#### APPROPRIATE ASSESSMENT SCREENING REPORT

### Regarding a

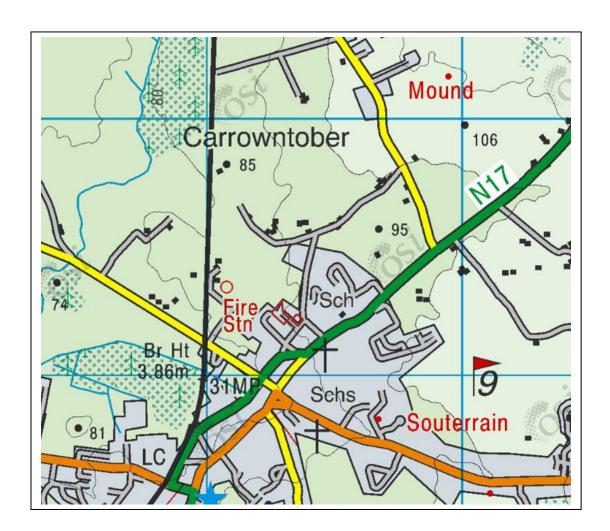
#### PART 8 PLANNING APPLICATION

For the

Provision of 15 residential units in an urban setting

at

Connolly Park, Tubbercurry, Co. Sligo



Client: Sligo County Council

**County Hall** 

Riverside

Sligo

Co. Sligo

Paul Neary B.Sc. (Hns. Env. Sc.) M.Sc. (Eco. Tox)

**Environmental Consultant** 

Stonehall

**Foxford** 

Co. Mayo

Tel: 00353 87 2352811

Email: pnearyfoxford@gmail.com

Environmental Impact Assessment-EMS-Environmental Monitoring,-Natura Impact Assessment-Noise Monitoring,-Discharge Licence Applications-IPPC Licence-Isophonic Mapping--Product Analysis-Nutrient Management Plans-Flood Plain Assessment-EPA Site Suitability Assessment

	<u>ACKNOWLEDGEMENTS</u>
	ACKNOWLEDGENENIS
We wish to acknow	wledge the essential contribution of National Parks and Wildlife whose maps, site
synopsis, features of	of interest, Natura 2000 forms, management plans and conservation objectives which
have facilitated the	creation of this report

#### **INDEX**

- 1.0 The Appropriate Assessment Process
  - 1.1.1 Stages
  - 1.1.2 Notes on the Author
- 2.0 Appropriate Assessment Stage 1 Screening Matrix
  - 2.0.1 Development Type
  - 2.0.2 Development Location
  - 2.0.3 Natura Sites within the Impact Zone
  - 2.0.4 Qualifying Interests of the Natura Site (s)
- 2.1 Description of The Project
  - 2.1.1 Location
  - 2.1.2 Brief Description of the Key Components of The Project
  - 2.1.3 Distance of the Project from the Natura Sites in the Impact Zone
- 2.2 Description of the Natura Sites within the Potential Impact Zone
  - 2.2.1 Name
  - 2.2.2 Site Code
  - 2.2.3 Site Description
  - 2.2.4 Qualifying Interests
  - 2.2.5 Other Notable Features of the Natura 2000 Site (s)
  - 2.2.6 Conservation Objectives
- 2.3 Assessment Criteria
  - 2.3.1 Description of the Individual Elements of the Project
  - 2.3.2 Description of any likely direct or indirect impacts of the project either alone or in combination with other plans or projects
  - 2.3.3 Description of any likely changes to the Natura 2000 site
  - 2.3.4 Description of likely impact on Natura 2000 site (s) as a whole
  - 2.3.5 Description of significant impacts or where scale and magnitude are unknown
  - 2.4 Screening Conclusion

#### 3.0 Appropriate Assessment \_ Stage 1 Screening Matrix: Finding of No Significant Effects

- 3.0.1 Planning Application Number
- 3.0.2 Development Type
- 3.0.3 Development Location
- 3.0.4 Natura 2000 Site (s) within Impact Zone
- 3.0.5 Qualifying Interests of the Natura 2000 Site (s)

#### 3.1 Name of the Project or Plan

- 3.1.1 Name and Location of Natura 2000 Sites
- 3.1.2 Description of the Plan or Project
- 3.1.3 Is the Plan or Project directly Connected to or Necessary to the Management of the Site (s)
- 3.1.4 Details of Other Plans or Projects

#### 4.0 Assessment of Significant Effects

- 4.0.1 Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 Site.
- 4.0.2 Explain why effects are Not Considered Significant
- 4.0.3 List of Agencies Consulted
- 4.0.4 Response to Consultation

#### 5.0 Data Collected to Carry Out the Assessment

### **Appendix**

**Appendix 1 Maps** 

**Appendix 2 Ecological Survey and Photographs** 

**Appendix 3 Site Synopsis** 

**Appendix 4 Restricted Non Native Species Lists** 

**Appendix 5 WFD Data** 

**Appendix 6 Consultation** 

#### 1.0 THE APPROPRIATE ASSESSMENT PROCESS

#### INTRODUCTION

There is a requirement, under Article 6(3) of the ED Habitats Directive (Directive 92/43/EEC), to carry out an Appropriate Assessment. The first step of the Appropriate Assessment process is to establish whether, in relation to a particular plan or project, Appropriate Assessment is required. Article 6(3) states:

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.'

A number of guidance documents on the appropriate assessment process were consulted during the preparation of this NIS. These are:

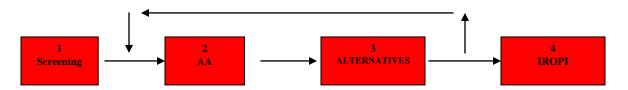
- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (NPWS 2009, Revised February 2010);
- Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (Nov. 2001 - published 2002);
   and
- Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (2000).
  - EU Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC (2007);

Where it cannot be deduced or proven with certainty that a development or plan will not have a significant effect on a Natura 2000 site (s) then it is necessary and essential to carry out an appropriate assessment on the ramifications of the development on the Natura site(s) with respect to their features of interest conservation objectives. The guidance for Appropriate Assessment (NPWS, 2009, revised February 2010) states:

"AA is an impact assessment process that fits within the decision-making framework and tests of Articles 6(3) and 6(4) and, for the purposes of this guidance, it comprises two main elements. Firstly a Natura Impact Statement - i.e. a statement of the likely and possible impacts of the plan or project on a Natura 2000 site (abbreviated in the following guidance to "NIS") must be prepared. This comprises a comprehensive ecological impact assessment of a plan or project; it examines the direct and indirect impacts that the plan or project might have on its own or in combination with other plans and projects, on one or more Natura 2000 sites in view of the sites' conservation objectives. Secondly, the competent authority carries out the AA, based on the NIS and any other information it may consider necessary. The AA process encompasses all of the processes covered by Article 6(3) of the Habitats Directive, i.e. the screening process, the NIS, the AA by the competent authority, and the record of decisions made by the competent authority at each stage of the process, up to the point at which Article 6(4) may come into play following a determination that a plan or project may adversely affect the integrity of a Natura 2000 site".

#### 1.1 STAGES

The European Commission's guidance promotes a fours stage process, as set out in Box 1 below, to complete the Appropriate Assessment, and outlines the tests required at each stage. Stages 1 and 2 deal with the main requirements for assessment under Article 6.3 Stage 3 may be part of Article 6(3) or a necessary precursor for Stage 4.



This screening report should include the requesite ecological impact assessment and testing required under the provisions of Article 6(3) by means of the first stage of Appropriate Assessment, the screening process (as set out in the EU Guidance documents).

#### EU guidance<sup>1</sup> states:

"This stage examines the likely effects of a project or plan, either alone or in combination with other projects or plans, upon a Natura 2000 site and considers whether it can be objectively concluded that these effects will not be significant. This assessment comprises four steps:

- 1. determining whether the project or plan is directly connected with or necessary to the management of the site;
- 2. describing the project or plan and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the Natura 2000 site;
- 3. identifying the potential effects on the Natura 2000 site;
- 4. assessing the significance of any effects on the Natura 2000 site".

The screening report should also provide the information required for the Competent Authority to establish that Appropriate Assessment (Stage 2) is not required.

#### 1.2 Notes on the Author

The AA has been undertaken by Paul Neary B.Sc. (Env. Sc.) M.Sc (eco tox), whom has previously carried out Ecological surveys and damage assessments on the Kerry Mountains, Ox Mountains, Shores of Lough Conn and Lough Cullin under the auspices of NPWS, he has also been involved in formulating management plans for National Parks and lectured in ecology. A number of his Appropriate Assessment reports have bee successfully defended by AN Bord Pleanala in High Court actions taken by objectors whom wished to have the Boards decisions overturned. He has also submitted a number of remedial NIS's directly to An Bord Pleanala under section 261A of the Planning and Development Act the findings of which have been ratified by the Bord. Paul Neary is also an environmentalist approved by NPWS / Duchas / Dept. of Agriculture for the carrying out of ecological assessments on NHA's, SAC's, SPA's, pNHA's and National Parks and the creation of management plans and frame work plans on the afore mentioned under the registration number PL321 (code 00805).

