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Constraints Study Report

River Deel (Crossmolina)

Flood Relief Scheme

October 2012

OPW
The Office of Public Works
Oifig na nOibreacha Poiblí

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RIVER DEEL (CROSSMOLINA) FLOOD RELIEF SCHEME

CONSTRAINTS STUDY REPORT

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EXECUTIVE SUMMARY

This report sets out the key environmental issues relating to the Study Area for the River Deel (Crossmolina) Flood Relief Scheme which may be impacted upon by potential flood risk management measures and/ or which may impose constraints on the viability and/ or design of these measures. Information has been gathered on engineering, socio-economic, environmental, archaeological and geotechnical constraints.

Environmental constraints have been investigated under the following headings:

- Human Beings
- Ecology
- Water
- Soils & Geology
- Archaeology & Cultural Heritage
- Landscape
- Air & Climate
- Material Assets

Under each heading, the assessment methodology is first outlined followed by a description of the defined Study Area or 'receiving environment'. Finally, a summary of the key constraints and implications for the proposed scheme is noted.

In addition to the assessments carried out, a public consultation was held to present the Study Area to the public and invite feedback regarding the proposed scheme. Information gathered during this public consultation has been included in this report.

This report is the first stage in the environmental assessment process, which will be ongoing throughout the planning and design of the project. Information gathered or alternatives suggested arising from public information days, meetings with stakeholders and written representations will be considered on the grounds of engineering feasibility, environmental viability, existing constraints and economics.

SUMMARY OF KEY CONSTRAINTS

The following is a summary of the key constraints identified as part of this study.

HUMAN BEINGS
In designing the proposed scheme, the value (both cultural and economic) of any buildings (Residential, Retail, etc) close to river edge or likely to be adversely affected by the scheme should be taken into account. In addition, adverse impacts on buildings or structures of conservation interest should be minimised or avoided where possible.
Any design proposals should ensure that Bridge links between eastern and western sides of the town are maintained so that temporary or permanent disruption on local transport links in the town and route along the N59 between Ballina and West Mayo are minimised.
The design of the scheme should consider the public amenity value of the Study Area. Impacts on public amenity areas adjacent to the river should be considered, with replacement mitigation proposed if necessary. Access by anglers and visibility of the river as a tourist attraction should be given consideration as part of any proposed scheme.
Impacts on especially sensitive receptors e.g. schools, church, day care centre, should be considered in the flood risk assessment.
ECOLOGY
Given the sensitivity of the river habitat, factors that materially affect the function of the river under normal flow conditions such as water depth, velocity and changes to the shape of the bed should be given consideration, so that the existing function of the river can be maintained. Impacts to areas up and downstream of the Study Area should also be considered as part of the assessment.
In designing the proposed scheme, consultation with both IFI and NPWS will be necessary, together with an appropriate amount of survey work to establish baseline conditions in the river. Constraints may be placed on the times of year that in-stream works may be carried out depending on the results of the various surveys and the results of consultation with IFI and NPWS. Constraints may also be placed on the time of year/weather conditions that the surveys may be undertaken.

In salmonid spawning areas, in-stream works are generally not permitted during the period October – March (inclusive), as this is the sensitive time for spawning. Given that the river is also an important angling and nursery area, it is likely that further constraints will need to be considered.
Freshwater Pearl Mussel Surveys and Otter surveys can be undertaken at any time of year but are dependant on water levels. Pearl Mussel surveys require that there is good visibility in the water column and can only be undertaken in sunny, bright weather when water levels are not high and sediment loading on the river is low. Where such surveys are required, weather conditions will constrain the timing of these.
The optimal survey season for White-clawed Crayfish is from July to September. Surveys and removal operations should be avoided in the period when females are releasing young (late May-July). It is also recommended to avoid surveys in the period from December to the end of March as efficiency of searches is very low.
Kingfisher surveys should be carried out during the summer nesting period (April – September).
Any surveys for Greenland White-fronted Geese in the Study Area must be carried out in the winter bird season (October-March).
The River Deel is designated as part of the River Moy SAC and flows into Lough Conn, which is designated both as part of the River Moy SAC and the Lough Conn and Lough Cullin SPA. Negative impacts on qualifying interests of the sites and other habitats or species of conservation importance have the potential to negatively affect the status of these designated sites. Screening for Appropriate Assessment should inform the requirement for the preparation of a Natura Impact Statement and progression to Stage 2 Appropriate Assessment.
Consideration should be given to areas of higher biodiversity and ecological sensitivity, such as woodlands, wetlands and riparian vegetation along the river corridor. If works are required in these areas, care should be taken to mitigate significant effects.
Appropriate measures should be taken to ensure that the spread of any invasive species is not accelerated by any proposed works.
Regard should be had to the *Biodiversity & Generic Recommendations for Crossmolina Community Council Ltd* commissioned by Crossmolina's Tidy Towns Committee 2011.
WATER
The design of the proposed scheme should take into account the impacts on water (both Quality and Quantity) that any proposed flood relief scheme will have on the yields of existing groundwater abstractions, taking into account productive gravel

