




Peer Review of Natura Impact Statement Report for River Deel Flood Relief Scheme, Crossmolina Co. Mayo.

Department of Public Expenditure and Reform

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1. Legislative Context

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of SACs and the Birds Directive (2009/147/EC) seeks to protect birds of special importance by the designation of SPAs. It is the responsibility of each Member State to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected sites throughout the European Community.

An Appropriate Assessment is required under Article 6 of the Habitats Directive where a project or plan may give rise to significant effects upon a Natura 2000 or European site, paragraphs 3 states that:

“6(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site, in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

These obligations in relation to Appropriate Assessment have been implemented in Ireland under Part XAB of the Planning and Development Act 2000, as amended (“the 2000 Act”), and in particular Section 177U and Section 177V thereof. The relevant provisions of Section 177U in relation to AA screening have been set out below:

“177U.— (1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

(2)...

(3)...

(4) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is required if it cannot be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

(5) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is not required if it can be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.”

1.1 Stages of AA

The Appropriate Assessment Screening Report (the “**Screening Report**”) considers whether the Development is likely to have a significant effect on a European site and whether a Stage 2 Appropriate Assessment is required.

The AA process is a four-stage process, with issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

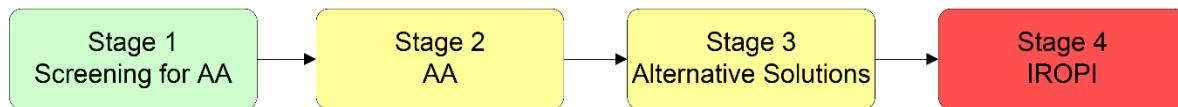


FIGURE 1. THE FOUR STAGES OF THE APPROPRIATE ASSESSMENT PROCESS (DEHLG, 2010).

The four stages of an AA, can be summarised as follows:

- Stage 1 *Screening* addresses:
 - whether a plan or project is directly connected to or necessary for the management of the site, or
 - whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site in view of its conservation objectives.
- Stage 2: *Natura Impact Statement (NIS)*. The second stage of the AA process assesses the impact of the project or plan (either alone or in combination with other projects or plans) on the integrity of the European site, with respect to the conservation objectives of the site and its ecological structure and function. A Natura Impact Statement containing a professional scientific examination of the project or plan is required and includes any mitigation measures to avoid and reduce significant negative impacts.
- Stage 3: *Assessment of alternative solutions*. If the outcome of Stage 2 is negative i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.
- Stage 4: *Assessment where no alternative solutions exist and where adverse impacts remain*. The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a European site, where no less damaging solution exists.

The need to apply the precautionary principle in making any key decisions in relation to the tests of AA has been confirmed by European Court of Justice case law. Therefore, where significant effects are likely, uncertain, or unknown at screening stage, AA will be required.

If it is determined during screening stage that the proposal has the potential to have a significant effect on a European site, then a NIS will be required.

2.Screening

Section 4 of the NIS states *The Article 6(3) report cannot exclude the potential for the proposed flood relief scheme to have a significant effect on two European Sites:*

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

This section of the NIS examines the potential for adverse effects on the above listed European Sites, taking into account all relevant data, mitigation, best practice, construction methodologies that are in place to minimise or prevent such effects. Potential adverse effects are

assessed in view of best scientific knowledge, on the basis of objective information in relation to the proposed development including the proposed avoidance, reduction and preventive measures. Each European Site is considered separately.

The relevant sections of the Site-Specific Conservation Objective documents and Site Synopses are provided in Appendix V.

We concur with the conclusions of the AA Screening report.

At this point in the NIS it should describe any other European sites that were considered in the Screening Report and why they were ruled out.

It should also be stated both here and in the AA Screening report why any European site outside the 15km zone was ruled out.

