

# Inspector's Report 26.JP0043

**Development** Bridge Rehabilitation works along the

N11 at Glebe Bridge.

**Location** Glebe Bridge, Edermine and Cooraun,

Co Wexford.

Planning Authority Wexford County Council (L.A) &

Kildare County Council (Applicant).

Planning Authority Reg. Ref. N/A

Applicant Kildare County Council (Applicant).

**Type of Application** Application under the provisions of

S.177AE.

Planning Authority Decision N/A

**Observers** (i) Inland Fisheries Ireland,

(ii) Department of Arts, Heritage, Regional, Rural and Gaeltacht

Affairs.

**Date of Site Inspection** 19<sup>th</sup> of April 2017.

**Inspector** Karen Hamilton.

#### 1.0 Introduction

1.1. Kildare County Council have applied to An Bord Pleanála, on behalf of Wexford County Council, under the provisions of Section 177AE of the Planning and Development Act, 2000 (as amended), for Local Authority development requiring Appropriate Assessment, for rehabilitation works at Glebe Bridge, N11 and associated riverbed works. A Natura Impact Statement was submitted along with other documentation in support of the application. Two submissions in respect of the application were received from Inland Fisheries Ireland (IFI) and National Parks and Wildlife Services (NPWS).

# 2.0 **Site Location and Description**

- 2.1. The subject site is located along the N11 radiating south from Enniscorthy. The site includes area around the base of Glebe Bridge which is a single-span masonry arch bridge carrying the N11 national road across Edermine Stream which enters into the River Slaney c. 400m downstream. The bridge structure is in poor condition with significant circumference cracks in the arch barrel and erosion along the embankments close to the structure.
- 2.2. The area around the bridge is characterised by mature trees and hedging and the adjoining lands are currently used as farmland. Access to the site from the road along the north is via a small plantation which has been subject to extensive dumping in previous years. The lands to the east of the bridge are arable farmlands.

# 3.0 **Proposed Development**

- 3.1. The proposed development maybe summarised as follows:
  - a) Rehabilitation works to Glebe Bridge including:
    - Crack injection of resin,
    - Stitching/ grouting/ repair of circumferential cracks,
    - Masonry repointing, repair, grouting following vegetation removal,
  - b) Works along embankment and within the river bed include:

- Removal of all vegetation within the site including some mature trees to the west embankment over the masonry arch of the bridge,
- New concrete invert slab, 1- 2m downstream of the bridge, to prevent erosion,
- Embankment protection system 11 m southeast off the end of the bridge as the river turns through 30 degrees and 1m of the northeast embankment.
- Erection of a timber post and rail fence around the inlet head wall.

# 4.0 Application submitted

- 4.1. The application for approval was lodged directly to the Board on the 01<sup>st</sup> of March 2017 and was accompanied by the following information:
  - A report including details of the project description, a Screening for Appropriate
    Assessment, a Natura Impact Statement, an Ecological Impact Assessment, and
    Invasive Alien Species Risk Assessment and an Invasive Species Management
    Plan.
  - Section 85 agreement between Kildare County Council and Wexford County Council.
  - Contract drawings of the scheme in A4 format.
  - Copies of the public notices.
  - A list of prescribed bodies to whom notice of the application have been forwarded. These bodies include the following:
    - An Chomhairle Ealaion,
    - Fáilte Ireland
    - An Taisce
    - Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs
    - The Heritage Council
    - Southern Regional Assembly

- Inland Fisheries Ireland
- Environmental Protection Agency
- Health Service Executive
- Minister for Communications, Climate Action and Environment
- Minister for Agriculture, food and the Marine
- Irish Water.

#### 5.0 Observations Received

In addition to the two submissions detailed below, acknowledgements of receipt where received from both Waterways Ireland and Transport Infrastructure Ireland.

# 5.1. Inland Fisheries Ireland (IFI)

IFI welcome the proposed works downstream from Glebe Bridge to repair the masonry/cobbled scour protection and address bank erosion including the construction of a "rocky ramp" fish- ramp.

The Edermine Stream system forms part of the Slaney River system with several species listed in Annex II of the Habitats Directive, including Salmon, River Lamprey, Brook Lamprey, Sea Lamprey and Otter.

It is requested that works are undertaken to incorporate best practice into construction methods and minimise discharges to silt, suspended solids in waters. The following points are raised:

- a) Works should adhere to IFI document "Guidelines on the protection of fisheries during construction works and in adjacent waters".
- b) Consultation and agreements with IFI for in stream works.
- c) When pressure grouting of the cracks is undertaken no excess grout should enter waters and grout should not discharge directly to surface waters.
   Concrete should be only poured in dry weather.
- d) Cherry Laurel is an invasive species and present on the site and impairs salmonid productivity, steps should be taken to eradicate from the site.
- e) The closed season for in-stream works (October- June) must be observed.

- f) Best practice methods include no discharge of suspended solids or deleterious matter into the watercourse with systems to deal with prolonged rainfall
- g) Fuels, liquids etc. to be stored in bunded compounds and refuelling of machinery in bunded areas.