<sup>&</sup>lt;sup>1</sup> Paragraph 3.1 of 'Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological Guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (Nov. 2001)

# 2.0 APPROPRIATE ASESSMENT $\_$ STAGE 1 SCREENING MATRIX

In accordance with Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC

Planning Application Number	PROPOSED DEVELOPMENT UNDER THE LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT REGULATIONS 2001, PART 8 (ARTICLE 81) (AS AMENDED)
2.0.1 Development Type	The proposed project is orientated around the provision of 15 residential units 5 comprising of 7 houses (2 X 2-bed, 2 storey semi-detached houses, 4 X 3-bed 2 storey semi-detached houses, 1 X 4-bed 2 storey detached house) and 8 apartments (4 X 1-bed apartments in one 2 storey block, 4 X 2-bed apartments in a separate 2 storey block) and a 0.031Ha green area at Connolly Park, Tubbercurry, Co. Sligo. Over two plots involving a land area of 0.385Ha site which is extended to 0.506Ha when taking into account the resurfacing of the existing roads post development. The proposed project will connect to all the existing services (water, electricity, sewer, storm sewer).
2.0.2 Development Location	The proposed brown field urban site is located in the townland of Carrowntober in Tobercurry Town with an address at Connolly Park. It is located 130M North West of St. Georges Church of Ireland which is on Church Street, North of Humbert St. and North West of the N17 Charlestown to Sligo Road at grid references 552251, 812251 and 552319, 812228.
2.0.3 Natura 2000 site(s) within impact Zone	River Moy SAC 002298 Turloughmore (Sligo) SAC 00637
2.0.4 Qualifying interests of Natura 2000 site(s)	River Mov SAC 002298:  [1092] Austropotamobius pallipes [1095] Petromyzon marinus [1096] Lampetra planeri [1106] Salmo salar (only in fresh water) [1355] Lutra lutra [7110] * Active raised bogs [7120] Degraded raised bogs still capable of natural regeneration [7150] Depressions on peat substrates of the Rhynchosporion [7230] Alkaline fens [91A0] Old sessile oak woods with Ilex and Blechnum in the British Isles [91E0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno Padion, Alnion incanae, Salicion albae)
	Turloughmore (Sligo) SAC 00637 Turloughs [3180]

2.1 Description of the	2.1 Description of the Project		
2.1.1 Location (Attach map)	The South East facing urban brown field site located in Tobercurry Town (see maps in appendix) grid references 552251, 812251 and 552319, 812228.		
2.1.2 Brief description of the Key components of the project	The proposed project is orientated around the provision of 15 residential units 5 comprising of 7 houses (2 X 2-bed, 2 storey semi-detached houses, 4 X 3-bed 2 storey semi-detached houses, 1 X 4-bed 2 storey detached house) and 8 apartments (4 X 1-bed apartments in one 2 storey block, 4 X 2-bed apartments in a separate 2 storey block), connect to all the existing services (water, electricity, sewer, storm sewer) and a 0.031Ha green area at Connolly Park, Tubbercurry, Co. Sligo. Over two plots involving a land area of 0.385Ha site which is extended to 0.506Ha when taking into account the resurfacing of the existing roads post development involving short duration light construction works (<12months for the main elements – foundations, blocks and roofing).		
2.1.3 Distance of the project from Natura sites in potential Impact zone	River Moy SAC 002298 terrestrial section located 4.382Km South West of the proposed site boundary Turloughmore (Sligo) SAC 00637 terrestrial section located 1.749Km North East of the proposed site boundary.		

	2.2 Description of the Natura Site(s) within the potential impact zone
2.2.1 Name(s)	River Moy SAC 002298 Turloughmore (Sligo) SAC 00637
2.2.2 Site Code(s)	River Moy SAC 002298 Turloughmore (Sligo) SAC 00637
2.2.3.SiteDescription (Detailed ecological data can be Given in the appendices)	SITE NAME: RIVER MOY SAC SITE CODE: 00002298 (Oct 2020)  This site comprises almost the entire freshwater element of the Moy and its tributaries including both Loughs Conn and Cullin. The system drains a catchment area of 805 sq. km. Most of the site is in Co. Mayo though parts are in west Sligo and north Roscommon. Apart from the Moy itself, other rivers included within the site are the Deel, Bar Deela, Castlehill, Addergoole, Clydagh and Manulla on the west side and the Glenree, Yellow, Strade, Gweestion, Trimogue, Sonnagh, Mullaghanoe, Owengarve, Eighnagh and Owenaher on the east side. The underlying geology is Carboniferous Limestone for the most part though Carboniferous Sandstone is

present at the extreme west of the site with Dalradian Quartzites and schists at the south west. Some of the tributaries at the east, the south of Lough Conn and all Lough Cullin are underlain by granite. There are many towns adjacent to but not within the site. These include Ballina, Crossmolina, Foxford, Swinford, Kiltimagh and Charlestown (see appendix).

SITE NAME: TURLOUGHMORE (SLIGO) SAC SITE CODE: 00637 (Sept 2018)

A turlough basin bordered by pasture and cutover bog. The outlines are smoothed by glacial drift with a small Outcrop of the bedrock at the eastern end. The floor is flat with a number of depressions which may take water movement. Much of the upper vegetation has a heathy character reflecting the proportion of sand in the local drift.

# 2.2.4 Qualifying Interests of the Natura 2000 Site(s)

(From NPWS)

#### River Moy SAC 002298: 22/10/20

[1092] Austropotamobius pallipes

[1095] Petromyzon marinus

[1096] Lampetra planeri

[1106] Salmo salar (only in fresh water)

[1355] Lutra lutra

[7110] \* Active raised bogs

[7120] Degraded raised bogs still capable of natural regeneration

[7150] Depressions on peat substrates of the Rhynchosporion

[7230] Alkaline fens

[91A0] Old sessile oak woods with Ilex and Blechnum in the British Isles

[91E0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno Padion, Alnion incanae, Salicion albae)

Turloughmore (Sligo) SAC 00637 (10/09/13)

Turloughs [3180]

#### 2.2.5 Other Notable Features of the Natura 2000 Site(s) (From Natura 2000 Data Form)

#### RIVER MOY SAC (Oct 2020)

This site comprises almost the entire freshwater element of the Moy and its tributaries, including both Lough Conn and Cullin. The system drains a catchment area of 805 km². Most of the site is in Co. Mayo though parts are in west Sligo and north Roscommon. The underlying geology is Carboniferous Limestone for the most part though Carboniferous Sandstone is present at the extreme west of the site with Dalradian Quartzites and schists at the south west. The river and its various tributaries rise in a number of locations some of which are upland areas dominated by blanket bog and heath. Throughout most of its course however the river flows through low-lying countryside where most of the adjoining land consists of agricultural grassland. The river eventually reaches the sea at Ballina where it flows into Killala Bay. To the west of Lough Cullin

the river passes through areas where the bedrock is dominated by silicious rocks such as granite and here the character of the adjoining land changes to one where blanket bog and heath are important components of the landscape. In addition to river and lake habitats, the site contains adjoining habitats of ecological interest such as raised bogs, heath, wet grassland and deciduous woodland. Small pockets of conifer plantations, close to the lakes and along parts of the rivers, are included. Improved grassland is also included where it occurs along the river channels.

#### **QUALITY AND IMPORTANCE:**

This extensive site contains good examples of the Annex 1 habitats active raised bog, degraded raised bog, Rhynchosporion vegetation, alluvial woodland and old oak woodlands. The raised bog areas present constitute the most north-westerly examples of raised bog in Ireland, with the most important examples occurring at Derrynabrock and Tawnaghbeg. An excellent example of old oak woodland is to be found just east of Pontoon along the shores of Loughs Conn and Cullin. This represents one of the largest stands of oak woodland in western Ireland. Water quality of the river channels is generally good and the majority is classified as unpolluted. The open waters of Loughs Conn and Cullin are moderately hard with relatively low colour and good transparency. Lough Conn, with a surface of 50km2, is classified as a mesotrophic system, while Lough Cullin (surface of 11 km2) is classified as an oligotrophic system. The rivers and lakes support important populations of Lutra lutra, Austropotamobius pallipes, Lampetra planeri and Petromyzon marinus. The Moy system is one of the most important in Ireland for Salmo salar and is an internationally renowned fishery. It also has important stocks of Salmo trutta. Lough Conn supports a nationally important population of Anser albifrons flavirostris and has regionally important numbers of Cygnus cynus and Pluvialis apricaria (all Annex I Bird Directive species). The lakes support a range of other wintering waterfowl, notably nationally important populations of Aythya fuligula and Bucephala clangula. Lough Conn / Cullin represents one of only 4 breeding sites in Ireland for Melanitta nigra, which in Ireland is at the south-west end of its European range. The population, however, has seriously declined in recent years. A range of mammals listed in the Red Data Book occur within the site, including Martes martes and Myotis daubentoni. At least five Red Data Book plant species occur, including Cephalanthera longifolia and Spiranthes romanzoffiana.

#### VULNERABILITY

Lough Conn is a mesotrophic system but with eutrophic tendencies in its North Basin. A doubling of phosphorus inputs for the period 1980 to 1990 caused a number of ecological changes such as an apparent increase in the littoral algal production and the possible extinction of Salvelinus alpinus. While conditions stablised during the 1990s, the lake, as well as Lough Cullin and the river and its tributaries, are susceptible to water pollution mainly from agricultural intensification within the catchment. Further afforestation in the catchment is not desirable for water quality reasons. The main threats to raised bog areas within the site are peat-cutting and associated activities such as drainage and burning. The long-term future of the woodland areas

near Pontoon is threatened by overgrazing and the spread of exotic plant species, particularly Rhododendron. The breeding *Melanitta nigra* population has seriously declined in the last decade, possibly due to predation by *Mustela vison* which has spread throughout the site.

Negative	e Impacts		
Rank	Threats and pressures [code]	Pollution (optional) [code]	inside/outside [i o b]
M	A03		0
M	F03.01		i
М	A04		i
М	A08		i
M	В		o
L	J01		i
M	I01		i
М	A04		o
М	E01.03		О
Н	F02.03		i
L	C01.03		i
М	В		i
М	E01		0
М	A08		О
М	A03		i

Positive Impacts			
	Activities, management [code]		inside/outside [i o b]
Н	F02.03		i
М	F03.01		i

#### TURLOUGHMORE (SLIGO) SAC (Sept 2018)

A turlough basin bordered by pasture and cutover bog. The outlines are smoothed by glacial drift with a small Outcrop of the bedrock at the eastern end. The floor is flat with a number of depressions which may take water movement. Much of the upper vegetation has a heathy character reflecting the proportion of sand in the local drift.

#### **QUALITY AND IMPORTANCE:**

The habitat is rather uniform though the vegetation that is there is well developed and not currently overgrazed. The importance of the site stems largely from its northerly location and the sand content of the soil which is fairly unusual. There is little if any precipitation of calcium carbonate.