aquifers in the area.
The design of the proposed scheme should take into account the main objectives of the Water Framework Directive River Basin District Management Plan (RBDMP) by ensuring that any works proposed do not result in the deterioration of water quality.
The design should also take into account the presence of protected and sensitive areas identified in the RBDMP.
SOILS & GEOLOGY
It is recommended that a geotechnical investigation be carried out once the potential flood alleviation measures are developed in order to identify local geology and ground conditions.
ARCHAEOLOGY & ARCHITECTURAL HERITAGE
Given the provisions of the National Monuments Acts, no disturbance to, or interference with, any known archaeological sites can take place without first consulting the National Monuments Service of the Department of Arts, Heritage, and the Gaeltacht (DAHG).
It is recommended that all impacts on identified archaeological and heritage sites, and their immediate vicinities, be avoided in the design of the proposed flood relief scheme.
Should this not be possible then archaeological investigations are recommended for archaeological and heritage sites in the vicinity of, or those that would be directly impacted by the proposed scheme. It is recommended that this programme take place well in advance of construction works in order to allocate adequate time to evaluate and record any archaeological features that may be revealed.
It is recommended that any ground disturbance works associated with the proposed scheme be assessed for archaeological monitoring. Appropriate mitigation should be determined during the design phase in consultation with the National Monuments Service (DAHG).
It is recommended that the Underwater Archaeological Unit (DAHG) be consulted during the design of the proposed flood relief scheme in order to agree appropriate underwater archaeological assessment and mitigation strategies. Depending on the flood alleviation measures chosen, the riverine assessments required by the DAHG may consist of river bank and underwater archaeological survey pre-works, possible testing around the bridges and other sites along the river course, and full monitoring of all works.
All Record of Protected Structures sites have statutory protection and avoidance of these features is recommended.
The National Monuments Service of the Department of Arts, Heritage and the Gaeltacht should be consulted at all stages of the scheme development.

LANDSCAPE
The Study Area includes areas and features designated as vulnerable and sensitive in the Landscape Appraisal for County Mayo, which is included as an Appendix to the Mayo County Development Plan (2008-2014). Many of these features are associated with Lough Conn. Although there are no scenic routes or highly scenic vistas within the Study Area, there are a number of scenic routes and one highly scenic vista within 10 kilometres of the Study Area. Appropriate design, siting and mitigation measures are therefore required to integrate the proposed scheme within the landscape. Particular regard should also be had to the potential visual impact on views available from the three stretches of designated Scenic Route and the areas of Scenic Landscape, which are located within the Study Area.

AIR QUALITY
Prior to the selection of a preferred flood relief scheme as part of the Engineering Study, it is recommended that the short listed flood alleviation measure be assessed in relation to the impact of noise and vibration during the construction phase of the project.
It is recommended that mitigation measures be put in place to reduce the impacts on air quality and the noise environment during the construction phase of any proposed flood relief scheme.
It is recommended that the effects of vibration during the construction phase be considered in the selection process for a potential flood alleviation measures.
Meteorological and climatological data should be consulted in the engineering design process.
The potential impacts of climate change should be assessed with regard to the prediction of flood risk and should be taken into account in the design of a proposed flood relief scheme.
MATERIAL ASSETS
It is recommended that the existing and proposed location of watermains and underground services in the vicinity of any proposed flood relief scheme be ascertained as part of the Engineering Study. It is recommended that Mayo County Council and other utility providers with services in the area be consulted regarding the location and priority of existing and proposed services. It is further recommended that the services be protected as part of any proposed flood relief scheme.
It is recommended that the Crossmolina Waste Water Treatment Plant remains operational at all times.
It is recommended that any proposed change in the hydrological regime of the River Deel and its tributaries be assessed in relation to the assimilative capacity of the river at the locations of the two discharges from Wastewater Infrastructure within the Study Area.