# 5.2. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DAHRRGA)

This submission has been received from the National Park and Wildlife (NPWS) in relation to nature conservation and may be summarised as follows:

- It is noted that IFI have been consulted with regard the potential impacts on Salmon and Lamprey species.
- Instream works: The Board should have regard as to the impact of changes
  on the habitat and species from hydrological issues based on the inclusion of
  the hard structures. The final design for the rock ramp system/ fish pass
  should be fully assessed by the Board and further information may be
  required.
- Survey Work and Bats: Bats are protected under Annex IV of the Habitats Directive and Bat roosts can only be destroyed under licence. The Bat survey should be undertaken by a suitably qualified person and it is noted that the submitted ecological survey recommends further survey to assess the presence of bats in the bridge. Reference to departmental guidance for the protection of bats is submitted.
- <u>Birds and Wexford Slobs:</u> The impact on the birds listed as QI have been screened out based on the proximity to the site. The source of the closest proximity distance should be clarified by the Board.
- <u>Alien Invasive Species</u>: An Bord Pleanála should satisfy itself that the species management plan is adequate to control the spread of invasive species in particular the treatment of bare soil following removal of Himalayan Balsam.
- Construction Management Plan (CMP): The CMP should include complete
  project details with adequate mitigation supported by scientific information for
  an appropriate assessment to be undertaken. The location of settlement

- ponds, disposal sites and construction compounds. The CMP should also include methods to ensure invasive alien species are not introduced.
- Bridges and Flora: Masonry bridges are a valuable habitat for a myriad of vascular, bryophyte and lichen species and although they have no statutory protection they support Irelands biodiversity. Consideration to the removal should be given and only lime mortar used for repointing, regrouting.

## 6.0 **Legislative and Planning Context**

#### 6.1. **National**

- 6.1.1. The EU Habitats Directive (92/43/EEC)
  - This Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the EU. Article 6(3) and 6(4) require and appropriate assessment of the likely significant effects of a proposed development on its own and in combination with other plans and projects which may have an effect on a European Site (SAC or SPA).
- 6.1.2. European Communities (Birds and Natural Habitats) Regulations, 2011
  - These regulations consolidate the EU (Natural Habitats) Regulations 1997 to 2005 and the EU (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures in CJEU judgements.
- 6.1.3. Appropriate Assessment Plans and Projects in Ireland Guidance for Planning Authorities, 2010.
  - Guidance provided for the competent authority for the assessment of any submitted plan or project.
  - The impact of any project or plan alone or in combination with other project on the integrity of the Natura 2000 site is considered with respect to the conservation objectives of the site and the structure and function.
- 6.1.4. Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes (National Roads Authority).
  - Chapter 5: Examination of buildings and other built structures.

 Bridges are potential roost sites and should be examined properly for evidence of the presence of bats.

Appendix 3: Appropriate Survey Timetable for bats affects by roads schemes

 Bridge: 4 survey rounds per season required to confirm species presence and activity.

Potential species in bridges: Brown Long-eared, Daubenton's, Natter's, Whiskered, Brandt's, Lesser horseshoe's.

6.1.5. Guidelines on Protection of Fisheries During Construction works in and adjacent to Waters (Inland Fisheries Ireland, 2016)

#### Chp 3: Issues of concern

- Pollution of waters: silts and solids, cementitious residues, oils and greases, wood preservative.
- Introduction of invasive species: plants, algae, fish and shellfish.
- Interference with upstream and downstream movements of aquatic life: improperly designed crossing structures, insufficient water depth and physical alteration of stream channels (characteristics and stream profile).

#### Chp 4: Timing of instream works

 Works should normally be carried out during the period July- Sept to minimise impact on salmon and trout spawning.

Chp 6: River and stream permanent crossing structures

- Large boulders strategically placed are required for bank protection works, each course of boulders laid should be layers with topsoil to facilitate vegetation and irregular boulders used.
- Gabions are not a preferred option for bank protection as they are unsightly and once the wire is broken the baskets collapse, rock armour is preferred.

#### Chp 7: Construction Impacts

- Uncured concrete can kill fish etc. pre-cast concrete should be used.
- Silt can clog spawning beds and damage juvenile fish facility. species.

- Discharge of fuels and oils can be toxic to aquatic life.
- Best Practice measures should be used in construction.

Chp 10: Repairs to existing bridges, culverts and scour slabs.

- During grouting of the bridge trained staff should monitor for grout losses and use a portable ph monitoring.
- A secure flume arrangement or piping may be used so grouting is undertaken in the dry. Screening shall also be used.
- A sealed and secure decking should be used during repointing and masonry works.
- Perching should not occur where new concrete slabs are poured. Extensive guidance is provided for the recommended depth etc. for scour slabs.

#### 6.2. Wexford County Development Plan 2013-2019

The site is located within a rural area south of Enniscorthy and is not located in an area with a specific zoning objective. The following policies relate to protection of the European sites from the impact of plans and projects.

#### **Objective TO3 (Transport)**

"To ensure that all proposed plans or projects relating to transportation (including walking, cycling, rail, bus, airports, ports and roads) and any associated improvements works, individually or in combination with other plans or projects, are subject to Appropriate Assessment Screening to ensure there are no likely significant effects on the integrity (defined by the structure and function) of an Natura 2000 site (s) and the requirements of Articles 6 (3) and 6(4) of the EU Habitats Directive are fully satisfied. Where the plan or project is likely to have a significant effect on a Natura 2000 site it shall be subject to Appropriate Assessment. The plan or project will proceed only after it has been ascertained that it will not adversely affect the integrity of the site or where in the absence of alternative solutions, the project is deemed imperative for reasons of overriding public interest, all in accordance with the provisions of Articles 6 (3) and 6 (4) of the EU Habitats Directive.