#### **VULNERABILITY**

The most important impacts and activities with high effect on the site

Negative Impacts			
Rank	and	I/Ontional)	inside/outside [i o b]
Н	A02.01		i
L	B02.01		0
Н	K02		i

Positive	Impacts		
Rank	Activities, management [code]	Pollution (optional) [code]	inside/outside [i o b]
L	X		i

# 2.2.6 Conservation Objectives (From NPWS)

#### RIVER MOY SAC

Version 1: 3<sup>rd</sup> August 2016

To maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

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:

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

002298 River Moy SAC

1092 White-clawed Crayfish Austropotamobius pallipes

1095 Sea Lamprey Petromyzon marinus

1096 Brook Lamprey Lampetra planeri

1106 Salmon Salmo salar

1355 Otter Lutra lutra

7110 Active raised bogs\*

7120 Degraded raised bogs still capable of natural regeneration

7150 Depressions on peat substrates of the Rhynchosporion

7230 Alkaline fens

91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)\*

• indicates a priority habitat under the Habitats Directive

The Detailed Conservation Objectives and Supporting Documents are available for reference on the NPWS Web site

#### TURLOUGHMORE (SLIGO) SAC

Version 6.0 21/02/18

The overall aim of the Habitats Directive is to maintain or restore the favorable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network. European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favorable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites. The maintenance of habitats and species within Natura 2000 sites at favorable conservation condition will contribute to the overall maintenance of favorable conservation status of those habitats and species at a national level.

Favorable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favorable.

The favorable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Objective: To maintain or restore the favorable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:

**Code Description** 

3180 Turloughs\*

· denotes a priority habitat

The Detailed Conservation Objectives and Supporting Documents are available for reference on the NPWS Web site

#### 2.3 Assessment Criteria

2.3.1 Describe the individual Elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site

There are no activities that would have a significant direct impact on any of the Natura sites species or habitats. The following are a list of the main activities on site.

- (1) General light construction activities
- (2) Operation of heavy plant
- (3) Landscaping
- (4) Habitation and recreational areas

However given the separation distance from the boundaries of the Natura sites to the boundary of the proposed development site (>1.7Km) this negates the potential for any significant impacts either directly or indirectly on them. All direct impacts can be excluded at this stage given the 1.749Km and 4.4382Km separation distances consequently only indirect effects need be considered.

- 2.3.2 Describe any likely direct, Indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site taking into account the
- following
- (i) Size and scale;
- (ii) Land-take;
- (iii) Distance from the
- (iv) Natura 2000 site or key Features of the site;
- (v) Resource requirements (water abstraction etc.);
- (vi) Emissions (disposal to land, water or air);
- (vii) Excavations requirements
- (viii) Transportation requirements
- (ix) Duration of construction, operation, decommissioning etc;
- (x) Other

The location, scale and nature of the proposed urban development is such that it will not directly or indirectly impact on any of the annexed habitats or species of the two Natura sites considered nor will it contravene their conservation objectives or plans. The development location consists of non annexed habitat and is segregated from the Natura sites by a minimum of 1.7Km. The intervening land use consist of dwellings, housing estates, commercial buildings, railway lines (disused) national, regional and local access roads. The proposed development does not require water abstraction or direct discharge to surface water, land or air. No changes to surface water quality (microbiologically, chemically, physically or quantitatively) are anticipated given that there are no direct discharges to or abstraction from surface water.

No Soil or sub soil is to be imported on to the site as a result of the proposed development.

Where aggregate for the purposes of fill is required it is to be sourced in a quarry that is registered under section 261/261A of the 2000 planning and development act or have a grant of planning under that act. The quarry should be free from Japanese knotweed to prevent introduction of these invasive species.

Construction and demolition waste would not be reused on site.

No maintenance of heavy plant would occur on site with all preventative maintenance carried out prior to entry to the site.

Refuelling of heavy plant shall only occur as necessary with no hydrocarbons for such purposes stored on site.

Excavated material shall not be stockpiled on site but should be landscaped and reseeded as soon as possible.

All empty packaging shall be stored in appropriate containers for disposal as required. Batch concrete trucks are prohibited from the washing out of the drum on site.

Where OFCH is utilised the tank shall be bunded to 110% of the volume of the tank and roofed. There shall be no outlet at the base of the bund. Alternatively double skinned tanks may be used.

The restricted species as listed in appendix of this report shall not be utilised or introduced for the purposes of landscaping or any other purposes.

A water tight container shall be provided for the storage of empty chemical containers which shall be removed off site and disposed of appropriately as required.

Control of weeds within the site boundary shall be performed manually. Spot spraying of noxious weeds is permitted provided such activity conforms to the REPS / AEOS / GLAS specifications or any subsequent specification governing such an activity.

Site preparation, construction and subsequent use / management is not required to be cognisant of the Inland fisheries Ireland guidance on "The protection of fisheries habitat during construction and development works at river sites" as no instream works are associated with the development with no streams, drain or rivers within 50M of the development site boundary.

The storm water from the proposed development would only egress the site via a suitably sized petrol interceptor / silt trap which shall be installed at the earliest possible opportunity.

No material would be removed from or deposited in the any Natura Site as a result of the proposed project.

The proposed project would connect to the existing services (sewer, storm water, electricity)

The projected impact of the proposed project is considered neutral therefore will be no cumulative, direct, indirect or secondary impacts on any of the Natura sites considered either alone or in combination with any other proposed project or plan.

2.3.3 Describe any likely changes to

The Site arising as a result of:

- (i) Reduction in habitat area:
- (ii) Disturbance to Key species;
- (iii) Habitat or species density;
- (iv) Changes in key indicators of conservation value (water quality etc);
- (v) Climate change

The proposed development does not involve the reduction in habitat area associated with either of the Natura sites.

There will be no disturbance to any key species associated with the Natura sites given the separation distances from them and the absence of suitable on site habitat for such species.

The urban brown field setting and >1.7Km separation distance of the proposed development from the boundary of the Natura sites dictates that light, noise and vibration from either construction or subsequent habitation would be detectable within the boundary of the Natura sites.

The species for which the Natura sites were designated are predominantly confined to the aquatic / marine / intertidal / sub tidal sections of them or the immediate area surrounding them e.g. the reclusive *Lutra lutra* generally are only found within 80M of suitable habitat and tend not to be present in areas of high anthropogenic activity.

Surface water quality will not be impacted as there will be no direct discharges to surface

water as a result of the development. There will be no climate change either micro or otherwise as a result of the project. The proposed development area is currently subject to continual anthropogenic activity with the project located on an existing brown field urban site. Consequently there will be no disturbance of any species above that already experienced in the area i.e. the proposed activity would be easily assimilated / absorbed into the background by the urban setting with no cumulative impact. The only habitats that would be impacted are BL3, ED3 and GA2 none of which are annexed habitat types. The species for which the Natura sits were designated would not inhabit or expand their range in a manner that would encompass the proposed development site.

- 2.3.4 Describe any likely impacts on the Natura 2000 sites as a whole in terms of:
  - (i) Interference with the Key relationships that define the structure of the site.(ii) Interference with key relationships that define the function of the site.

The proposed project will not alter, interfere or impact on any of the key relationships that define either the function of or the structure of the Natura sites either directly or indirectly due to the separation distance. There will be no fragmentation or disturbance of any designated habitat or species, either directly or indirectly, there will be no land take or material deposited, in or removed from any Natura sites as a result of the proposed project.

- 2.3.5 Provide indicators of signifiance as a result of the identification of effects set out above in terms of:
- (i) Loss
- (ii) Fragmentation
- (iii) Disruption
- (iv) Disturbance
- (v) Change to key elements of the site (e.g. water quality etc.)

There will be no loss, fragmentation, disruption or disturbance of the Natura sites or their annexed species either directly or indirectly, associated with the proposed project. No changes to surface water quality (microbiologically, chemically, physically or quantitatively) are anticipated given that there are no direct discharges to or abstraction from surface.

The proposed brown field urban development site is sufficiently removed from the Natura sites such that there will be no impact either directly or indirectly with respect to disturbance for example ppy of a hydraulic roller at 25M is only 1.5mms which truck on rough surfaces only produce a ppv of <2mm/s at 20M. There will be no activities associated with the development that would give rise to fugitive dust which would occur predominantly during the construction phases of the proposed development. Any such dust would be described as inert and harmless in the chemical context and would not contain any of the harmful compounds as described and listed in Atmospheric Emissions by T.A. Luft, (1986), section 2.3. During construction the noise source would be external in nature and as the dimensions are small compared to the location, in respect to the designated site, then as the sound energy is radiating it will spread over an area that is proportional to the square of the distance. As this is an inverse square law then the sound level will decline by 6dB for each doubling of distance and will not have a deleterious effect on the designated sites either during construction or subsequent habitation. It can be projected that noise levels at the periphery of the Natura Sites would not be elevated above existing background either during construction or subsequent use. Typical values in the vicinity of the development post construction would be in the order of 55 -65 dB with the existing N17 RTN remaining the dominant source of sound.

Light is not of consideration as the proposed development is in an urban setting which is separated from the natura sites by a minimum of 1.7Km and would be absorbed by the existing back ground levels.

2.3.6 Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.

No significant impacts are predicted given the limited scale, separation distance >1.7Km and short duration of the construction and phase of the proposed project which will connect to all the existing services (water, waste water, electricity, storm water). Subsequent use is not anticipated to produce any significant impacts either directly or indirectly.