It is recommended that Mayo County Council and the National Roads Authority be consulted in relation to any effects on the existing and proposed roads infrastructure in the Study Area from a proposed flood relief scheme.

1 INTRODUCTION

1.1 OVERVIEW OF SCHEME

The purpose of the River Deel (Crossmolina) Flood Relief Scheme is to identify the most viable flood relief scheme to alleviate flooding in Crossmolina Town.

1.2 STUDY AREA

The Study Area extends along the channel, flood plains and surrounding lands of the River Deel from Ballycarroon to Lough Conn and includes three tributaries, their flood plains and surrounding lands as shown on Figure 1.1 overleaf. The Study Area is centred around Crossmolina town.

Several tributary streams join the River Deel within the Study Area along with larger tributaries including the Torreen River and the Rathnamagh River.

1.3 STAGE OF PROCESS

The Constraints Study is the first stage in the Environmental Impact Assessment for the River Deel (Crossmolina) Flood Relief Scheme and is being advanced in parallel with the Engineering Study for the River Deel (Crossmolina) Flood Relief Scheme. The project will be delivered in the following stages:

Environmental Impact Assessment		**Engineering Study**
Stage I	Part 1 **Constraints Study** (*this stage*) Part 2 Screening for Appropriate Assessment	Hydrology Study & Hydraulic Modelling Site Investigations Flood Risk Assessments Flood Risk Management Options Cost Benefit Analysis Selection of Preferred Option Flood Risk Management Plan Interference Notices Public Exhibition
Stage II	Part 1 Environmental Assessment of Viable Options Part 2 Appropriate Assessment (if required)	
Stage III	Environmental Impact Statement	
Stage IV	Public Exhibition	

Table 1.1 Stages in the Planning of the River Deel (Crossmolina) Flood Relief Scheme

1.4 SCOPE OF ASSESSMENT

Information has been gathered under the relevant headings prescribed in the Environmental Protection Agency (EPA) guidelines "Advice Notes on Current Practice in the Preparation of Environmental Impact Statements, 2003"

1.5 CONSULTATION

Consultation has taken place with statutory and non-statutory consultees as part of the initial scoping process. Comments and information were sought from the following list of consultees:

STATUTORY EIA CONSULTEES	
1	An Bord Pleanála
2	An Comhairle Ealaion (The Arts Council)
3	An Taisce - The National Trust for Ireland
4	Commission for Electricity Regulation
5	Department of Agriculture, Food and the Marine
6	Department of Arts, Heritage and the Gaeltacht
7	Dept. of Communications, Energy & Natural Resources
8	Department of Environment, Community and Local Government
9	Department of Justice and Equality
10	Department of the Jobs, Enterprise and Innovation
11	Environmental Protection Agency
12	Failte Ireland
13	Health and Safety Authority
14	HSE Western Regional Health Forum
15	Inland Fisheries Ireland
16	Irish Aviation Authority
17	Mayo County Council
18	National Roads Authority
19	Office of Public Works
20	Railway Procurement Agency
21	The Heritage Council
22	West Regional Authority

Table 1.2 Statutory EIA Consultees

OTHER CONSULTEES	
1	An Óige
2	Birdwatch Ireland
3	Bord Gais
4	Bord na Móna
5	Botanical Society of the British Isles – local recorder
6	Coillte Teoranta
7	Councillor Gerry Ginty
8	Councillor Jarlath Eugene Munnelly
9	Councillor John O'Hara
10	Councillor Annie May Reape
11	Councillor Eddie Staunton
12	Crossmolina Agricultural and Industrial Show
13	Crossmolina Business Association
14	Crossmolina Community Alert
15	Crossmolina Community Development Ltd
16	Crossmolina Community Festival Committee
17	Crossmolina Chronicle
18	Crossmolina Fishing Club
19	Crossmolina GAA – Deel Rovers
20	Crossmolina Ladies GAA
21	Crossmolina Tidy Towns
22	Development Applications Unit
23	Earthwatch (Friends of the Earth Ireland)
24	Eircom
25	ENFO
26	Environment Section – Mayo County Council
27	ESB
28	Environmental Sciences Association of Ireland
29	Geographical Society of Ireland
30	Geological Survey of Ireland
31	Irish Creamery Milk Suppliers Association
32	HSE Western Regional Health Forum
33	Institute of Geologists of Ireland
34	Irish Farmers Association (Galway Mayo Branch)
35	Irish Heritage Trust