#### **Objective NH03 (Natural Heritage)**

"To ensure that any plan or project and any associated works, individually or in combination with other plans or projects, are subject to Appropriate Assessment Screening to ensure there are no likely significant effects on the integrity (defined by the structure and function) of a Natura 200 site (s) and the requirements of Articles 6 (3) and 6(4) of the EU Habitats Directive are fully satisfied. Where the plan or project is likely to have a significant effect on a Natura 2000 site it shall be subject to Appropriate Assessment. The plan/project will proceed only after it has been ascertained that it will not adversely affect the integrity of the site or where in the absence of alternative solutions, the project is deemed imperative for reasons of overriding public interest, all in accordance with the provisions of Articles 6 (3) and 6 (4) of the EU Habitats Directive

### 6.3. Natural Heritage Designations

The site is located 125m from the Slaney River Valley SAC and 450m from the Wexford Harbour and Slobs SPA and the Species of Conservation Interest (SPI) and habitats of Qualifying Interests (QI) for each are detailed below.

#### 7.0 Further Information

A further information request was issued to Kildare County Council on the 03<sup>rd</sup> of May 2017 in relation to the information below. The County Council responded to this request on the 19<sup>th</sup> of May 2017. The information submitted was not deemed as significant and therefore was not recirculated, and the main points are listed below:

#### Design

- 1. Clarify the need for concrete slabs instream.
- 2. Provide full construction details and environmental assessments of the different schemes proposed or alternatively the final and actual proposal.

#### **CMP**

3. The Construction Management Plan and accompanying plans do not adequately address access to the site for construction, site clearance and the location of

proposed bunding area. Plans shall be provided including such areas and the NIS and associated documents are amended to address these issues. Furthermore, details of how and where any materials removed from site will be disposed of shall be provided e.g. to appropriate landfill etc.

#### Timing of Works

4. The NIS refers to a restriction on works before the 01<sup>st</sup> of July and after 30<sup>th</sup> of September as a mitigation against potential impacts for migrating Salmon and Lamprey. The submission from the NPWS have raised the issue of timing of works, particularly in relation to nesting birds and restrictions from the Wildlife Act, which restrict the removal of hedgerow from 01<sup>st</sup> of March to the 31<sup>st</sup> of August. A schedule of works shall be submitted during which construction is included to take place, having regard to any environmental and ecological timing constraints.

#### <u>Bats</u>

5. Section 3.3 of the Ecological Impact Assessment refers to the recorded location of bat species in the vicinity of the site and recommends further survey work in the form of an emergence survey to confirm the presence or absence of Daubenton's Bat and other bat species at the site. Reference to Section 5.2 of the "Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes" (NRA) recommends thorough examination for the evidence of bats. Please provide evidence of such further survey work carried out by suitably qualified and experienced person.

#### **Invasive Species**

6. It is requested that the measures proposed in the Invasive Species Management Plan and corresponding CMP and NIS is expanded. This should include full eradication methods for Cherry Laurel on the site, additional soil treatment following the pulling of Himalayan Balsam and maps detailing the site works in relation to the proposed 7m buffer and the location of the Japanese Knotweed and measures to deal with the invasive species.

#### Birds

7. It is requested that a full assessment of the impact of the proposed development on the qualifying interests of the Wexford Harbour and Slobs SPA is submitted

and shall include results of surveys carried out and any mitigation measures recommended.

# 8.0 Planning Assessment

#### 8.1. Introduction

Section 177AE of the Act requires that where an appropriate assessment is required in respect of a development which is being carried out by or on behalf of a local authority that is the planning authority, the local authority shall prepare an NIS and shall apply to the Board for approval and the provisions of Part XAB shall apply.

The Board in making a decision in respect of the proposed development shall (inter alia) consider:

- The likely effects on the environment of the proposed development,
- The likely consequences for the proper planning and sustainable development in the area, and
- The likely significant effects of the proposed development upon a European Site.

The proposed development includes sub-structure end supports, spandrel wall stabilisation works, masonry repair and concrete crack injection to an existing bridge, vegetation clearance, earthworks and embankment protection around the bridge and instream works including boulder bars for a bed check weir system for c. 6m downstream. Extensive bank erosion and structural damage was evident upon site inspection on the 19th of April 2017 and 2 no submissions were received from both National Parks and Wildlife Services (NPWS) and Inland Fisheries Ireland (IFI) on the plans and particulars. In addition to the initial submitted information, cognisance is given to the additional information submitted following a request by An Bord Pleanála.

#### 8.2. The likely effects on the environment

The most likely impact of the proposed development on the environment arises from the impact of the construction works on the water quality and flora and fauna. This is discussed in some detail in relation to the impact on the Natura 2000 site in the appropriate assessment below, however the wider ecological impact and those species not listed as Qualifying Interest of the European Sites are addressed below in addition to other relevant areas as follows:

- Flora and Fauna
- Bats
- Traffic and Access
- Noise and Vibration.

#### 8.2.1. Flora and Fauna

The impact on individual species present on the site is detailed in the EcIA and I note there are no protected flora on the site.

<u>Flora:</u> The proposed development requires the removal of a number of mature trees (c.20m<sup>2</sup>), there is an abundance of trees in the vicinity. A submission from the NPWS raised concern over the possible removal of saxicolous vascular, bryophyte and lichen species from the bridge due to the proposed works and recommended the use of only lime mortar for regrouting. I have assessed the masonry arch and do not consider there is a significant amount of growth which would require removal.

