cork County Council	Skibbereen	Flood Risk Assessment & Management Study – Ilen Catchment River Ilen Catchment Flood Risk Assessment & Management Study: Feasibility Study & Preparation of Draft Flood Risk Plan Flood Plain & Channel Survey	119,000	2011
18	Cork County Council	Kilmacahill, Cloyne	Replacement of culverts and works to watercourses	8,100	2012
19	Cork County Council	Ballymakeery / Ballyvourney	Removal of overhanging growth & other obstacles to river for 3.4 miles from Ballyvourney Bridge downstream	10,000	2012
20	Cork County Council	Riverstick	Replacement of Ballady Culvert	81,000	2012
21	Cork County Council	Inchigeelagh	Selectively clear bankside trees & scrub Selectively clear islands where impeding flows to mean low water level	45,000	2012
22	Cork County Council	Glashaboy River	River cleaning works only to improve hydraulic capacity	36,000	2012
23	Cork County Council	Midleton Northern Relief Road	Study	19,000	2013
24	Cork County Council	River Ilen, Skibbereen	Replace the 36m of culvert in private lands	72,000	2015
25	Cork County Council	Ballingeary	Tree & shrub removal from Inchinossig Bridge to the Bunsheelin River, on Bunsheelin River from GAA pitch to confluence with the River Lee & in an area known as “The Ford”	22,500	2016
26	Cork County Council	Inchigeelagh	Selectively clear bank side trees & shrubs Clear river bed material	22,500	2016

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No.	**Local Authority**	**Project Location**	**Project Details**	**Approved Funding (€)**	**Year of Approval**
27	Cork County Council	St. Colum's Community Hall, Ballylickey	Construct flood defence wall around the community hall, including slot in flood barriers at access points	18,000	2017
28	Cork County Council	Ballinveltig, Curragheen Bridge	Replace the existing double culvert with one large culvert of equal width & height Construct an overflow culvert downstream & a land drain	180,000	2017
				3,064,280	

2. Maintenance carried out under Arterial Drainage Act, 1945

The OPW has statutory responsibility for and carries out a programme of Arterial Drainage Maintenance. These maintenance works relate to arterial drainage schemes completed by the OPW under the Arterial Drainage Acts 1945, with the primary purpose to improve the drainage of agricultural lands. Local Authorities are responsible for the maintenance of Drainage Districts, which were completed up to 1943.

The OPW's annual Arterial Drainage Maintenance Works Programme protects 260,000 hectares (650,000 acres) of agricultural lands and comprises 11,500km (7,150 miles) of river channel and approximately 800km (500 miles) of embankments.

COUNTY: CORK				
Completed Scheme		County(s)	Duration of Works	Benefitting Area (Acres)
Deel	(Major Scheme)	Limerick, Cork	1962 – 1968	11,900
Maigue	(Major Scheme)	Limerick, Tipperary, Cork	1973 – 1986	30,500
Owvane	(Small Scheme)	Cork	1962 – 1963	400

3. Proposed Measures in Flood Risk Management Plans

The OPW has now studied and assessed flood risk in Ireland, focussing on 300 areas of potentially significant risk throughout the country.

Flood Maps have been created for each of these communities to describe existing and potential flood risk. The OPW has now published Flood Risk Management Plans which set out, for these communities, how it is proposed to manage the assessed flood risk through investment in flood relief schemes and other policy measures. The Plans also set out measures in place and under consideration that can manage flood risk in other parts of the county.

The following tables set out the communities in this County that are covered by the Flood Risk Management Plans and provides an indication of the proposed flood relief schemes contained in the Plans for these communities.

In some instances, a technically viable flood relief scheme has been identified, however, a more detailed assessment of the costs and benefits will be completed to determine if the proposed Scheme is feasible.

For other communities, there is a relatively low level of flood risk from rivers and/or the sea, and no structural flood relief measures are therefore proposed at this time. The current level of risk will be reviewed, along with all areas, on a regular basis into the future.

In addition to the implementation of proposed flood relief schemes, funding will continue to be available for localised projects under the Minor Works Scheme.

The Plans also set out those non-structural measures in place or proposed, for example Flood Forecasting, which benefit all at risk communities and properties. The Interdepartmental Flood Policy Co-ordination Group will continue its work now greatly informed by the wealth of knowledge in the Plans to bring forward further feasible proposals for Government's consideration to support and assist households and communities through non-structural flood risk management and mitigation measures.