OTHER CONSULTEES	
36	Irish Peatland Conservation Council
37	Irish Planning Institute
38	Irish Wildlife Trust
39	Landscape Alliance Ireland
40	Lough Conn and Cullin Anglers
41	Mayo County Development Board
42	National Association of Regional Game Councils
43	National Building Agency
44	National Federation of Group Water Schemes
45	National Monuments Service
46	National Museum of Ireland
47	National Parks and Wildlife Service
48	Planning Section – Mayo County Council
49	Riverwalk Residents Association
50	Royal Town Planning Institute
51	Salmon Growers Association
52	Salmon Research Agency of Ireland
53	The Meteorological Service
54	The Mining Heritage Trust of Ireland
55	Tidy Towns Committee
56	Teagasc
57	Tourism Ireland
58	Voice of Irish Concern for the Environment
59	Water Services Section – Mayo County Council
60	Waterways Ireland
61	Western River Basin District Office

Table 1.3 Other Consultees

A copy of the letter and attachments issued to Consultees is included in Appendix A. Copies of any written correspondence received are also provided in Appendix A.

2 SCHEME CONTEXT AND BACKGROUND

2.1 HISTORY OF FLOODING

There is a long history of flooding in the floodplains of the River Deel and in Crossmolina town. Between 1963 and 1966, the Moy Catchment Drainage Scheme (CDS) was carried out on the River Deel from Lough Conn to approximately 200m upstream of Jack Garret Bridge. Since the CDS scheme, three significant floods have impacted the town and while a number of lesser events have also occurred, anecdotal information suggests that they had minor impact. The largest event occurred in October 1989 and initial analyses carried out by OPW have estimated that this event had a 35 year return period.

2.2 FUTURE CHANGES

The risk of flooding may increase with time. Future changes, which have the potential to affect the risk of flooding include:

- Climate Change potentially resulting in higher rainfall and higher tide levels;
- Geomorphological processes, such as (i) sedimentation transport, which affects the area of conveyance of the river channel and (ii) erosion;
- Development within the catchment of the River Deel, which depending on the type of development may have he potential adversely affect the response of the catchment to rainfall;
- Changes in land use, including forestation and land drainage.

2.3 POTENTIAL FLOOD RISK MANAGEMENT MEASURES

An Engineering Study is being advanced in parallel with the Environmental Assessment of the proposed flood relief scheme. The Constraints identified in this report will inform the selection of flood risk management measures as part of the Engineering Study.

The range of engineering measures typically considered for flood relief schemes include, but are not limited to the following:

a) Do Nothing (i.e., implement no new flood alleviation measures)

b) Non-Structural Measures (e.g. flood warning system or individual property protection)

c) Relocation of Properties and/or infrastructure

d) Reconstruction of Properties and/or infrastructure to a higher level

e) Flow Diversion (e.g. river diversion or flood flow bypass channel)

f) Flow Reduction (e.g. upstream catchment management or flood storage)

g) Flood Containment through Construction of Flood Defences

h) Increase Conveyance of Channel (upstream and/or through and/or downstream of the town)

i) Sediment Deposition and Possible Sediment Traps

j) Pump storm waters from behind flood defences

k) Measures Specific to the Study Location

It is not possible, at this stage, to define the number of scheme options that will require study, although a typical Engineering Study of this nature will identify between three and five viable options.

2.4 TOPOGRAPHY AND MAPPING

The Study Area extends along the river channel from Ballycarroon to Lough Conn, including a number of small tributaries along with the larger Tooreen and Rathnamagh Rivers, flood plains and surrounding lands as shown on Figure 1.1 previously. The Study Area centres on Crossmolina town.