Fauna: The submitted EcIA refers to the possible impact of proposed development on territory occupied by the Eurasian Otter *Lutra Lutra*, the presence of physical habitat for the White clawed Crayfish *Austropotamobius pallipes* and the likely presence of bat species. The impact of the proposed development on bats is addressed separately below. In relation to the otter territory, the ecological report disregards the site as a possible holt because of the proximity to a busy road which I consider reasonable. The EcIA reports the nature of the overhanging trees and heterogeneity of the substrate on the site provides an ideal habitat for the crayfish and depending on the type of substrate reinstated underneath the masonry arch of the bridge and the rock armour reinforcement of the embankments there would be no significant impact on the crayfish population. I note the proposed fill between the boulder bars instream includes imported class fill material grade to match the existing river bed. Therefore, based on the location of the site, use of a rocky substrate for fill, to match the existing river bed, and rock armour along the

embankment, I do not consider the proposed development would have significant negative impact on the fauna.

#### 8.2.2. **Bats**

Bats are protected under Annex IV of the Habitats Directive and bat roosts can only be destroyed under licence under the Wildlife Act of 1976-2012 and a derogation licence under the Birds and Natural Habitats Regulations. The CMP refers to the presence of bat habitat on the site. It does not include further details on the type of roost e.g. maternity, hibernation, malting, feeding, transitional satellite which could assist any method statement required for mitigation measures <sup>1</sup>. General mitigation measures for the protection of bats are included in the CMP i.e. a bat survey four weeks before works, relocation prior to demolition and only removing bats and supporting vegetation under licence from NPWS.

The NPWS submission referenced the information on Bats in the Ecological Impact Assessment in particular the survey method and following a further information request in relation to confirmation on the survey methods for the presence of species by a suitably qualified person, the Local Authority responded with full details of the survey works. The survey concluded the presence of bats on site, as per the Construction Management Plan (CMP), and identified the regrouting of cracks in the masonry arch as long-term significant impact on bats. The CMP includes specific mitigation measures for Glebe Bridge to prevent interference to an existing bat roost where the location of the crack will be clearly marked, all personal alerted, the crack shall not be grouted or repointed and no work shall be undertaken in the vicinity of the roost prior to agreement with the Employer's Representative. Clause No. 1770.2AR of the CMP refers to the use of vacuum blasting as a preparation method for regrouting the cracks. The EcIA also recommends further survey work in the form of an emergence survey to confirm the presence or absence of Daubenton's Bat at the site. I consider it reasonable that in the presence of licenced ecologist and additional emergence survey, the mitigation measures included would prevent a significant negative impact on the bat roost.

#### 8.2.3. Traffic and Access

<sup>&</sup>lt;sup>1</sup> **Kelleher,C. & Marnell, F.** (2006) Bat Mitigation Guidelines for Ireland. Irish Wildlife Manual, No 25. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.

The site is located below the N11 and can be accessed on foot via a steep bank, through third party farmland or across lands from an adjoining local road. In terms of traffic generation, the proposed development will not result in any appreciative increase in traffic volumes. While traffic volumes may increase during the construction period this increase will be temporary in nature. Additional information was requested in relation to the proposed site access and a response from the local authority indicated that it was "prudent not to specify or place restrictions on construction access routes within the permitted site extents shown on Contact Drawing no. 100-ST05-005....." Reasoning for the non-inclusion of the site access reverted to the need for the appointed contractor to assess the use of plant and machinery in the first instance and also to mark out the presence of any Japanese Knotweed so the construction machinery could avoid. I consider the absence of the site access within the proposed development unacceptable as The Board is required to assess the full impact of traffic, habitat removal and consider the issue of avoidance of invasive species within the site an unsatisfactory action plan, I have further discussed this issue in relation to the European Sites below.

#### 8.2.4. **Noise and Vibration**

The closest dwelling is located 100m from the bridge. During the construction phase it is likely that the bridge rehabilitation will give rise to increased noise generation. The information on file estimates that the work will take between four and five months which is short-term and acceptable. Appendix 1/9 of the CMP refers to the operation on site during normal working hours Monday to Saturday with no works on Saturday and public holidays where noise levels will comply with recommendations in BS 5528 Code of practice for noise (British Standard for piling operations), normal levels during the day 70 LAeq dB(A). I consider this level exceeds the normal the permitted noise levels and based on the absence of a definitive site access the site area could be closer than 100m from the existing dwelling. Therefore, based on the lack of detail submitted in relation to the site access proposed development could potentially have a more significant impact on residential amenity of adjoining properties than suggested in the application documents.

#### 8.2.5. Conclusions on the likely effects on the environment.

On the basis on the rural setting and the size and scale of the works, compliance with the IFI guidance and the use of mitigation measures, I do not consider the proposed development would have a significant impact on the general flora and fauna of the vicinity. In terms of negative impacts, I consider that in the absence of the final details of the proposed development it is not possible to carry out a complete assessment of the proposed development or fully consider the adequacy of mitigation measures particularly in relation to the impact of the construction traffic and noise related activities on any adjoining dwelling.

# 8.3. The Likely Consequences for the proper planning and sustainable development of the area.

The proposal is to upgrade a bridge which runs under the N11 that crosses over the Edermine River. The proposed development provides structural support for the masonry arch of the Glebe bridge and the embankment and instream works associated with the rehabilitation prevent additional erosion at the base of the bridge and direct the stream downstream.