2.4 Screening Conclusion and Statement		
Screening Conclusion	Appropriate Assessment is not required as there would be no significant impacts either directly or indirectly on the identified Natura sites with respect to annexed habitat and / or annexed species either during construction or subsequent habitation.	
	No specific mitigation measures or compensation measures are required to ensure that there are no direct or indirect impacts on the Natura sites habitats or species.	
Completed by	Paul Neary B.Sc. (Hns. Env. Sc.), M.Sc (eco. Tox)	
Date	07/04/2021	

# 3.0 APPROPRIATE ASESSMENT \_ STAGE 1 SCREENING MATRIX FINDING OF NO SIGNIFICANT EFFECTS MATRIX (FONSE)

In accordance with Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC

3.0.1 Planning Application Number	PROPOSED DEVELOPMENT UNDER THE LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT REGULATIONS 2001, PART 8 (ARTICLE 81) (AS AMENDED)
3.0.2 Development Type	The proposed project is orientated around the provision of 15 residential units 5 comprising of 7 houses (2 X 2-bed, 2 storey semi-detached houses, 4 X 3-bed 2 storey semi-detached houses, 1 X 4-bed 2 storey detached house) and 8 apartments (4 X 1-bed apartments in one 2 storey block, 4 X 2-bed apartments in a separate 2 storey block) and a 0.031Ha green area at Connolly Park, Tubbercurry, Co. Sligo. Over two plots involving a land area of 0.385Ha site which is extended to 0.506Ha when taking into account the resurfacing of the existing roads post development. The proposed project will connect to all the existing services (water, electricity, sewer, storm sewer).
3.0.3 Development Location	The proposed brown field urban site is located in the townland of Carrowntober in Tobercurry Town with an address at Connolly Park. It is located 130M North West of St. Georges Church of Ireland which is on Church Street, North of Humbert St. and North West of the N17 Charlestown to Sligo Road at grid references 552251, 812251 and 552319, 812228.
3.0.4 Natura 2000 site(s) within impact Zone	River Moy SAC 002298 Turloughmore (Sligo) SAC 00637
3.0.5 Qualifying interests of Natura 2000 site(s)	River Moy SAC 002298:  [1092] Austropotamobius pallipes  [1095] Petromyzon marinus  [1096] Lampetra planeri  [1106] Salmo salar (only in fresh water)  [1355] Lutra lutra  [7110] * Active raised bogs  [7120] Degraded raised bogs still capable of natural regeneration  [7150] Depressions on peat substrates of the Rhynchosporion  [7230] Alkaline fens  [91A0] Old sessile oak woods with Ilex and Blechnum in the British Isles  [91E0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno Padion, Alnion incanae, Salicion albae)

Turloughmore (Sligo) SAC 00637
Turloughs [3180]

3.1 Name of project or plan	CONNOLLY PARK - PROPOSED DEVELOPMENT UNDER THE LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT REGULATIONS 2001, PART 8 (ARTICLE 81) (AS AMENDED)
3.1.1 Name and Location of Natura 2000 Site	River Moy SAC 002298 terrestrial section located 4.382Km South West of the proposed site boundary  Turloughmore (Sligo) SAC 00637 terrestrial section located 1.749Km North East of the proposed site boundary.
3.1.2 Description of the project or plan	The proposed project is orientated around the provision of 15 residential units 5 comprising of 7 houses (2 X 2-bed, 2 storey semi-detached houses, 4 X 3-bed 2 storey semi-detached houses, 1 X 4-bed 2 storey detached house) and 8 apartments (4 X 1-bed apartments in one 2 storey block, 4 X 2-bed apartments in a separate 2 storey block), connect to all the existing services (water, electricity, sewer, storm sewer) and a 0.031Ha green area at Connolly Park, Tubbercurry, Co. Sligo. Over two plots involving a land area of 0.385Ha site which is extended to 0.506Ha when taking into account the resurfacing of the existing roads post development involving short duration light construction works (<12months for the main elements – foundations, blocks and roofing).
3.1.3 Is the project or plan directly connected with or necessary to the management of the site (provide details)	No
3.1.4 Are there other projects or plans that together with the project or plan being assessed could affect the site (provide details)?	There are no other projects or plans that in combination with the proposed project could impact on the Natura sites considered. The proposed plan is project to have a neutral impact given that there are no discharges to air, soil or water associated with construction or subsequent use that could impact the Natura Sites; and given the separation distance, which is >1.7Km, all other potential impacts are negated by virtue of that separation distance. Other plans and projects considered are;  Directive - Birds Directive  Directive - Habitats Directive  Directive - Drinking Waters Directive

**Directive - Major Accidents and Emergencies Directive** 

**Directive - Environmental Impact Assessment Directive** 

**Directive - Sewage Sludge Directive** 

**Directive - Urban Waste Water Treatment Directive** 

**Directive - Plant Protection Products Directive** 

**Directive - Nitrates Directive** 

**Directive - Integrated Pollution Prevention Control Directive** 

Other Stipulated Measure - Cost recovery for water use

Other Stipulated Measure - Promotion of efficient and sustainable water use

Other Stipulated Measure - Protection of drinking water sources

Other Stipulated Measure - Control of abstraction and impoundment

Other Stipulated Measure - Control of point source discharges

Other Stipulated Measure - Control of diffuse source discharges

Other Stipulated Measure - Authorisation of discharges to groundwaters

Other Stipulated Measure - Control of priority substances

Other Stipulated Measure - Controls on physical modifications to surface waters

Other Stipulated Measure - Controls on other activities impacting on water status

Other Stipulated Measure - Prevention or reduction of the impact of accidental pollution

incidents

**On-site waste water treatment systems** 

Freshwater Pearl Mussel sub-basin plan

**Shellfish Pollution Reduction Plan** 

Where the projected impact is considered neutral then no cumulative impacts are possible irrespective of the impacts attributed to any other plan or project, as those impacts would not be increased or exacerbated by the project considered.

#### 4.0 The assessment of significant effects

4.0.1 Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 Site. A desk top study in conjunction with on site survey (ecological, hydrological) was carried out on site. From this it was determined that the project will not have a significant effect on the Natura site either directly or indirectly, alone or in combination with other projects. The project impact is considered neutral.

4.0.2 Explain why these effects are not considered significant.

The effects are not considered significant as all potential indirect effects are negated by virtue of the separation distance between the area of construction and the SAC / SPA which exceeds 1.7Km. The construction phase of the project is of extremely short duration and lacks the scale to have a direct or indirect, significant or insignificant impat on the Natura sites and is located in an urban setting on what can be considered a brown field site. None

	of the species for which the Natura sites ware designated are present on site nor would they populate the site given the lack of suitable habitat and the existing high level of anthropogenic activity in an urban setting and distance to suitable habitat.  There is no undesignated annexed habitat present on the proposed urban brown field development site. The species for which the Natura site was designated would not expand their range to encompass the development site as they are predominantly aquatic or confined to the lake shore. The construction phase of the project is of short duration (less than 12months) with the completed project to be connected to all the existing services. All potential impacts can be accurately predicted from published data.
4.0.3 List of agencies consulted: provide contact name and telephone or email address.	As part of the process Sligo County Council would consult NPWS. To avoid duplication consultation with NPWS will be through that process.
4.0.4 Response to consultation.	N/A

Who carried out the Assessment?	Source of Data	Level of assessment completed.	Where can the full results of the assessment be accessed and viewed.
Paul Neary Environmental Consultants	National Parks and Wild Life	Consultation Site Synopsis Birds and Habitats Regulations 49 & 50. Threat Response Plans for Lutra Lutra Threat Response Plans for Vesper bats All Ireland Species action plan Bats All Ireland Species action Plan – Red Squirrel All Ireland Species Action Plan – Irish Lady's Tresses, pollan, hare, corncrake. National Biodiversity Plan The Status of EU protected habitats and species in Ireland.	Paul Neary Stonehall Foxford Co. Mayo
	Geological Survey of Ireland	Bedrock Data. Aquifer Vulnerability. Soil and Sub soils Data. Aquifer potential. Source protection, karst and ground water well data.	
	Environmental Potection Agency	Water Quality Data. Air Quality Data.	
	Water frame Work Directive (water matters web site) National Bio diversity Centre	Status and objectives for ground water and surface water Data on species in area	
	Heritage Council	Data on species in area	
	Department of the Environment	Circular NPW 1/10 & PSSP 2/10 Appropriate Assessment of Plans and Projects in Ireland – Guidance for	

	Dlanning Authorities	
	Planning Authorities.	
Department of	Environmental Plan –	
Agriculture	Nutrient management plans.	
	pians.	
Inland Fisheries	Wild Salmon	
	Management	
Freshwater Life – R.		
Fitter R. Manuel		
Biology of Fresh		
Waters -PS Maitland		
Dept. of the		
Environment, 1994		
Planning Policy		
Guidance: Nature		
Conservation		
Collins Field Guide to		
Freshwater Life, R.		
Fitter, R. Manuel.		
Domino Guide to Wild		
Flowers of Britain and		
Ireland, Marjorie		
Blamey, Richard Fitter,		
Alastar Fitter.		
Collins Nature Guides to		
Wild Flowers of Britain		
and Europe, W. Lippert & D. Podlech.		
& D. Fouleth.		
Waterfowl Ecology M		
Owen & J M Black		
Kingfisher Concise Field		
Guide to Animal &		
Plants of Britain &		
Europe, Michael Chinery		
The Status of EU		
Protected Habitats		
and Species in Ireland,		
NPWS, Department of		
Department of		

the Environment, Heritage and Local Government 2008. **European Commission.** 2007b. Interpretation manual of European Union habitats. EUR27. **European Commission, DG** Environment. EPA. 2002. Guidelines on information to be contained in **Environmental Impact Statements.** EPA, Wexford. **Biology of Fresh** Waters, 2<sup>nd</sup> edition, P S Maitland. Treweek, J. 1999 **Ecological Impact Assessment Blackwell** Science Ltd. Oxford EPA. 2003. Advice **Notes on Current** Practice (in the preparation of **Environmental** Impact Statements). EPA, Wexford. **National Parks and** Wildlife Service. 2008. The Status of EU **Protected Habitats and** Species in Ireland. **Conservation status in** Ireland of habitats and species listed in the **European Council** directive on the conservation of

habitats, flora and	
fauna 92/43/EEC.	
National Parks and	
Wildlife Service,	
Department of	
Environment, Heritage	
and Local Government.	
NPWS 2009	
Appropriate	
Assessment of Plans	
and Projects in Ireland	
- Guidance for	
Planning Authorities	
Revised February 2010	
Department of	
Environment, Heritage	
and Local Government	
Southall, B.L., Bowles,	
A.E. Ellison, W.T.,	
Finneran, J.J. Gentry,	
R.L. Greene, C.R.,	
Kastak, D., Ketten,	

#### **6.0 Overall Conclusions:**

Appropriate Assessment is not required as there would be no significant or insignificant impacts either directly or indirectly on the identified Natura sites with respect to annexed habitat and / or annexed species either during construction or subsequent habitation.

The site is located in an urban setting with no direct links to the Natura sites. On completion the project will be connected to all the existing services – sewer, storm water, water, electricity.