The following mapping was used in order to prepare this Constraints Study;

- Ordnance Survey Discovery Series Mapping at 1:50,000 scale
- Old Raster 6" Mapping
- Old Raster 25" Mapping

Ordnance Survey 1:50,000 scale Discovery Series mapping is the main background mapping used in the preparation of the drawings provided with this report.

3 ENVIRONMENTAL CONSTRAINTS

3.1 INTRODUCTION

The purpose of this section of the report is to describe the key environmental issues relating to the Study Area which may be impacted upon by potentially viable flood risk management measures and/ or which may impose constraints on the viability and/ or design of these measures.

3.2 METHODOLOGY AND GUIDELINES

This Constraints Study is the first stage in the Environmental Impact Assessment for the River Deel (Crossmolina) Flood Relief Scheme and is being carried out in accordance with the Environmental Protection Agency (EPA) guidelines "Advice Notes on Current Practice in the Preparation of Environmental Impact Statements, 2003".

Information has been gathered under relevant headings prescribed in the EPA Guidelines.

Ryan Hanley in association with McCarthy Keville O'Sullivan has employed archaeological specialists to carry out studies under the following heading:

Study	Specialist
Archaeology, Architectural & Cultural Heritage	John Cronin & Associates

Table 3.1 Environmental Specialists

The following sections outline the findings of the Constraints Study and identify potential environmental constraints associated with the scheme.

3.3 HUMAN BEINGS

This section sets out the socio-economic features of the Study Area that may impact on the selection of flood alleviation measures for the proposed scheme.

3.3.1 Settlements and Planning Policy

The following sources of information were utilised in the preparation of this section:

- Mayo County Development Plan, 2008 - 2014
- Regional Planning Guidelines for the West Region, 2010 - 2022
- Census of Ireland 2006 and 2011 (www.cso.ie)
- Mayo County Council Website
- Local Community Websites www.crossmolina.ie and www.crossmolina.net

The major settlement within the Study Area is Crossmolina, which is located on the River Deel and close to the northern shore of Lough Conn in north Co. Mayo. The town is considered a 'smaller town or village' in the Mayo County Development Plan and is located seven miles west of Ballina (which is considered a national 'linked development hub' town in the National Spatial Strategy), on the N59 National Secondary Route.

There is no specific Local Area Plan for the town, but planning and development policies and objectives for the area are included within the Mayo County Development Plan. The most relevant of the overall strategies in the Mayo County Development Plan is to the Study Area is the proposed development of:

> '*the Linked Hub of Castlebar/Ballina and Westport as its natural extension, as the spine around which the sustainable development of County Mayo will be structured, and to promote this extended Hub in the future development of spatial policy, both regionally and nationally*'

and '*to promote sustainability and vibrancy in rural communities, including small towns and villages*'.

Specific Strategic Policies in relation to Crossmolina (as one of the listed towns and villages in County Development Plan) are:

> ***P/CSS – 3.1***
>
> *To promote their sustainable development and growth so that they are sustained and consolidated as local rural service centres, to enable them to provide an appropriate range of services and facilities, including social infrastructure, retail development, commercial and enterprise development and act as attractive, viable options for inward movement and investment.*

P/CSS – 3.2

To retain their special character and identity and ensure the orderly development of newly developing areas by resisting urban sprawl, haphazard and piecemeal development and ribbon development.

P/CSS – 3.3

To support and promote the quality of the built environment through sensitive redevelopment, enhancement and renewal of the physical fabric and ensuring that new development respects the character, patterns and tradition or existing places and the built form.

3.3.2 Population and Housing

The Census of Ireland (www.cso.ie) provides population information for Electoral Divisions (EDs), 'Small Areas', in addition to data specific to Crossmolina as a 'town'. Data for the EDs of Crossmolina North and Crossmolina South was reviewed, in addition to information for other EDs within the Study Area (Ardagh, Fortland, Deel and Carrowmore). Figure 3.3.1 shows the boundaries of the Electoral Divisions within the vicinity of the Study Area which were considered as part of the preparation of this Constraints Study.

