



### Map Legend

- Special Area of Conservation
- Special Protection Area
- 15km buffer
- Water Subcatchments
- Permanent Works Area
- Temporary Construction Works Area
- Washlands Extent

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**EU designated sites within 15km**

Project Title: Crossmolina Flood Relief Scheme

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EUROPEAN SITES	QUALIFYING INTERESTS <small>(SOURCED FROM NPWS ONLINE CONSERVATION OBJECTIVES, WWW.NPWS.IE ON THE 21/06/2020)</small>	CONSERVATION OBJECTIVES	POTENTIAL FOR THE PROPOSED FLOOD RELIEF SCHEME TO RESULT IN SIGNIFICANT EFFECTS
<b>SAC</b>			
<b>River Moy SAC (002298)</b>  <b>Works partially within the SAC</b>	Active raised bog (7110)* Degraded raised bogs still capable of natural regeneration (7120) Depressions on peat substrates of the <i>Rhynchosporion</i> (7150) Alkaline fens (7230) Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (91A0) Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (91E0)* <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Salmo salar</i> (Atlantic Salmon) [1106]	Detailed conservation objectives for this site (Version 1, August 2016) were reviewed as part of the assessment and are available at <a href="http://www.npws.ie">www.npws.ie</a>	<p>The proposed flood relief scheme will result in direct effects on the River Moy SAC with works proposed within the SAC at the locations of the River Flow Control Structure and the Intake Weir. The ongoing maintenance of the River Deel between the Jack Garrett Bridge and just upstream of the Intake weir will be included in the OPW River Moy Maintenance Area as part of the flood relief scheme. This area is within the River Moy SAC. There is potential for habitat loss and disturbance to the aquatic habitats and species associated with the proposed works in this area.</p> <p>Much of the proposed development is located outside the SAC but there is potential for indirect effects in various forms such as hydrological and hydromorphological changes to the functioning of the river, water pollution or disturbance to result in significant effects on the River Moy SAC.</p> <p>The following Qualifying Interests have the potential to be affected by the proposed works both directly through habitat loss and disturbance and indirectly through water pollution causing</p>

	<i>Lutra lutra</i> (otter) [1355]		<p>habitat deterioration and through potential changes to the hydromorphology of the river.</p> <ul style="list-style-type: none"> <li>• Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (91E0)*</li> <li>• <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</li> <li>• <i>Petromyzon marinus</i> (Sea Lamprey) [1095]</li> <li>• <i>Lampetra marinus</i> (Brook Lamprey) [1096]</li> <li>• <i>Salmo salar</i> (Atlantic Salmon) [1106]</li> <li>• <i>Lutra lutra</i> (otter) [1355]</li> </ul> <p><b>It cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on this European site. Accordingly, a Stage Two Appropriate Assessment is required.</b></p> <p>Following the review of the Conservation Objectives for the SAC, the detailed desk study and the field surveys undertaken, no pathway for significant effect on the following QI habitats was identified:</p> <p>Active raised bog (7110)*</p> <p>Degraded raised bogs still capable of natural regeneration (7120)</p>
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			<p>Depressions on peat substrates of the <i>Rhynchosporion</i> (7150)</p> <p>Alkaline fens (7230)</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (91A0)</p> <p>These habitats were not recorded during the surveys undertaken and are not identified from the area in the site specific conservation document.</p>
<b>Bellacorick Bog Complex SAC (001922)</b>  <b>5.3km to the west</b>	<p>Natural dystrophic lakes and ponds (3160)</p> <p>Northern Atlantic wet heaths with <i>Erica tetralix</i> (4010)</p> <p>Blanket bogs (*if active) (7130)</p> <p>Depressions on peat substrates of the <i>Rhynchosporion</i> (7150)</p> <p>Alkaline fens (7230)</p> <p><i>Vertigo geyeri</i> (Geyer's Whorl Snail) [1013]</p> <p><i>Saxifraga hirculus</i> (Marsh Saxifrage) [1528]</p>	<p>Detailed conservation objectives for this site (Version 1, October 2017) were reviewed as part of the assessment and are available at <a href="http://www.npws.ie">www.npws.ie</a></p>	<p>This European Site is located upstream and up gradient of the proposed flood relief scheme. There was no identifiable pathway by which the proposed flood relief scheme has the potential to result in effects on the SAC. The qualifying interests are associated with peatlands and wetlands that have no potential to be affected by the proposed works.</p> <p><b>No pathway for effect exists and the site is not within the Likely Zone of Impact. It can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on this European site. Accordingly, a Stage Two Appropriate Assessment is not required.</b></p>
<b>Killala Bay/Moy Estuary SAC (000458)</b>	<p>Estuaries (1130)</p> <p>Mudflats and sandflats not covered</p>	<p>Detailed conservation objectives for this site (Version 1, October 2012) were reviewed as part of the assessment and</p>	<p>Whilst this European Site is located approximately 10km from the proposed works, it is approximately 40km upstream via surface</p>