3 Anticipated Construction Methods.

It is noted that (p6) *“Rock armour/ stone gabions will be placed in order to provide scour protection to the riverbanks upstream and downstream of the intake location.”*

We would recommend the following in order that the impact can be fully assessed:

- The extent of this bank protection should be clearly outlined (e.g. how many metres upstream and downstream)
- The location of this bank protection should be clearly described (e.g. will the gabions be placed in the channel, will the river bank be dug out to allow for the placement of the gabions). This bank protection and all associated mitigation measures should be addressed in more detail.
- Drawings of the proposed intake structure and bank protection should be provided with the SAC and River Deel boundaries overlaid.

It is stated that (p9) *“If in the unlikely event during construction works, it is considered that there is a possibility of flood water passing underneath the flood defence wall foundations, either sheet piles or grouting techniques will be required to provide a cut-off. The sheet piles may be metal or plastic and would be driven to the required depth using a piling hammer or similar.”*

The potential impacts of these measures should be considered in the NIS report, at present they are not.

4 Effects

Fauna

There is no reference to crayfish surveys provided in section 3.3 although it states in Section 3.4 that this species is of **International** importance.

Justification for why the “presence/absence” survey described in Chapter 5 of the EIAR is adequate is required. As works are proposed on the riverbanks, the survey should have ideally involved a search for suitable crayfish refuges. Crayfish are known to burrow in earthen banks and seek shelter in fine tree roots. Construction works on the banks of the River Deel should be considered regarding their impact on crayfish and crayfish habitat, and appropriate mitigation measures should be provided.

Indirect Effects (Alluvial Forests with *Alnus glutinosa* and *Fraxinus excelsior* (91EO)

As part of the mitigation measures for the impact of the potential for run-off of pollutants to Alluvial Woodlands (p 24), it is stated that the “Position of intake structure set back from the riverbank and largely behind an earthen bank”.

The following information should be supplied in order to carry out a full assessment

- What is the nature of the “earthen bank”? Can it get washed away in high flow? Is it vegetated? Will it be disturbed during the construction phase? Are there crayfish burrows in this bank?
- How will water be directed into the intake structure if it is behind an earthen bank?
- A detailed diagram showing the site layout at the intake would be useful

Aquatic Species

Impacts to Qualifying Interests (Qis) should be assessed in light of their conservation objectives. It is noted in the text that “SSCO (Site Specific Conservation Objectives) document was consulted and the individual conservation objectives for each species were considered in light of the specific targets and attributes”. However, no details of this assessment, other than reference to mapping records for the species, are provided.

Under 4.1.4 Aquatic species the NIS states (in Section 4.1.4.1 Direct Effects)

“There will be no instream works associated with the proposed works. The only physical works within the SAC will be located on the banks of the River Deel at the intake point. The works will be set back from the River Channel. There will be no direct effects on habitat for any of these species within the SAC during either construction or operation of the proposed flood relief scheme”.

This requires clarification as it is at variance with Chapter 7 of the EIAR and if this is not correct is of major significance for the conclusions of the NIS

It is noted under section 4.1.4.1 *Direct Effects (P26)* that the works will be set back from the river channel. This is somewhat vague, and the authors should state precisely how far from the river channel the works will be undertaken in order to demonstrate that there will be no impact on aquatic species.

It is stated in Section 4.1.4.2 that *“The potential for the proposed development to result in indirect effects on the aquatic environment during construction exists in the form of run off of pollutants both to the River Deel and also to the Mullenmore Stream in the washlands. The measures that are in place to prevent and mitigate any such effects are described in full in Section Two and summarised above in relation to Alluvial Woodlands”.*

This is not the case as the potential impact of machinery operating on the riverbank is not addressed. Machinery operating on the riverbank could lead to siltation and/or bank destabilisation of the River Deel, which could have significant negative effects on the aquatic fauna therein.

Therefore, the following should be provided in order that the potential impact can be properly assessed:

- Further details on the types of machinery operating on the riverbank.

- Further details on how far from the river the machinery will be operating.
- Mitigation measures for the above should be provided (e.g. silt fences along the entire works area)
- Reference should be made to any Best Practice or Guidance documents such as those available from IFI.
- Full details on the nature, placement and maintenance of silt fences should be provided.
- Reference should be made to biosecurity measures, e.g. to prevent spread of crayfish plague. This should still be considered even if no instream works are proposed.