The 2011 census population figure for the combined EDs is 4,257 persons, which is an increase of 8% since 1996. This increase mainly arose in the period between the 2006 and 2011 census, as previous data showed fluctuations in population within the area. Within the Crossmolina EDs this trend is similar, although overall, Crossmolina North experienced only a 0.6% increase in the 1996 – 2011 period, as opposed to a 9% increase in the Crossmolina South ED. Similar to the surrounding area, Crossmolina North experienced a 7.6% drop in population between 1996 and 2006 with the recovery only happening in the last census period.

The Mayo County Development Plan (based on 2006 preliminary CSO figures) anticipates an increase of 0.5% in smaller towns and villages in the coming years with an increase of ca. 3% in population of larger hub towns (including nearby Ballina) which is likely to have an influence on adjacent areas such as Crossmolina.

Overall there were 1,935 houses recorded in the total 6 ED areas in the 2011 census; with 21% identified as unoccupied. Rates of unoccupied houses were highest in the two Crossmolina EDs at 22% and 29% respectively for Crossmolina North and South. Household sizes averaged at 2.8 persons per household, with averages slightly lower in the more urban Crossmolina EDs (2.5 and 2.7 persons per household respectively for Crossmolina North and South). Sixty three percent of houses within the 6 EDs were serviced by septic tanks, again, with lower percentages in Crossmolina North (26%) and Crossmolina South (46%) as the town is serviced by a mains sewerage system. In rural EDs, an average of 88% of houses were recorded as serviced by septic tanks.

3.3.3 Industry and Business

Crossmolina is located seven miles west of Ballina, which is considered a national 'linked development hub' town with Castlebar in the National Spatial Strategy. This proximity to an employment centre therefore influences the employment opportunities available to inhabitants of Crossmolina and other rural areas surrounding Ballina. The primary type of employment provided in the town of Crossmolina is service based employment, in addition to employment generated by agricultural and tourist industries.

The 2011 census also provided information about the journey time to work, school or college where applicable. Within the 6 ED Study Area, 71% of respondents have a journey time of less than 30 minutes to their work or education, which indicates that the majority of employment and educational facilities are located relatively close by.

The 2011 Census data for the EDs in the Study Area shows that the industries which employ the greatest percentage of persons are Professional Services (21.4%), Commerce and Trade (19.6%) and Agriculture, Forestry and Fishing (13.6%). A greater percentage of females are employed in the professional services and 'other' industries; with a larger proportion of males employed in the Agriculture, Forestry and Fishing and Building and Construction Industries.

3.3.4 Tourism

Tourism is one of the major contributors to the national economy and is a significant source of full time and seasonal employment. During 2011 (the latest period for which Fáilte Ireland figures are available), total overseas visitors to Ireland were 9.9 million, a decrease from the previous years. According to Fáilte Ireland, the fall in tourist numbers and associated revenue in recent years is due to the global downturn and unfavourable exchange rates with the euro. Expenditure by overseas visitors to Ireland in 2011 was estimated to be worth €3.1 billion, down from €3.9 billion in 2009. (Source: *Fáilte Ireland*)

Ireland is divided into seven tourism regions. The West Region, in which the Study Area is located, comprises Counties Clare, Galway and Mayo. During 2011, Mayo benefited from 2.7% of the total overseas visitors to the country and a similar percentage revenue (€83M or 2.6%) of the total tourism income generated in Ireland for that year.

Table 3.3.1 provides Fáilte Ireland figures showing the type of activities that overseas tourists engaged in and a breakdown of the percentages that undertook each activity. From these figures it can be seen that Historical/cultural visits form the majority of all activities enjoyed in Ireland but with other activities including visiting gardens, hiking/walking, golf, fishing, cycling and equestrian pursuits and also significant activities in terms of tourism.

Fáilte Ireland data relating to the times of year that overseas tourists visit Ireland indicates that the peak season is July and August with less activity in the months of May, June and

September and relatively low visitor activity during the winter autumn, winter and early spring months October – April.

Holiday - Activities Engaged in (%)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Fishing	4	4	3	1	2	2	2	3	3	3	3
Equestrian Pursuits	2	2	1	1	1	1	1	1	1	1	1
Golf	6	7	4	2	3	3	3	5	4	3	3
Cycling	3	3	2	3	3	2	1	2	3	2	2
Hiking/ Walking	9	7	5	5	4	6	7	9	17	11	20
Historical/ Cultural visits	43	53	52	42	44	54	56	67	74	67	73
Visits to gardens	11	17	12	9	9	12	12	18	21	23	33

Table 3.3.2 Activities undertaken by overseas visitors whilst visiting Ireland

3.3.4.1 Tourism Angling

The most recent survey undertaken by Fáilte Ireland (2005) found that while numbers of anglers have increased gradually from an all-time low of 56,000 visitors in 2002, the potential for growth remains. Excellent local angling is available on the River Deel and on nearby Lough Conn, in addition to the River Moy in Ballina.