<b>10.7km north east</b>	by seawater at low tide (1140) Annual vegetation of drift lines (1210) <i>Salicornia</i> and other annuals colonising mud and sand (1310) Atlantic salt meadows (1330) Embryonic shifting dunes (2110) Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (2120) Fixed coastal dunes with herbaceous vegetation* (2130) Humid dune slacks (2190) <i>Vertigo angustior</i> (Narrow-mouthed Whorl snail) [1014] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Phoca vitulina</i> (Harbour Seal) [1365]	are available at <a href="http://www.npws.ie">www.npws.ie</a>	<p>water. Any water discharging from the proposed works area has to pass through Lough Conn &amp; Lough Cullin for a distance of approximately 19km before entering the River Moy for a distance of over 20km before reaching the SAC. The lake and river would provide settlement and buffering from any potential pollution event and the potential for significant effects can be excluded.</p> <p>In addition, the Qualifying Interests of the SAC are all coastal or marine in nature and less sensitive to siltation or freshwater pollution than receptors within the River Moy or Loughs Conn &amp; Cullin.</p> <p><b>No pathway for significant effect exists and the site is not within the Likely Zone of Impact. It can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on this European site. Accordingly, a Stage Two Appropriate Assessment is not required. Appropriate Assessment is not required.</b></p>
<b>Newport River SAC (002144)</b>  <b>11.7km to the south west</b>	<i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] <i>Salmo salar</i> (Salmon) [1106]	This site has the generic conservation objective: 'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected'.	<p>This European Site is in an entirely separate surface water catchment from the proposed flood relief scheme and is separated from the proposed works by a distance of over 11km.</p> <p><b>No pathway for effect exists and the site is not within the Likely Zone of Impact. It can be excluded, on the basis of objective information,</b></p>

		(NPWS Generic version 6.0, 2018)	<b>that the proposed development, individually or in combination with other plans or projects, will have a significant effect on this European site. Accordingly, a Stage Two Appropriate Assessment is not required.</b>
<b>Lough Dahybaun SAC (002177)</b> <b>12.9km north west</b>	<i>Najas flexilis</i> (Slender Naiad) [1833]	This site has the generic conservation objective:  'To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.' (NPWS Generic version 7.0, 2020)	This European Site is in an entirely separate surface water catchment from the proposed flood relief scheme and is separated from the proposed works by a distance of over 12km.  <b>No pathway for effect exists and the site is not within the Likely Zone of Impact. It can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on this European site. Accordingly, a Stage Two Appropriate Assessment is not required.</b>
<b>Owenduff/Nephin Complex SAC (000534)</b> <b>14.5km south west</b>	Oligotrophic waters containing very few minerals of sandy plains (3110)  Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> (3130)  Natural dystrophic lakes and ponds (3160)  Watercourses of plain to montane levels with the <i>Ranunculon fluitantis</i> and <i>Callitricho</i> – <i>Batrachion</i>	Detailed conservation objectives for this site (Version 1, July 2017) were reviewed as part of the assessment and are available at <a href="http://www.npws.ie">www.npws.ie</a>	This European Site is primarily located in a separate surface water catchment. The small section that is within the Moy catchment is upstream and up gradient of the proposed flood relief scheme. There was no identifiable pathway by which the proposed flood relief scheme has the potential to result in effects on the SAC. The qualifying interests are associated with peatlands and wetlands that have no potential to be affected by the proposed works.  <b>No pathway for effect exists and the site is not within the Likely Zone of Impact. It can be</b>