COUNTY: CORK					
AREA NAME	**Existing Scheme in Place**	**Scheme in Construction, Design or Pending**	**New Scheme Proposed in the Plans**	**Potential Scheme subject to further assessment.**	**No Scheme Proposed as Community at Low Risk or Scheme Not Viable**
Ballingeary			√		
Ballymakeery / Ballyvourney		√			
Bandon		√			
Bantry			√		
Carrigaline		√			
Castlemartyr			√		
Castletown Bearhaven (Castletownbere)			√		
Charleville					√
Clonakilty		√			
Cork City		√			
Douglas		√			
Dunmanway	√			√	
Durrus					√
Fermoy	√				
Freemount	√				
Glanmire		√			
Inchigeelagh			√		
Inishannon			√		
Kanturk			√		
Killeagh					√
Little Island		√			
Macroom		√			
Mallow	√				
Midleton & Ballynacorra		√			
Milford					√
Passage West					√
Rathcormack			√		

COUNTY: CORK					
AREA NAME	**Existing Scheme in Place**	**Scheme in Construction, Design or Pending**	**New Scheme Proposed in the Plans**	**Potential Scheme subject to further assessment.**	**No Scheme Proposed as Community at Low Risk or Scheme Not Viable**
Schull			√		
Skibbereen		√			
Togher		√			
Tower	√				
Whitegate					√
Youghal			√		

No.	Proposed Scheme	Properties Protected	Further Information on Proposed Scheme
1	Ballingeary	46	The proposed measure consist of flood walls and embankments to protect vulnerable properties in Ballingeary. These wall range in height from 0.7 – 1.1m while the embankments have a maximum height of 2.3m.
2	Bantry	198	The proposed measure consist of Fluvial Flood Defences comprising of walls and embankments and Tidal Flood Defences comprising of sea walls.
3	Castlemartyr	22	The proposed measure consist of the diversion of the Kiltha River around the town via an existing bypass channel through the grounds of the hotel and the construction of flood walls to protect vulnerable properties at the confluence of the Kiltha and the bypass channel.
4	Castletown Bearhaven	29	The proposed measure consist of sea walls with removable barriers for access to slipways etc. The walls range from 1.1 – 2.1m in height.
5	Inchigeelagh	28	The proposed measure consist of flood walls and embankments to protect vulnerable properties in Inchigeelagh. These defences range from 0.6 – 1.9m in height.
6	Inishannon	42	The proposed measure consist of walls and embankments with a maximum height of 2.0m along the River Bandon.
7	Kanturk	152	The proposed measure consist of the provision of a storage area on the Dalua River upstream of the town along with fluvial Flood Defences on the Dalua and Allow rivers comprising of walls and embankments along with storm water pump stations.
8	Rathcormack	31	The proposed measure consist of the diversion of flood flows from the Kilbrien Stream via a 1200mm diameter culvert to the Shanowen River and will protect against the 1% AEP fluvial flood event.
9	Schull	47	The proposed measure consists of the construction of a new culvert along the Schull Stream, located along the road and diversion of the Meenvane Stream to an alternative watercourse via a flow diversion culvert.
10	Youghal	75	The proposed measure for Youghal that may be implemented after project-level assessment and planning or Exhibition and confirmation might include Monitoring and Flood Defences. Tidal monitoring to be carried out in advance of any mitigation works to review and determine the design tide plus surge level. Tidal flood Defences along the quays and to the rear of properties comprising of sea walls, removable barriers / gates are included at certain locations to maintain existing access points along with storm water pump stations. These Flood Defences are expected to provide protection against the 0.5% AEP tidal flood event.

In addition to the 300 areas that were the focus of the CFRAM programme, a small number of other areas were also assessed through four Pilot CFRAM programmes, or have rural or small flood relief schemes already in place or in progress. These other areas have been referenced in the Flood risk Management plans and the main outputs are summarised below.

COUNTY: CORK					
AREA NAME	**Existing Scheme in Place**	**Scheme in Construction, Design or Pending**	**New Scheme Proposed in the Plans**	**Potential Scheme subject to further assessment.**	**No Scheme Proposed as Community at Low Risk or Scheme Not Viable**
Cobh				√	
Crookstown		√			