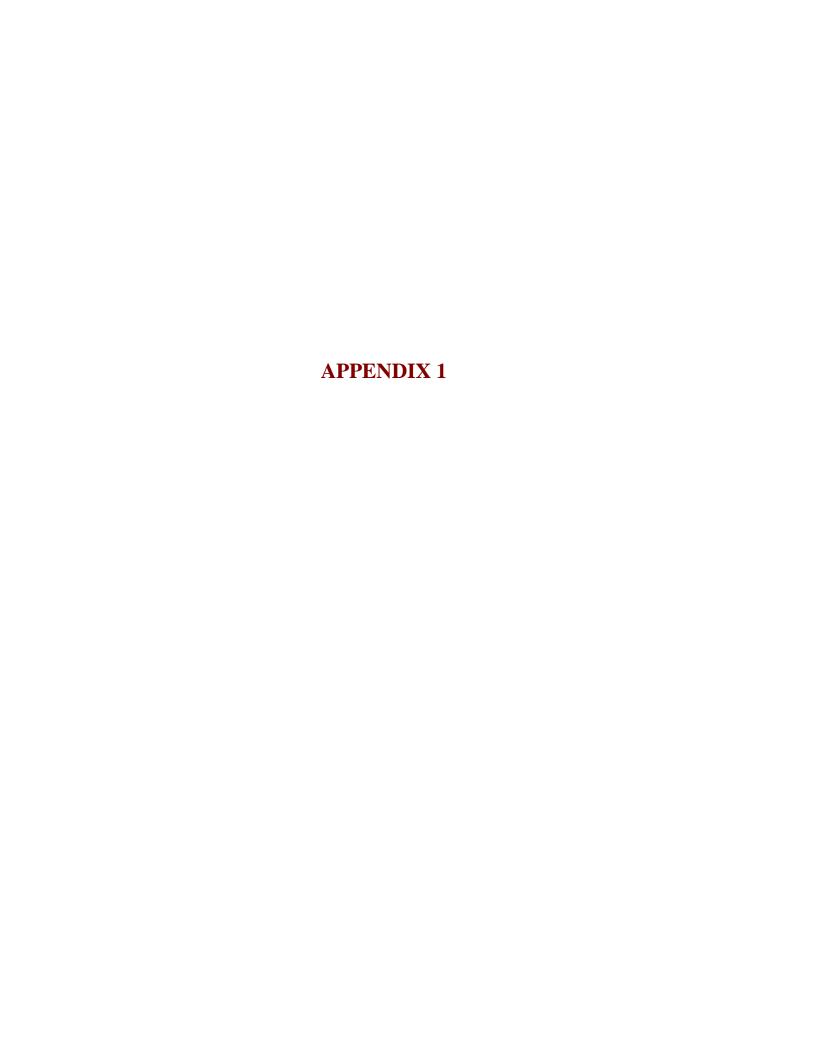
The species for which the River Moy SAC was designated are predominantly aquatic any would not expand there range to encompass the propoed development site.

Turloughmore (Sligo) SAC was designated for habitat type only with no annexed species listed in the features of interest.

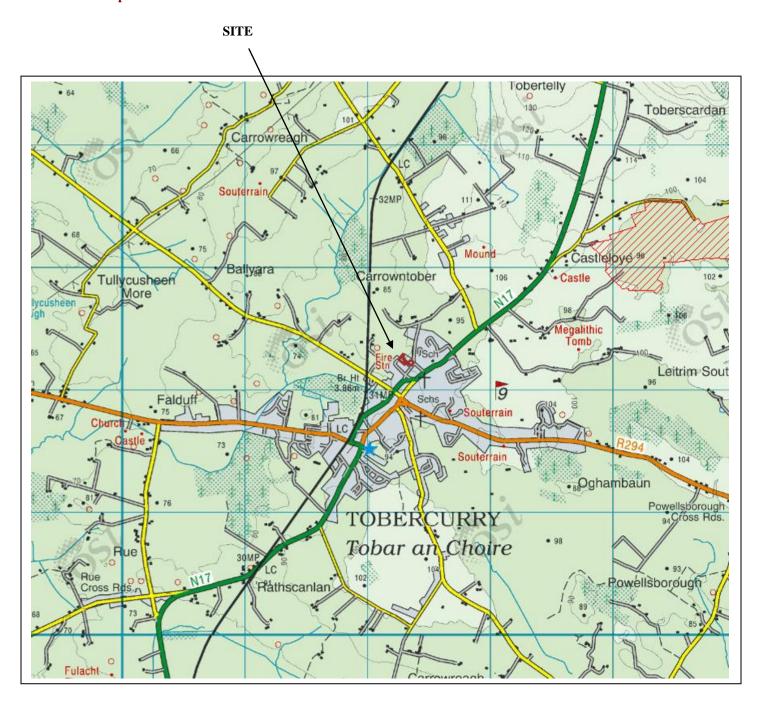
The construction phase of the project lacks the scale and magnitude to impact the Natura sites which are a minimum of 1.7Km form the area of construction.

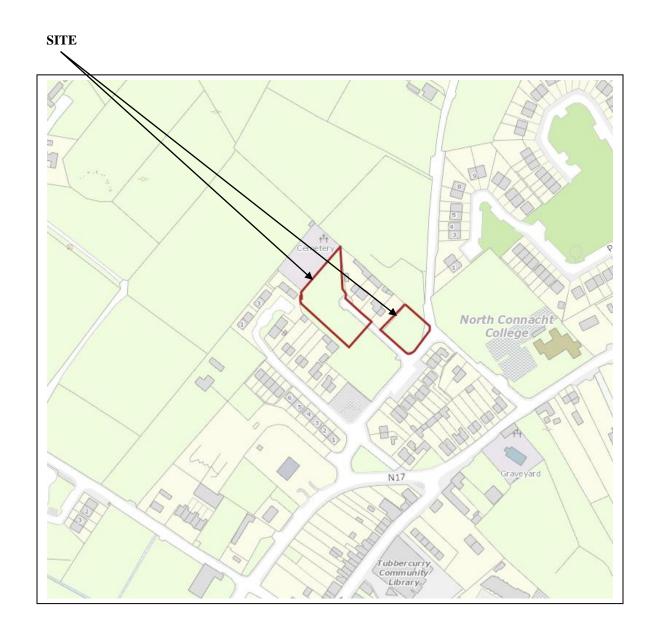
No specific mitigation measures or compensation measures are required to ensure that there are no direct or indirect impacts on the Natura sites habitats or species.

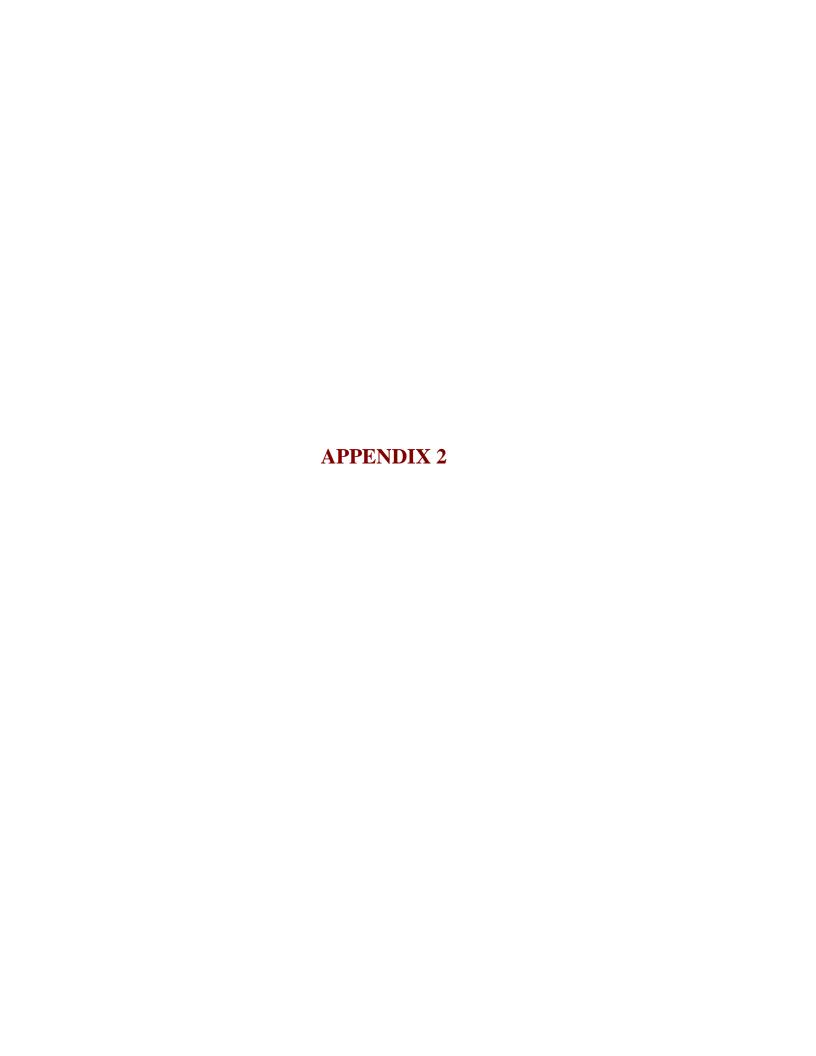
Appendices: Attach Relevant Ecological data as required to support findings of stage 1 screening matrix.



**MAP: 1 Development Location** 





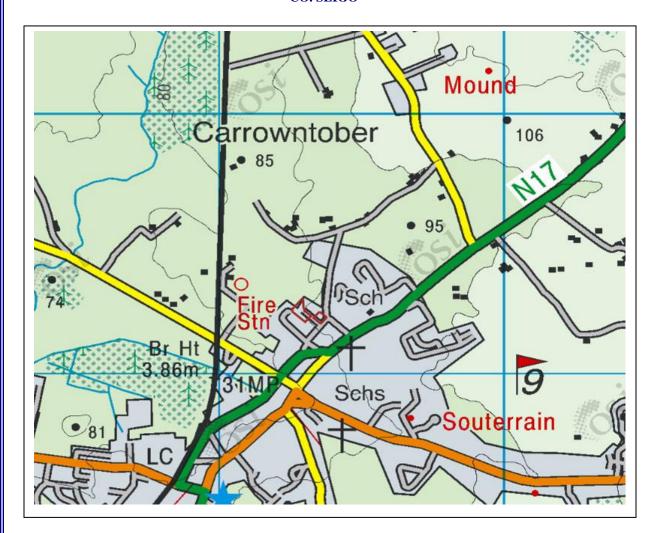


#### ECOLOGICAL SURVEY REGARDING A

# PART 8 PLANNING APPLICATION FOR THE

## CONSTRUCTION OF 15 MIXED RESIDENTAL UNITS

AT
CONNOLLY PARK, TOBERCURRY
CO. SLIGO



Client: Sligo County Council Paul Neary B.Sc. (Hns. Env. Sc.) M.Sc. (Eco. Tox)

County Hall Environmental Consultant

Riverside Stonehall
Sligo Foxford
Co. Sligo Co. Mayo

Tel: 00353 87 2352811

Email: pnearyfoxford@gmail.com

Environmental Impact Assessment-EMS-Environmental Monitoring,-Natura Impact Assessment-Noise Monitoring,-Discharge Licence Applications-IPPC Licence-Isophonic Mapping--Product Analysis-Nutrient Management Plans-Flood Plain Assessment-EPA Site Suitability Assessment

## 1.1 SITE DESCRIPTION AND DESK TOP STUDY

# 1.2 PLOT HISTORY AND CURRENT LAND USE

# 1.3 ECOLOGICAL SURVEY

- 1.3.1 Ecological survey
- **1.3.2** Botany
- 1.3.3 Fauna
- 1.3.4 Avian Species
- 1.3.5 Amphibians
- 1.3.6 Entomology

**Appendix 1: Habitat Map** 

#### 1.1 Site Description and desk top study

The brown field urban site is located in the townland of Carrowntober in Tobercurry Town with an address at Connolly Park. It is located 130M North West of St. Georges Church of Ireland which is on Church Street, North of Humbert St. and North West of the N17 Charlestown to Sligo Road at grid references 552251, 812251 and 552319, 812228.