On Pages 26, 28, 30, 32, 33, the following statement is made *“Given that the proposed flood relief scheme will not, following the implementation of the relevant best practice and mitigation, result in any adverse effects on when considered by itself, it cannot contribute to any cumulative or in-combination effects when considered in combination with any other plans or projects.”*

While the statement may be correct, it is inappropriate at this point in the report. Taken in isolation the proposed flood relief scheme may not result in “adverse effects”. However, cumulative effects can arise from the accumulation of different effects that are *individually minor*.

Therefore, all of these effects and the potential cumulative effects from other plans and projects should be assessed under heading 4.3 Cumulative Effects.

5. Conclusion

The concluding statement is not robust enough in light of recent Case Law – *“It can be excluded, on the basis of objective scientific information, that the project, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site”*.

We would recommend the following:

This Natura Impact Statement details the findings of the Stage 2 Appropriate Assessment conducted to further examine the potential direct and indirect impacts of the Proposed River Deel Flood Relief Scheme on the following Natura 2000 sites:

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

The above sites were identified by a screening exercise that assessed likely significant effects of a range of effects that may arise from the Proposed Development. The Appropriate Assessment investigated the potential direct and indirect impacts of the Proposed Works, both during Construction and Operation on the integrity and qualifying interests of the above Natura 2000 sites alone and in combination with other plans and projects, taking into account the site's structure, function and conservation objectives.

Where potentially significant impacts were identified, a range of mitigation and avoidance measures have been suggested to help offset them. As a result of this Appropriate Assessment it has been concluded that, ensuring the avoidance and mitigation measures are implemented as proposed, the Proposed Development will not have a significant adverse impact on the above Natura 2000 sites.

As a result of the complete, precise and definitive findings in of this NIS, it has been concluded, beyond reasonable scientific doubt, that the Proposed Development will have no adverse effects on the qualifying interests, special conservation interests and on the integrity and extent of River Moy SAC (2298), and Lough Conn and Lough Cullin SPA (004228) Accordingly, the Proposed Development will not adversely affect the integrity of any relevant European site.

6. Recommendations

1. State why any European site outside the 15km zone was ruled out. (Section 1.1)
2. Full details should be provided on the measures to be employed to protect the bank during works. (section 2.2.1)
3. Assess the impacts of sheet piling or grouting techniques to be employed in the event of flood water passing underneath the flood defence wall foundations (Section 2.2.3 Page 9)
4. Provide justification for why the Crayfish survey outlined in Chapter 5 of the EIAR is adequate given that this is a species of International Importance. (Section 3.3)
5. Provide detail on the earthen bank (Section 4.1.5.1 p29) in order that the potential direct impacts can be fully assessed.
6. Provide full details of the assessment of all QI species in view of their Conservation Objectives.
7. Resolve the discrepancy between the NIS and Chapter 7 of the EIAR regarding instream works. If there are proposed instream works then the impacts of these will need to be fully assessed.
8. Address the potential for impact from machinery operating on the riverbank in Section 4.1.4.2
9. Address all cumulative effects of the proposed development with other plans and projects in Section 4.3
10. Amend the conclusion to ensure that it complies with the requirements as set out in case law.
11. Ensure that Mitigation measures inform the Construction Environmental Method Statement, not the reverse. There are measure in the CEMS which are not in the NIS (e.g. pre-construction Otter surveys)
12. Correct minor typographical errors as set out below:
 - Page 9. Should “silt barrages” be “silt barriers”?
 - Page 11: Replace “*Fontanilis* sp.” with “*Fontinalis* sp.”
 - Page 23. Reference to Alkaline Fens habitat under section 4.1.2 *Old sessile oak woods with Ilex and Blechnum in the British Isles (91A0)* likely to be a typo.
 - Page 31, 4.1.6.5 delete *Anser albifrons flavirostris*
 - Table captions should be above the table, not below