Objective TO3 of the Wexford County Development Plan 2013-2019 provides support for plans and projects relating to transport projects and any associated improvement works subject to Appropriate Assessment screening and Appropriate Assessment should the project be likely to have a significant effect on a Natura 2000 site. In addition to this specific policy for transport, Objective NH03 includes a requirement for compliance with the EU Habitats Directives for all plans and projects.

8.3.1. Conclusions on the Likely Consequences for the Proper Planning and Sustainable Development of the Area.

I consider the likely consequences for the proper planning and sustainable development in the area will be on the whole positive in terms of support for infrastructure and would accord with the development plan. The effects on the likely impact on the European Sites are discussed below.

#### 8.4. The likely significant effects upon a European Site

Glebe Bridge is located under the N11 and over Edermine Stream, a tributary which feeds into the Slaney River. The Slaney River forms part of the Slaney River Valley SAC and Wexford Harbour and Slobs SPA, approx. 500m downstream.

#### 8.4.1. Potential impact on any European Sites

Guidance on appropriate assessment as set out European and National Guidance<sup>2</sup> requires the identification of pathways, likely impacts on the conservation objectives of the European sites along with cumulative impacts and the likely significant impact along with mitigation measures. For the purpose of this assessment I have identified other Natura 2000 sites within a 15km radius, in addition to the Slaney River Valley SAC and Wexford Harbour and Slobs SPA.

These sites are as follows:

- Screen Hill SAC, c.12km (site code 000708),
- The Raven SPA, c.15km (site code 004019),

In the case of the Screen Hills SAC and those conservation objectives relating to European Dry Heaths and Oligotrophic water, I am not aware of any source/pathway/receptor route between this sites and the subject site. In relation to The Raven SPA, I am not aware that any of the wetland and waterbirds bird species that constitute their qualifying interests would be significantly affected by the proposal for the subject site. Therefore, I consider that both of these Natura 2000 sites can be screened out.

For the purpose of this assessment the impact of the proposed development on each of the Slaney River Valley SAC and Wexford Harbour and Slobs SPA is addressed separately below, although some of the issues may be interlinked.

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<sup>&</sup>lt;sup>2</sup> Assessment of plan and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43EEC (EC, 2002). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities, (DoEHLG, 2010)

## Slaney River Valley SAC (side code: 00781)<sup>3</sup>

The following five habitats and eight species are selected as the qualifying interest for this SAC. It is a conservation objective to maintain the condition of (1130,1140,1365,3260) and restore the condition of (1095,1096,1099,1103,1106,1355, 91AO, 91EO). The conservation status of the Freshwater Pearl Mussel (1029) is currently under review.

- Estuaries [1130]
- Mudflats and sandflats not covered by seawater at low tide [1140]
- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]
- Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]
- (Priority Habitat) Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]
- Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]
- Petromyzon marinus (Sea Lamprey) [1095]
- Lampetra planeri (Brook Lamprey) [1096]
- Lampetra fluviatilis (River Lamprey) [1099]
- Alosa fallax fallax (Twaite Shad) [1103]
- Salmo salar (Salmon) [1106]
- Lutra lutra (Otter) [1355]
- Phoca vitulina (Harbour Seal) [1365)

# Wexford Harbour and Slobs SPA (side code:4076)<sup>4</sup>

There are 32 species of birds listed as SPI of this SPA and it is internationally important for several species of waterfowl and one of the top three sites for wintering birds and all the species use this SPA for wintering apart from the Hen Harrier (post-breeding/roost) and the Little Tern (breeding). The conservation objective is to maintain the favourable conservation condition of all of these species and the

<sup>&</sup>lt;sup>3</sup> Site Synopsis Slaney River Valley SAC (DAHG)

<sup>&</sup>lt;sup>4</sup> Site Synopsis Wexford Harbour and Slobs SPA (DAHG)

habitats they require. The NIS used the Irish Wetland Bird Survey (I- WeBS) as a method of identification of assessing the potential for any pathways from the proposed development.

**Table 1**: List of species included in the Wexford Harbour and Slobs SPA.

| Little Grebe  | Great         | Cormorant    | Grey    | Bewick's   | Whooper    | Mallard |
|---------------|---------------|--------------|---------|------------|------------|---------|
|               | Crested       |              | Heron   | Swan       | Swan       |         |
|               | Grebe         |              |         |            |            |         |
| Greenland     | Light-bellied | Red-breasted | Black-  | Bar-tailed | Black-     | Lesser  |
| White-fronted | Brent Goose   | Merganser    | tailed  | Godwit     | headed     | Black-  |
| Goose         |               |              | Godwit  |            | Gull       | backed  |
|               |               |              |         |            |            | Gull    |
| Shelduck      | Wigeon        | Teal         | Pintail | Goldeneye  | Hen        | Coot    |
|               |               |              |         |            | Harrier    |         |
| Oystercatcher | Golden        | Grey Plover  | Lapwing | Knot       | Sanderling | Dunlin  |
|               | Plover        |              |         |            |            |         |
| Curlew        | Redshank      | Little Tern  | Scaup   |            |            |         |

#### 8.4.2. NIS Submitted

The NIS is submitted following screening for an Appropriate Assessment which concluded there would only be likely a significant impact on either the Slaney River Valley SAC and the Wexford Harbour and Slobs SPA and no other European Site, which I consider reasonable. The likely significant impact on the individual habitat and species contained in both of these European Sites is summarised below.