The proposed project is orientated around the provision of 15 residential units 5 comprising of 7 houses (2 X 2-bed, 2 storey semi-detached houses, 4 X 3-bed 2 storey semi-detached houses, 1 X 4-bed 2 storey detached house) and 8 apartments (4 X 1-bed apartments in one 2 storey block, 4 X 2-bed apartments in a separate 2 storey block), connect to all the existing services (water, electricity, sewer, storm sewer) and a 0.031Ha green area at Connolly Park, Tubbercurry, Co. Sligo. Over two plots involving a land area of 0.385Ha site which is extended to 0.506Ha when taking into account the resurfacing of the existing roads post development involving short duration light construction works (<12months for the main elements – foundations, blocks and roofing).

The proposed site is located in a catchment includes the area drained by the River Moy and all streams entering tidal water in Killala Bay between Benwee Head and Lenadoon Point, Co. Sligo, draining a total area of 2,345km². The largest urban centre in the catchment is Castlebar. The other main urban centres in this catchment are Ballina, Tubbercurry, Kiltimagh, Swinford, Foxford, Enniscrone and Crossmolina. The total population of the catchment is approximately 77,262 with a population density of 33 people per km². The lowland parts of the catchment are underlain by various types of limestones while the upland areas from the Ox Mountains and Croaghmoyle are underlain by a band of igneous and metamorphic rocks. Much of the lowland area south of Lough Conn exhibits a drumlin topography. There are extensive sand and gravel aquifers lying between Swinford and Charlestown to as far south as Knock, to the east of Ballina and southwest of Crossmolina. More specifically it is located in the Tubbercurry Stream 030 sub basin within the River Moy sc010 subcatchment.

The underlying geology is DPBL (dinantian pure bedded limestone) which contains a Regionally important aquifer (RKc) of Extreme (E) vulnerability and a groundwater protection response R2<sup>2</sup>. The principle soil group is "Made" ground which is in line with the urban setting.. The sub soil is a combination of Urban" and TLs wgich are shallow with the DTB <3M. The site is not located within a designated or proposed Natura site nor is it contiguous to one. The terrestrial section of the River Moy SAC (site code 002298) is located 4.382Km to the South West with the Turloughmore (sligo) SAC (site code 00637) bterrestrial boundary is located 1.749Km North East of the proposed site boundary. The on site habitat is described as amenity grassland (GA2) and buildings and artificial surfaces (BL3) with elements of ED3 however overall these habitat areas are too small to be mapped. The urban setting dictates that the surrounding land use consists of commercial building, national roads, regional roads, amenity grassland and dwellings. The noise levels at the site are dominated by RTN from the adjacent N17 and Tobercurry Town.

There is no existing qualitative or quantitative data for ground water in the immediate area of the proposed development but it is classified as "Good" by the NRBMP / WFD with an objective of "Protect" and considered "not at risk".

The North West flowing Order 2 Tubbercurry Stream is located 267M South West of the site boundary and drains a catchment of 10.1Km up to this point with a 95%ile flow of 0.021M<sup>3</sup>S<sup>-1</sup> and a 5%ile of

0.8350.021M<sup>3</sup>S<sup>-1</sup>. There is a monitoring station 325M SW of the site boundary "At the old Railway Bridge" (IEMRRS34T030400). The Q values at this location were 1-2 in 2004, 3-2 in 2007, 2 in 2008, 2 in 2009, 2 in 2010, 2 in 2013, 2-3 in 2014, 2-3 in 2015, and 3 in 2019 giving a Q Legend of "Poor" and a linear Q value of 2-3. There are 5 additional surface water monitoring stations down stream of IEMRRS34T030400 which have Q Legends of "Bad", "Poor", "Poor" "Poor" and "Moderate" moving down stream. In the Tubbercurry stream the Chemical (surface water) status is considered "Good" as is the fish and nitrate status. The Oxygenation Conditions are attributed a "High" status. Other characteristics such as Invertebrate status, Nutrient conditions, DO, pH, supporting chemistry and general conditions are give a "Pass" rating. North withstanding the fore mentioned characteristics the Bio Status is considered "Poor". The UWWTP TPEFF2700D00925 discharges secondary treated effluent to the Tubbercurry Stream. 4.869Km to the West of the site boundary the Tubbercurry Stream outfalls in to the River Moy. The monitoring station upstream of the confluence the Q Linear Value is 4-5 with a Q Legend of "High". The monitoring station directly downstream of the confluence has a Q Linear Value of 3 and a Q legend of "Poor" however further down stream the Q Linear value rises to 4 with a Q Legend of "Good". The total oxidised N is on an upward trajectory but at 1.320mg/L are far from the IQG of 1.8mg/L.

The Near surface nitrate susceptibility of the soils / su soil is classified as 2 (pip) by the EPA with the near surface P susceptibility classified as 2 and sub surface nitrate susceptibility classified as 2.

The EPA has not assessed the relative risk to ground water from N, MRP and pathogens at this specific location which would be anticipated as there are no discharges to ground water to consider given the urban setting. The air quality in the area is described as very good (zone D) which translates to the following,  $SO_2$  0-49 $\mu$ gM<sup>-3</sup> (1hr average),  $NO_2$  0-36  $\mu$ gM<sup>-3</sup> (1hr average),  $O_3$  0-39  $\mu$ gM<sup>-3</sup> (1hr average) and  $PM_{10}$  0-19  $\mu$ gM<sup>-3</sup> (24hr average).

There are no direct or indirect links between the development site and the River Moy / Turloughmore SAC's.

#### 1.2 Plot History and Current Land Use:

The pot is currently considered disused amenity grassland with buildings / artificial surfaces and disturbed ground also present. It is located in an urban serviced street lit setting with continual anthropogenic activity and noise dominated by the RTN form the N17.

#### 1.3 ECOLOGICAL SURVEY

(see maps)

#### 1.3.1 Ecological survey:

The habitat on site is classified as;

- (1) Amenity Grassland (GA2)
- (2) Buildings and Artificial Surfaces (BL3)
- (3) Disturbed Ground (ED3)

**1.3.2 Botany** 

Given the urban setting no meaningful botanical species are present.

1.3.3 Fauna.

There was no direct or indirect evidence of any mammalian species present in the location of the proposed

development. This was anticipated given the continual anthropogenic activity in the urban setting.

1.3.4 Avian species.

No annexed avian species were recorded in the location of the proposed development nor would any be

anticipated. given the urban setting. The SAC avian species would not nest, roost or forage at this location

due to its urban setting, continual anthropogenic activity and potential for predation by domesticated feline

and canines.

1.3.5 Amphibians.

No Amphibian species were noted nor is there any suitable on site habitat suitable to support any populations

of such species.

1.3.6 Entomology.

No invertebrate species of note were recorded.

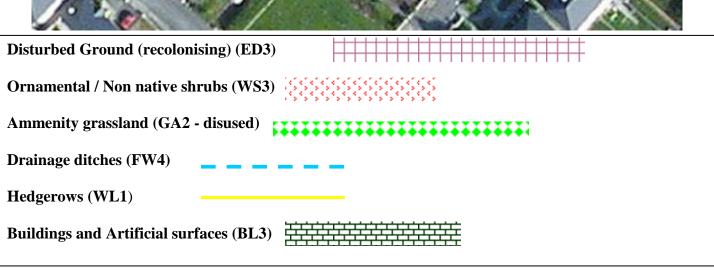
Paul Neary B.Sc., M.Sc.

\*\*PL321 (code 00805)

\*\* These codes indicate that Paul Neary is an approved environmentalist by NPWS / Duchas / Dept. of Agriculture for the carrying out of ecological assessments on NHA's, SAC's, SPA's, pNHA's and National Parks and the creation of management plans and frame work plans on the afore mentioned.