3.3.4.2 Local Tourist Attractions

Crossmolina.ie and crossmolina.net websites list a number of local attractions as outlined below:

Crossmolina Looped Walks

A series of Looped Walks were developed, consisting of Local Town Walks, Woodland (Heritage) Walks and Mountain Walks. The distances vary in length from 3km to 12 km.

Kayaking on Lough Conn

Kayaking on Lough Conn is available based from Gortnor Abbey Harbour, allowing participants to access the lake and River Deel within a short distance.

Golf, Hiking and Boating

Boating on Lough Conn and hiking in the general area are also available to locals and visitors to the area. Crossmolina is centrally located for golf enthusiasts with a number of gold courses within a short driving distance, including Ballina, Enniscrone, Castlebar and Belmullet.

History and Archaeology

Crossmolina and surrounding areas are dotted with a wealth of historical and archaeological sites. The ruin of Abbeytown Abbey is 1.5km north of Crossmolina and the ruins of Errew Abbey can be seen 10.5km south-east of Crossmolina, while the ruins of the 16th century Deel Castle are to be found at the northern end of Lough Conn.

There are a number of visitor centres within 30 minutes' drive of Crossmolina, including:

North Mayo Heritage Centre at Enniscrone
Céide Fields Visitor and Interpretative Centre
Foxford Woollen Mills
National Museum of Country Life, Turlough

The annual Crossmolina Community Festival takes place at the end of July each year.

3.3.5 Community Facilities

3.3.5.1 Education

Educational facilities in Crossmolina include the local play school and mixed Crossmolina National School, which has 158 pupils on the roll for 2011/2012 and is located in a relatively recently constructed purpose-built building (opened 2000). Glenmore National School is also located within 7km of Crossmolina. Second level students are catered for by St. Tiernan's College, administered by the VEC and located in Crosssmolina with approx. 250 students, In addition, Jesus and Mary Secondary School at Gortnor Abbey, which recently celebrated its centenary, is also located within the Study Area and caters for students from the vicinity.

3.3.5.2 Sports and Recreation

There are a number of sports clubs in Bandon; the local GAA club, Deel Rovers have playing pitches and changing facilities on the N59 to the west of the town centre. The club has a number of underage teams and the area is also home to a Ladies GAA club. Badminton, boxing and basketball are also facilitated by local clubs, in addition to soccer at Kilmurray. Youth of all ages in the area can participate in Ladybirds and Brownies clubs in addition to the local Foróige club.

3.3.5.3 Local Amenities

The Crossmolina Town Trail was developed by the local Tidy Towns Committee, in addition to a LEADER funded Biodiversity Plan which was drawn up in 2011 on behalf of the Crossmolina Community Council. As part of the trail, a brochure is available online, in addition to plaques on the various features around the town, which incorporates historical, archaeological and other local interest information. A riverwalk was also developed in 1990, which includes some signage and ecological interpretative information about rare species using the River Deel.

3.3.6 Key Constraints

- In designing the proposed scheme, the value (both cultural and economic) of any buildings (Residential, Retail, etc) close to river edge or likely to be adversely

affected by the scheme should be taken into account. In addition, adverse impacts on buildings or structures of conservation interest should be minimised or avoided where possible.

- Any design proposals should ensure that Bridge links between eastern and western sides of the town are maintained so that temporary or permanent disruption on local transport links in the town and route along the N59 between Ballina and West Mayo are minimised.
- The design of the scheme should consider the public amenity value of the Study Area. Impacts on public amenity areas adjacent to the river should be considered, with replacement mitigation proposed if necessary. Access by anglers and visibility of the river as a tourist attraction should be given consideration as part of any proposed scheme.
- Impacts on especially sensitive receptors e.g. schools, church, day care centre, should be considered in the flood risk assessment.