Slaney River Valley SAC: Table 4 in the NIS includes assessment of the Potential Likely Significant effects (LSE) of the proposed development on each of the QI for the Slaney River Valley SAC and concludes there is a LSE on the spawning habitat of Sea Lamprey, Brook Lamprey and River Lamprey through the direct physical damage to potential/ suitable spawning beds and instream barriers. Additional LSE on the number and distribution of spawning redds for Atlantic Salmon are also likely. Mitigation measures for short term impacts include electrofishing, timing of works and adherence to standard best practice construction methods. No long-term impacts are predicted.

<u>Wexford Harbour and Slobs SPA</u>: Table 5 of the NIS includes a screening matrix for the likely significant effect of the proposed development on 8 birds (recorded within 3.5km of the site) and concludes that the likely significant impact on any species is trivial and inconsequential.

#### 8.4.3. Observations Submitted in Respect of AA

- a) The IFI submitted observations regarding the impact of the proposed development on the Atlantic Salmon, River Lamprey, Brook Lamprey and Sea Lamprey in particular the impact of the water quality and habitat of those species listed. The discharge of silt, timing of works, poor construction methods and presence of Cherry Laurel can lead to loss or degradation of valuable habitat and have a negative impact on those species listed above.
- b) The NPWS made a submission on the design of the instream works, construction methods, bat survey, nesting birds, invasive alien species and use of the site by birds listed as qualifying interest in the Wexford Slobs SPA. They commented that the Board should ensure there was sufficient information on instream works, bats, invasive species, nesting birds and methods on the construction, to ensure a full assessment of construction impacts on the European Sites can be carried out.

## 8.4.4. Impacts on the Qualifying Criteria of Slaney River Valley SAC

The subject site is 250m upstream from the edge of the Slaney River Valley SAC which includes habitats and species which are supported by hydrological pathways. The proposed works include embankment and instream works which directly affects the habitats and movement of migrating fish and therefore potentially the population dynamics of the species of this SAC. The NIS lists the likely significant impact on the spawning habitat on the River Lamprey, Brook Lamprey, Sea Lamprey and Atlantic Salmon.

#### 8.4.5. Impact on Habitats.

The Slaney River Valley SAC has 7 habitats listed as QI. The proposed development does not include a direct reduction in the size of any of these habitats within the SAC although, in the short-term, the construction works have a possibility of impacting the quality of the water downstream through pollution and increase in sedimentation, which I consider may have an indirect negative impact on the Estuaries. I note the

mitigation measures included for the proposed development state compliance with IFI "Guidelines on Protection of Fisheries During Construction works in and adjacent to Waters", and include the following:

- Dust minimisation plan,
- Direction of site drainage through a settlement facility prior to discharge,
- Toolbox talks by a qualified ecologist to all contractor personnel,
- Restriction on topsoil stripping in dry wet weather,
- Concrete pouring etc. in dry weather,
- Storage of fuels etc. in bunded area,
- Pre- cleaning of machinery and routine check for spillages.

The Local Authority responded to a further Information request relating to the location of bunding areas etc. to state that the Contractor will decide the exact bund locations, settlement area etc. upon appointment by the Local Authority, in accordance with construction methods and best practice. In the absence of the final details of the proposed development it is not possible to carry out a complete assessment of the proposed development or fully consider the consequences of the mitigation measures e.g. location of areas for machinery, bunded areas, settlement ponds. I consider that the lack of such information means that there remains sufficient uncertainty in regard to the proposed development's impact on a European Site.

Based on the precautionary principle, and the submission of inadequate information I do not consider that the full impacts of the development can be established or the effectiveness of the mitigation measures, therefore, I consider the proposed development has a potential to have an adverse impact on the water quality of Edermine stream, through sedimentation and pollution, and a potential for adversely affecting the integrity of the Estuaries in the Slaney River Valley SAC, having regard to its Conservation Objectives.

#### 8.4.6. Impact on Species

**Construction Works:** The construction works have the potential to have both a short and long-term impact on the species of in the SAC and those habitats they

require for survival. The proposal includes the removal of the fish prior to construction by electrofishing including dewatering of the stream. I note the TII guidance<sup>5</sup> states that dewatering is not an option where species are protected under the Habitats Directive in significant numbers, and also settlements pond are required to minimise the potential environmental impacts. Neither the species numbers or the location of the settlement ponds have been provided in the NIS.

<u>Timing of works</u>: Both the TII and the IFI guidance specify the importance of timing of works outside the migrating season in order to prevent a barrier to breeding Atlantic Salmon who migrate upstream to the same area each year. The NIS refers to a restriction on works before the 01<sup>st</sup> of July and after 30<sup>th</sup> of September as a mitigation against potential impacts for migrating Salmon and Lamprey.

The submission from the NPWS raised concern over the lack of detail on the final design of the works. A response to further information referred to the appropriate treatment of dumped materials on site, confirmation of site access and location of works areas following an appointment of a contractor and the final proposals for the treatment of invasive species.