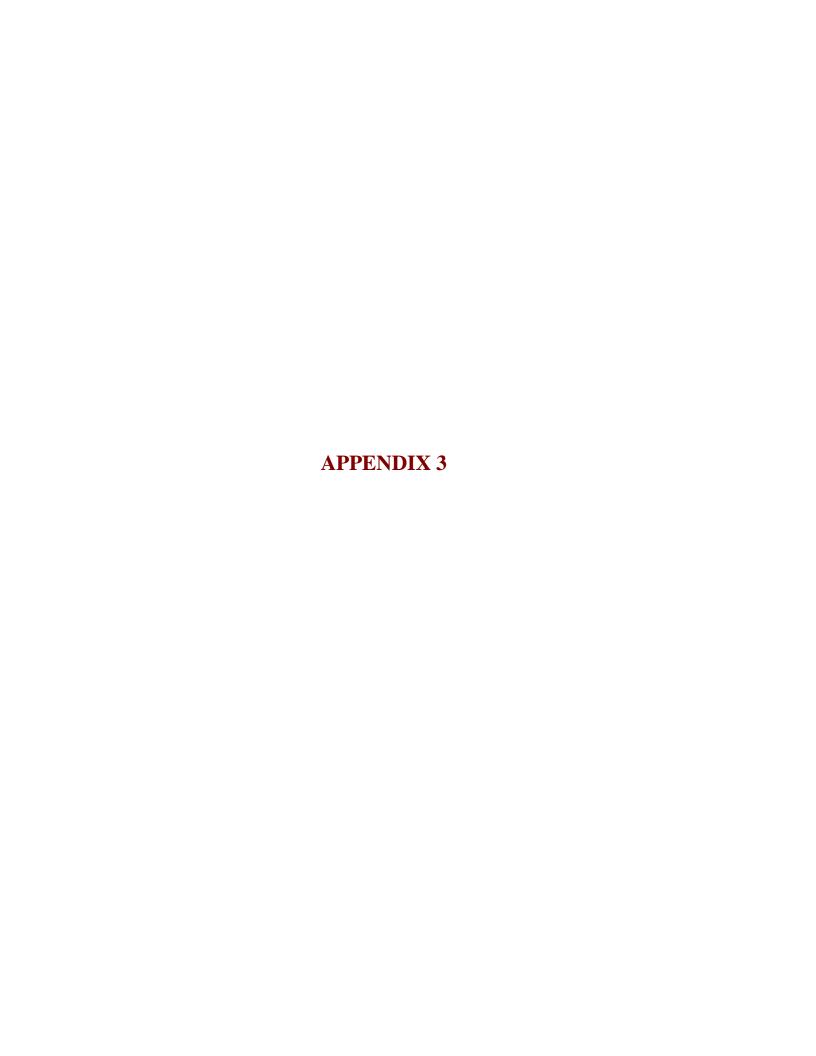
#### **HABITAT MAP**





## Site layout of proposed project:





#### SITE SYNOPSIS

SITE NAME: RIVER MOY SAC: Version Rev: 20 dated 22/10/20

**SITE CODE: 00002298** 

This site comprises almost the entire freshwater element of the Moy and its tributaries including both Loughs Conn and Cullin. The system drains a catchment area of 805 sq. km. Most of the site is in Co. Mayo though parts are in west Sligo and north Roscommon. Apart from the Moy itself, other rivers included within the site are the Deel, Bar Deela, Castlehill, Addergoole, Clydagh and Manulla on the west side and the Glenree, Yellow, Strade, Gweestion, Trimogue, Sonnagh, Mullaghanoe, Owengarve, Eighnagh and Owenaher on the east side. The underlying geology is Carboniferous Limestone for the most part though Carboniferous Sandstone is present at the extreme west of the site with Dalradian Quartzites and schists at the south west. Some of the tributaries at the east, the south of Lough Conn and all Lough Cullin are underlain by granite. There are many towns adjacent to but not within the site. These include Ballina, Crossmolina, Foxford, Swinford, Kiltimagh and Charlestown.

The site is a candidate SAC selected for alluvial wet woodlands and raised bog, both priority habitats on Annex I of the E.U. Habitats Directive. The site is also a candidate SAC selected for old oak woodlands, degraded raised bog and Rhynchosporion, all habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for the following species listed on Annex II of the same directive -Atlantic Salmon, Otter, Sea and Brook Lamprey and White-clawed Crayfish. On the slopes and rising ground around the southern shores of Loughs Conn and Cullin, Oak woodlands are seen. Sessile Oak (Quercus petraea) is the dominant tree with an understorey of Holly (Ilex aquifolium), Hazel (Corylus avellana) and Birch (Betida pubescens) with some Ash (Fraxinus excelsior). Additional species are associated with the lakeshore such as the whitebeam (Sorbus rupicola), Aspen (Populus tremida), Silver Birch (B. pendula) and the shrubs Guelder Rose (Viburnum opidus), Buckthorn (Rhamnus catharticus) and Spindle Tree (Euonymus europaeus). The ground flora is usually composed of Bilberry (Vaccinium myrtillus), Wood Rush (Luzula svivatica), Wood Sorrel (Oxalis acetosella), Buckler Ferns (Dryopteris aemula and D. dilatatd), Hard Fern (Blechnum spicant), Cow-wheat (Melampyrum spp.) and Bracken (Pteridium aqu'dinum). The rare Narrow-leaved Helleborine (Cephalanthera longifolid), protected under the Flora Protection Order, 1999, occurs in association with the woodlands. Also found in these woodlands is the snail (Acanthinula lamellata). associated with old natural woodlands. On higher ground adjacent to the woodlands is blanket bog with scattered shrubs and trees on the drier areas. The rocky knolls often bear Juniper (Juniperus communis) or Gorse (Ulex europaeus), with some unusual rare herb species such as Intermediate Wintergreen (Pyrola media) and Lesser Twayblade (Listera cordatd). Within the site are a number of raised bogs including those at Kilgarriff, Gowlaun, Derrynabrock, Tawnaghbeg and Cloongoonagh. These are examples of raised bogs at the north-western edge of the spectrum and possesses many of the species typical of such in Ireland, including an abundance of Bog Asphodel (Narthecium ossifragum), Carnation Sedge (Carex panicea) and the moss Campylopus atrovirens. Some of the bogs include significant areas of active raised bog habitat. Well developed pool and hummock systems with quaking mats of bog mosses (Sphagnum spp.), Bog Asphodel (Narthecium ossifragum) and White Beaked-sedge (Rhynchospora alba) are present, Many of the pools contain a diversity of plant species, including Bogbean (Menyanthes trifoliata), the bog moss Sphagnum cuspidatum, Campylopus atrovirens., Common Cottongrass (Eriophorutn angust(folium), Great Sundew (Drosera anglica) and occasional Lesser Bladderwort (Utricularia minor). Several of the hummock-forming mosses (Sphagnum fuscurn and 5. imbricatum) which occur here are quite rare in this region and add to the scientific interest of the bogs within the overall site. Depressions on the bogs, pool edges and erosion channels, where the vegetation is dominated by White Beaked-sedge (Rhynchospora alba) comprise the habitat Rhynchosporion. Associated species in this habitat at the site include Bog Asphodel, Sundews, Deergrass (Scirpus Scespitosus) and Carnation Sedge. Degraded raised bog is present where the hydrology of the uncut bogs, has been affected by peat cutting and other land use activities in the surrounding area such as afforestation and associated drainage and also by the Moy arterial drainage. Species typical of the active raised bog habitat are still present but the relative abundance of them is different. A typical example of the degraded habitat, where drying has occurred at the edge of the high bog, contains an

abundance and more uniform cover of Ling Heather (Calluna vulgaris), Carnation Sedge, Deergrass and sometimes Bog-myrtle (Myrica gale). Occurring in association with the uncut high bog are areas of wet regenerating cutover bog with species such as Common Cottongrass, bog mosses and Sundew, while on the drier areas, the vegetation is mostly dominated by Purple Moorgrass (Molinia caerulea). Natural regeneration with peat-forming capability will be possible over time with some restorative measures. The open water of Loughs Conn and Cullin is moderately hard with relatively low colour and good transparency. The phytpoplankton of the lake is dominated by diatoms and blue-green algae and there is evidence that the latter group is more common now than in former years. This indicates that nutrient inflow is occurring. Arctic Charr (Salvelinus alpinus) appear to have disappeared from the lake over the same period of time. The changes in Lough Conn appear to represent an early phase in the eutrification process. Stoneworts still present include Chara aspera, C. delicatula and Nilella cf. opaca. Other plants found in the shallower portions are the pondweeds. Where there is a peat influence Intermediate Bladderwort (Utricularia intermedia) is characteristic while Water Lobelia (Lobelia dortmanna) often grows in sand. Narrow reedbeds and patches of Yellow Water-lily (Nuphar lutea) occur in some of the bays. Drainage of the Moy in the 60s lowered the level of the lakes, exposing wide areas of stony shoreline and wet grassland, which are liable to flooding in winter. This increased the habitat diversity of the shoreline and created a number of marginal wetlands, including fens and marshes. Plant species of note in the lake-margin include Heath Cudweed (Omalotheca sylvatica), Great Burnet (Sanguisorba officinal is) and the northwestern edge of the spectrum and possesses many of the species typical of such in Ireland, including an abundance of Bog Asphodel (Narthecium ossifragum), Carnation Sedge (Carex panicea) and the moss Campylopus atrovirens. Some of the bogs include significant areas of active raised bog habitat. Well developed pool and hummock systems with quaking mats of bog mosses (Sphagnum spp.), Bog Asphodel (Narthecium ossifragum) and White Beaked-sedge (Rhynchospora alba] are present, Many of the pools contain a diversity of plant species, including Bogbean (Menyanthes trifoliata), the bog moss Sphagnum cuspidatum, Campylopus atrovirens., Common Cottongrass (Eriophorutn angust(folium), Great Sundew (Drosera anglica) and occasional Lesser Bladderwort (Utricularia minor). Several of the

hummock-forming mosses (Sphagnum fuscurn and 5. imbricatum) which occur here are quite rare in this region and add to the scientific interest of the bogs within the overall site. Depressions on the bogs, pool edges and erosion channels, where the vegetation is dominated by White Beaked-sedge (Rhynchospora alba) comprise the habitat Rhynchosporion. Associated species in this habitat at the site include Bog Asphodel, Sundews, Deergrass (Scirpus cespitosus) and Carnation Sedge. Degraded raised bog is present where the hydrology of the uncut bogs, has been affected by peat cutting and other land use activities in the surrounding area such as afforestation and associated drainage and also by the Moy arterial drainage. Species typical of the active raised bog habitat are still present but the relative abundance of them is different. A typical example of the degraded habitat, where drying has occurred at the edge of the high bog, contains an abundance and more uniform cover of Ling Heather (Calluna vulgaris), Carnation Sedge, Deergrass and sometimes Bog-myrtle (Myrica gale). Occurring in association with the uncut high bog are areas of wet regenerating cutover bog with species such as Common Cottongrass, bog mosses and Sundew, while on the drier areas, the vegetation is mostly dominated by Purple Moor-grass (Molinia caerulea). Natural regeneration with peat-forming capability will be possible over time with some restorative measures. The open water of Loughs Conn and Cullin is moderately hard with relatively low colour and good transparency. The phytpoplankton of the lake is dominated by diatoms and blue-green algae and there is evidence that the latter group is more common now than in former years. This indicates that nutrient inflow is occurring. Arctic Charr (Salvelinus alpinus) appear to have disappeared from the lake over the same period of time. The changes in Lough Conn appear to represent an early phase in the eutrification process. Stoneworts still present include Chara aspera, C. delicatula and Nilella cf. opaca. Other plants found in the shallower portions are the pondweeds. Where there is a peat influence Intermediate Bladderwort (Utricularia intermedia) is characteristic while Water Lobelia (Lobelia dortmanna) often grows in sand. Narrow reedbeds and patches of Yellow Water-lily (Nuphar lutea) occur in some of the bays. Drainage of the Moy in the 60s lowered the level of the lakes, exposing wide areas of stony shoreline and wet grassland, which are liable to flooding in winter. This increased the habitat diversity of the shoreline and created a number of marginal wetlands, including fens and marshes. Plant species of note in the lake-margin include Heath Cudweed (Omalotheca sylvatica), Great Burnet (Sanguisorba officinal is) and Loughs Conn and Cullin support important concentrations of wintering waterfowl and both are designated Special Protection Areas. A nationally important population of