	vegetation (3260) Northern Atlantic wet heaths with <i>Erica tetralix</i> (4010) Alpine and Boreal heaths (4060) <i>Juniperus communis</i> formations on heaths or calcareous grasslands (5130) Blanket bogs (* if active) (7130) <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355] <i>Drepanocladus vernicosus</i> (Slender Green Feather-moss) [1393] <i>Saxifraga hirculus</i> (Marsh Saxifrage) [1528]		<p>excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on this European site. Accordingly, a Stage Two Appropriate Assessment is not required.</p>
<b>Bellacorick Iron Flush SAC (000466)</b>  <b>14.5km north west</b>	<i>Saxifraga hirculus</i> (Marsh Saxifrage) [1528]	Detailed conservation objectives for this site (Version 1, Nov 2019) were reviewed as part of the assessment and are available at <a href="http://www.npws.ie">www.npws.ie</a>	<p>This European Site is in an entirely separate surface water catchment from the proposed flood relief scheme and is separated from the proposed works by a distance of over 14km.</p> <p><b>No pathway for significant effect exists and the site is not within the Likely Zone of Impact. It can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on this European site. Accordingly, a Stage Two Appropriate Assessment is not required.</b></p>

SPA	Special Conservation Interests		
<b>Lough Conn and Lough Cullin SPA (004228)</b>  <b>0.3km east of works area, washlands partially within SPA</b>	<i>Aythya fuligula</i> (Tufted Duck) [A061]  <i>Melanitta nigra</i> (Common Scoter) [A065]  <i>Larus canus</i> (Common Gull) [A182]  <i>Anser albifrons flavirostris</i> (Greenland White-fronted Goose) [A395]  Wetland and Waterbirds (A999)	<p>The generic conservation objectives of this designated site as per the Conservation Objectives Document (NPWS Generic version 5.0, 2016) are:</p> <p>1) To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA</p> <p>2) To maintain or restore the favourable conservation condition of the wetland habitat at Lough Conn and Lough Cullin SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.</p>	<p>The proposed flood relief scheme has potential to result in direct effects on the SPA. Whilst no physical works are being carried out within the SPA, the washlands are located partially within it and could potentially be directly affected through physical disturbance and habitat deterioration.</p> <p>There is also potential for indirect effects such as water pollution to result in significant effects on the Lough Conn &amp; Lough Cullin SPA.</p> <p><b>It cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on this European site. Accordingly, a Stage Two Appropriate Assessment is required</b></p>
<b>Killala Bay/Moy Estuary SPA (004036)</b>  <b>12.0km northeast</b>	<i>Charadrius hiaticula</i> (Ringed Plover) [A137]  <i>Pluvialis apricaria</i> (Golden Plover) [A140]  <i>Pluvialis squatarola</i> (Grey Plover) [A141]  <i>Calidris alba</i> (Sanderling) [A144]  <i>Calidris alpina alpina</i> (Dunlin)	<p>Detailed conservation objectives for this site (Version 1, May 2013) were reviewed as part of the assessment and are available at <a href="http://www.npws.ie">www.npws.ie</a></p>	<p>Whilst this European Site is located approximately 12km from the proposed works, it is over 40km upstream via surface water. Any water discharging from the proposed works area has to pass through Lough Conn &amp; Lough Cullin for a distance of approximately 19km before entering the River Moy for a distance of over 20km before reaching the SPA. The lake and river would provide settlement and buffering</p>



	[A149] <i>Limosa lapponica</i> (Bar-tailed Godwit) [A157] <i>Numenius arquata</i> (Curlew) [A160] <i>Tringa totanus</i> (Redshank) [A162] Wetland and Waterbirds (A999)		from any potential pollution event and the potential for significant effects can be excluded  <b>No pathway for significant effect exists and the site is not within the Likely Zone of Impact. It can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on this European site. Accordingly, a Stage Two Appropriate Assessment is not required.</b>
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Table 3.1 Determination of European Sites that are located within the Zone of Likely Effect