Invasive Species: The presence of invasive species has the potential to have a long-term impact on both the habitats and species listed as SPI/QI in the SAC. An Invasive Action Plan proposed a management plan to avoid areas with Japanese Knotweed with a 7m buffer, pull all Himalayan Balsam by hand between April and early May, and do nothing on the Cherry Laurel. The submission from the IFI required the eradication of Cherry Laurel as it is a threat to the habitats along salmonid waters and the NPWS recommended the treatment of bare soil following the hand pulling of Himalayan Balsam. Additional information was requested on these issues and also clarification of the inclusion of the site access with a sufficient buffer of 7 m surrounding the Japanese Knotweed. The Local Authority responded as follows:

 Cherry Laurel is not listed under the Third Schedule of Regulations 49 of the EC (Birds and Habitats) Regulations, 2011-2015, is present in abundance upstream and downstream from the site, on land in public and private ownership and will therefore not be eradicated.

<sup>&</sup>lt;sup>5</sup> Guidelines for the crossing of watercourse during the construction of national road schemes. (NRA)

- Himalayan balsam is all along the banks of Edermine Stream and the
  presence of seedbank makes eradication of the species in the area
  impractical. A method for the treatment of Himalayan Balsam will be agreed
  with the Contractor prior to mobilisation and in accordance with IFI best
  practice.
- Fig 2 of the Invasive Species Management Plan illustrates the location of Japanese Knotweed and it is anticipated the works can be carried out whilst maintaining a buffer.

I do not consider the existing abundance of invasive species along the stream a sufficient reason not to eradicate the invasive species in particular the Cherry Laurel and certainly not to address the issue within the confines of the site area. The existing unknown method of treatment of the Himalayan Balsam along with the unknown site access provides a lack of confirmation on the buffer for the Japanese Knotweed which in my opinion is insufficient to establish the effectiveness of the mitigation measures. Therefore, I consider the potential failure to adequately address the issue of invasive species has a potential long term negative impact on the habitat of the fish species along Edermine Stream and pathway downstream into the River Slaney Valley SAC.

Embankment works: The proposed works include the removal of c.11m of embankment to north and south of the existing bridge and replacement with gabions and rock armour to prevent erosion and support the bridge. Section 6.3, Appendix B included either gabion walls backfilled with suitable imported fill or "armourstone" rock armour for the embankment works. Further information was requested requiring a final submitted design. No further response was submitted from the local authority to confirm the embankment design. I note the IFI guidelines state the use of large irregular rock armour should be used rather than gabions as they facilitate the growth of vegetation and are less likely to collapse. Therefore, based on a lack of clarity in regard to the inadequate final design solution, I consider the proposed works along the embankment have a potential for a direct long-term negative impact on the spawning habitat of the River, Sea and Brook Lamprey and the Atlantic Salmon.

**Instream works**: The proposed instream works include a new concrete invert slab with downstand. The NPWS commented on the need for these instream works. The

supporting documentation refers to erosion. A response to a further information request confirmed the use of a "Bed check weir/rock ramp" following consultation with IFI, in lieu of the concrete invert slab. The IFI have no objection to the use of this design method for instream works subject to consultation with the IFI, which I consider reasonable.

### 8.4.7. <u>Cumulative Impact</u>

The Edermine Stream is a support tributary for species listed is the SAC. In the short term works to watercourses located in the zone of impact have the potential to have a cumulative negative impact on the QI e.g., sedimentation, water quality, destruction of habitats. The NIS includes a list of projects which may have a long-term cumulative impact including Enniscorthy Main Drainage Scheme Stage 3 and the M11 Gorey to Enniscorthy Scheme and conclude that the use of best practice methods during construction will prevent any negative impact on the spawning habitat or water quality on the SAC.

#### 8.4.8. Impact on the Wexford Harbour and Slobs SPA.

The site is located 450m from the edge of the Wexford Harbour and Slobs SPA. The proposed development includes the removal of an area (c. 20m²) containing mature trees around the bridge and along the river. The site area will be subject to clearance (c. 700m²) and also includes mature trees and vegetation. The Construction period must be undertaken before the 01st of July or after 30th of September due to the restriction on instream works for migrating species, therefore the trees and hedgerows are to be removed during this time. A submission from the NPWS raised the issue of timing for removal of trees and hedgerows and the impact on nesting birds. The Wildlife Act, restricts works from 01st of March to 31st of August. The EclA states that these works can be undertaken during the restricted period following a survey for nesting birds.

#### 8.4.9. Impact on Species

A Stage 1 screening assessment concluded that the proposed works, either alone or in combination with other plans or projects would be unlikely to give rise to any significant direct, indirect or secondary effect on the Wexford Harbours and Slobs SPA. Eight birds were included in Table 5 of the NIS, as those species recorded closest to the subject site (c.3.5km), and concluded that the likely significant impact

on any species is trivial and inconsequential. The 8 birds listed include Little Grebe (A004), Comerant (A017), Grey Heron (A028), Teal (A052), Mallard (A053), Coot (A125), Lapwig (A142), Curlew (A160) and Blackheaded Gull (A179). The NIS used the Irish Wetland Bird Survey (I- WeBS) as a method of assessing the potential for any pathways from the proposed development. Neither the Hen Harrier nor the Short Eared Owl were included in the screening assessment or NIS. The Hen Harrier is SPI for the SPA and the Short Eared Owl is referenced in the Site Synopsis. A response to a further information request, on the identification of nests within the cracks of the masonry bridge, was submitted and stated that the old nests recorded in the cracks of the Glebe Bridge are likely to be used by species such as wrens or dippers, which are not threatened and not Annex 1 species of the Birds Directive. However, based on the distance of the site (450m) from the edge of the SPA, I do not consider the response sufficiently demonstrates the site is not currently used by any SPI of this SPA.