\*Priority Habitat

### 3.1 EUROPEAN SITES WITH THE POTENTIAL TO BE SIGNIFICANTLY AFFECTED BY THE PROPOSED DEVELOPMENT

#### 3.1.1 River Moy SAC (002298)

The proposed flood relief scheme will result in direct effects on the River Moy SAC with works proposed within the SAC at the locations of the River Flow Control Structure and the Intake Weir. The ongoing maintenance of the River Deel between the Jack Garrett Bridge and just upstream of the Intake weir will be included in the OPW River Moy Maintenance Area as part of the flood relief scheme. This area is within the River Moy SAC. There is potential for habitat loss and disturbance to the aquatic habitats and species associated with the proposed works in this area.

Much of the proposed development is located outside the SAC but there is potential for indirect effects in various forms such as hydrological and hydromorphological changes to the functioning of the river, water pollution or disturbance to result in significant effects on the River Moy SAC.

The following Qualifying Interests have the potential to be affected by the proposed works both directly through habitat loss and disturbance and indirectly through water pollution causing habitat deterioration and through potential changes to the hydromorphology of the river.

- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (91E0)\*
- *Austropotamobius pallipes* (White-clawed Crayfish) [1092]
- *Petromyzon marinus* (Sea Lamprey) [1095]
- *Lampetra planeri* (Brook Lamprey) [1096]
- *Salmo salar* (Atlantic Salmon) [1106]
- *Lutra lutra* (otter) [1355]

#### 3.1.2 Lough Conn & Lough Cullin SPA (004028)

The proposed flood relief scheme has potential to result in direct effects on the SPA. Whilst no physical works are being carried out within the SPA, the washlands are located partially within it and could potentially be directly affected through physical disturbance and habitat deterioration.

There is also potential for indirect effects such as water pollution to result in significant effects on the Lough Conn & Lough Cullin SPA.

The following SCI species have the potential to be affected:

- *Aythya fuligula* (Tufted Duck) [A061]
- *Melanitta nigra* (Common Scoter) [A065]
- *Larus canus* (Common Gull) [A182]
- *Anser albifrons flavirostris* (Greenland White-fronted Goose) [A395]
- Wetland and Waterbirds (A999)

### 3.2 LIKELY CUMULATIVE IMPACT OF THE PROPOSED DEVELOPMENT ON EUROPEAN SITES, IN-COMBINATION WITH OTHER PLANS AND PROJECTS

In circumstances where it can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a number of European sites identified above, there is no possibility of likely cumulative impacts on those particular European sites arising as between the proposed development and other plans and project.

Where potential pathways for effects have been identified in Table 3.1, then the potential for cumulative effects resulting from the proposed development when considered in combination with other plans and projects, cannot be discounted at the screening stage and the potential cumulative impacts arising as between the proposed development and other plans and projects are required to be considered as part of a Stage Two Appropriate Assessment.

#### **4 ARTICLE 6(3) APPROPRIATE ASSESSMENT SCREENING STATEMENT AND CONCLUSIONS**

The findings of this Screening Assessment are presented following the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2001) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010).

##### **4.1 DATA COLLECTED TO CARRY OUT ASSESSMENT**

In preparation of the assessment, the following sources were used to gather information:

- Review of NPWS Site Synopses, mapping and Conservation Objectives for the various European Sites within the Likely Zone of Impact.
- Review of 2013 EU Habitats Directive (Article 17) Report.
- Review of OS maps and aerial photographs of the site of the proposed development.
- Review of relevant databases including National Biodiversity Ireland Database,
- Review of other plans and projects within the area.
- Liaison with the project team in relation to the design of the development.
- Extensive site visits conducted between 2012 & 2020

## 4.2 OVERALL CONCLUSIONS

It cannot be excluded beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information and in light of the conservation objectives of the relevant European sites, that the proposed development, individually or in combination with other plans and projects, would be likely to have a significant effect on the following European Sites:

- River Moy SAC (2298)
- Lough Conn & Lough Cullin SPA (004228)

As a result, an Appropriate Assessment of the proposed development is required and a Natura Impact Statement has been prepared in respect of the proposed development.