#### 8.5. Impact on Habitat.

The Site Synopsis for this SPA references the use of habitats for adjacent areas outside the SPA by the Hen Harrier during the non-breeding season, where the key habitats are listed as wetlands, scrub, tillage and hedgerow. The combination of estuarine habitats and farmland of polders provide optimum feeding and roost areas for a wide range of species.

The Local Authority responded to a further information request for additional surveys and assessment on the impact on the SPA, to state the species listed in the SPA for SPI were mostly waders and wildfowl which do not breed in Ireland and none of these species were recorded on site during inspection. In addition, the contract specification refers to compliance with TII guidance and care over harming birds' nests. No surveys were submitted to confirm there was no suitable habitat on the site for any relevant species or habitual use by any species. Based on the insufficient information of the use of the site for any species listed in the Conservation Objectives/ qualifying interests of the SPA, I consider that it has not been sufficiently demonstrated that the proposed development would not have long-term negative impact on the SPA.

#### 8.5.1. Conclusions on the Likely significant effects on a European site.

Slaney River Valley SAC: The proposed development relies on mitigation measures to prevent a significant negative impact on the species listed in the SAC. The submitted information fails to include sufficient information to allow an assessment of the proposed development and the effectiveness of the mitigation measures. In addition, the proposal does not include sufficient detail for the final design along the embankment for an assessment of the impact on the spawning habitat. Therefore, the potential negative impacts from the construction phase include habitat loss, habitat degradation and water quality cannot be discounted. Based on the distance to the SAC and the use of the stream for migrating species I consider that it has not been demonstrated that there would not be a significant negative impact on the population dynamics of the River Lamprey, Sea Lamprey, Brook Lamprey and Atlantic Salmon.

<u>Wexford Harbour and Slobs SPA:</u> The proposed development will not result in the direct loss, fragmentation or diminution of any habitat located in the Wexford Harbour and Slobs SPA although the NIS has not adequately demonstrated that the habitat to be removed from the site is not used for activities important for any species of bird which is a Feature of Interest of the SPA.

#### 9.0 Conclusion and Recommendation

On the basis of the information provided with the application, including the Natura Impact Statement, and in light of the assessment carried out above, I am not satisfied that the proposal, either individually or in combination with other plans and projects, would not adversely affect the integrity of the Slaney River Valley SAC (site code 00781) and Wexford Harbour and Slobs SPA (site code 4076), in view of the site's Conservation Objective. In such circumstances, the Board is precluded from granting approval.

It is considered that insufficient information has been submitted in relation to the extent and nature of the site works and proposed access arrangements, the impact of the removal of mature trees and treatment of invasive species which prevents a complete assessment of the proposed development or the consequences of the proposed development and effectiveness of the mitigation measures. It is also

considered that insufficient information has been submitted in relation to the use of the site by any of the Species of Conservation Interest of the adjoining SPA. Therefore, it has not been demonstrated that adverse effects on the integrity of the Conservation Objectives of the Slaney River Valley SAC and the Wexford Harbour and Slobs SPA would not result and I recommend that the current proposal be refused.

#### 10.0 Reasons and Considerations

The Board agreed with the screening assessment and conclusion carried out in the inspector's report that the Slaney River Valley SAC (Site Code 00781) and the Wexford Harbour and Slobs SPA (Site Code 4076) are the European site for which there is a likelihood of significant effects.

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposal for the Slaney River Valley SAC (Site Code 00781) Sites Conservation Objective, and in particular, to maintain or restore the favourable conservation condition of the River Lamprey, Sea Lamprey, Brook Lamprey and Atlantic Salmon and the Wexford Harbour and Slobs SPA (Site Code 4076) Sites Conservation Objective, in particular, to maintain the favourable conservation status of those Species of Conservation Interest.

In completing the assessment, the Board considered, in particular, the

- (i) Likely direct and indirect impacts arising from the proposal both individually or in combination with other plans or projects, specifically upon water quality and river habitat,
- (ii) Mitigation measures which are included as part of the current proposal,
- (iii) Conservation Objectives for these European Sites, and
- (iv)The views of the Department of Archaeology, Heritage, the Gaeltacht, Regional and Rural Affairs and Inland Fisheries Ireland.

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In completing the AA, the Board accepted and adopted the Appropriate Assessment carried out in the inspector's report in respect of the potential effects of the proposal on the aforementioned European Sites, having regard to the sites Conservation Objectives.

Thus, the Board is not satisfied that the Local Authority has demonstrated that the proposed development would not adversely affect the integrity of the European Sites in view of the sites Conservation Objectives. The proposed development would entail works which would have a likely significant effect on the hydrological support systems and the population dynamics of the River Lamprey, Sea Lamprey, Brook Lamprey and Atlantic Salmon. In the Board's opinion insufficient information has been provided in regard to the extent and location of proposed development, through construction methods, mitigation measures and control of invasive species. The consequences for the qualifying interests of the European Site, particularly the Atlantic Salmon and the River Lamprey, Brook Lamprey and Sea Lamprey have not been sufficiently addressed.

Furthermore, the NIS has failed to provide the best scientific evidence to assess the impact of the removal of the mature trees on all of the Species of Conservation Interest of the Wexford Harbour and Slobs SPA, in particular the Hen Harrier.

In overall conclusion, the Board is not satisfied that the proposed development would not adversely affect the integrity of the European Sites in view of the sites Conservation Objectives.

Karen Hamilton Planning Inspector

28<sup>th</sup> of June 2017