the Annex I species Greenland White-fronted Geese (average 113 over 6 winters 1994/95 to 1999/00) is centred on Lough Conn. Whooper Swans also occur (numbers range between 25 to 50), along with nationally important populations of Tufted Duck 635, Goldeneye 189 and Coot 464. A range of other species occur on the lakes in regionally important concentrations, notably Wigeon 303, teal 154, Mallard 225, Pochard 182, Lapwing (> 1,000) and Curlew 464. Golden Plover also frequent the lakes, with numbers ranging between 700 and 1,000. Loughs Conn and Cullin are one of the few breeding sites for Common Scoter in Ireland. Breeding has occurred on Lough Conn since about the 1940s when about 20-30 pairs were known. A census in 1983 recorded 29 pairs. Breeding was first proved on Lough Cullin in 1983 when 24 pairs were recorded. In 1995, 24-26 pairs were recorded at Lough Conn and 5 pairs at Lough Cullin. The latest survey in 1999 gives a total of 30 birds for both lakes, comprising only 5 pairs, 18 unpaired males and 2 unpaired females. The reason for the decline is not known but may be due to predation by mink, possible changes in food supply and/or redistribution to other sites. The Common Scoter is a Red listed species.

Agriculture, with particular emphasis on grazing, is the main landuse along the Moy. Much of the grassland is unimproved but improved grassland and silage are also present. The spreading of slurry and fertiliser poses a threat to the water quality of this salmonid river and to the large lakes. Fishing is a main tourist attraction on the Moy and there are a large number of Angler Associations, some with a number of beats. Fishing stands and styles have been erected in places. The North Western Regional Fishery Board have erected fencing along selected stretches of the river as part of their salmonid enhancement programme. Other aspects of tourism are concentrated around Loughs Conn and Cullin. Afforestation has occurred in the past around the shores of Loughs Conn and Cullin. The coniferous trees are due for harvesting shortly. It is proposed to replant with native tree species in this area. Forestry is also present along many of the tributaries and in particular along the headwaters of the Deel. Forestry poses a threat in that sedimentation and acidification occurs. Sedimentation can cover the gravel beds resulting in a loss of suitable spawning grounds. The Moy has been arterially dredged in the 60s. Water levels have been reduced since that time. This is particularly evident along the shores of Loughs Conn and Cullin and in the canal-like appearance of some river stretches. Ongoing maintenance dredging is carried out along stretches of the river system where the gradient is low. This is extremely destructive to salmonid habitat in the area. The site supports populations of several species listed on Annex II of the EU Habitats Directive, and habitats listed on Annex I of this directive, as well as examples of other important habitats. The presence of a fine example of broad-leaved woodland in this part of the country increases the overall habitat diversity and adds to the ecological value of the site as does the presence of the range of nationally rare and Red Data Book plant and animal species.

#### SITE SYNOPSIS

TURLOUGHMORE (SLIGO) SAC Version date: 10.09.2013 Rev13

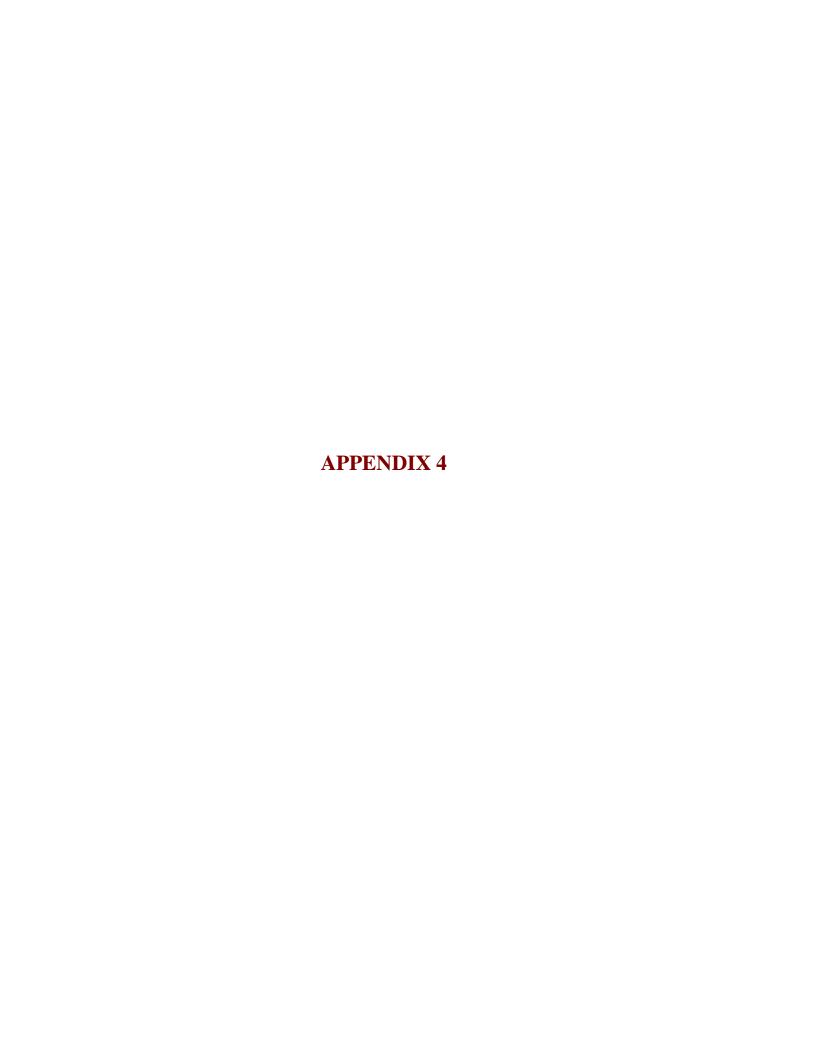
**SITE CODE: 000637** 

Turloughmore occupies a hollow in the drift-covered ridges north-east of Tobercurry in Co. Sligo. It is less calcareous than most turloughs and is also relatively free-draining, resulting in the fact that there are no long-lasting pools left when groundwater levels subside. The reason for this seems to be the sandy glacial drift which fills the basin. This is derived from the acidic rocks to the north, rather than the limestones to the south-east. The drift gives a smooth outline to the turlough and there is only a single small outcrop of rock. A raised bog encroaches from the east, which creates an unusual zonation on this side. Pasture, some of which floods at times of very high water levels, surrounds the remainder of the turlough. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

[3180] Turloughs\*

The turlough consists of two parts, separated by a slight ridge. The vegetation of both basins is a predominantly dry grass and

sedge community. Species present on the floor include a range of sedges (*Carex nigra, C. hirta* and scattered *C. disticha*), with Tall Fescue (*Festuca arundinacea*), Reed Canary-grass (*Phalaris arundinacea*) and Marsh Ragwort (*Senecio aquaticus*). Above this level, there is an extensive area of slightly leached heath-type vegetation, with Mat-grass (*Nardus stricta*), Tufted Hair-grass (*Deschampsia cespitosa*) and Carnation Sedge (*Carex panicea*). Tormentil (*Potentilla erecta*) is abundant, and a little Creeping Cinquefoil (*P. reptans*) is present, with lady's-mantle (*Alchemilla* sp.), Common Spotted-orchid (*Dactylorhiza fuchsii*) and, on the eastern side below the bog, Sneezewort (*Achillea ptarmica*), the eyebright *Euphrasia arctica* and Heath Rush (*Juncus squarrosus*). Above this zone there is often a band of Purple Moor-grass (*Molinia caerulea*), rushes (*Juncus effusus* and *J. conglomeratus*), Devil's-bit Scabious (*Succisa pratensis*) and Sweet Vernal-grass (*Anthoxanthum odoratum*). The site is visited occasionally by small numbers of Whooper Swan, a species listed on Annex I of the E.U. Birds Directive. The turlough has a regular flooding pattern in winter and appears to be unaffected by local or regional drainage. The more oligotrophic communities at this site would be threatened by agricultural improvement to the areas around the turlough. Grazing pressure around the turlough is mostly fairly high and this prevents scrub and woodland from becoming established. Part of the floor of the basin is grazed by horses. Turloughmore is important for being the most northern turlough in the country. It is of ecological interest also for its relatively oligotrophic nature, and has a good representation of the associated vegetation types.



## THIRD SCHEDULE

## Non-native species subject to restrictions under *Regulations 49 and 50*

Part 1: PLANTS

First column	Second column	Third column
Common name	Scientific name	Geographical application
American skunk-cabbage	Lysichifon tnneiicunus	Throughout the State
A red alga	Gratdoupia doryphora	Throughout the State
Brazilian giant-rhubarb	Gunnera manicata	Throughout the State
Broad-leaved rush	Juncus planifolius	Throughout the Slate
Cape pondweed	Aponogeton distachyos	Throughout the State
Cord-grasses	Spartina (all species and hybrids)	Throughout the State
Curly waterweed	Lagarosiphon major	Throughout the State
Dwarf eel-grass	Zostera japoniai	Throughout the State
Fanwort	Cabomba caraliniana	Throughout the State
Floating pennywort	Hydrocotyle ratmnculoides	Throughout the State
Fringed water-lily	Nymphoides peltata	Throughout the State
Giant hogweed	Heracleum mantegazzianum	Throughout the State
Giant knotweed	Fallopia sachalinensis	Throughout the Slate
Giant-rhubarb	Gunnera tinctoria	Throughout the State
Giant salvinia	Salvinia molesta	Throughout the State
Himalayan balsam	Impatiens glanduUfera	Throughout the State
Himalayan knotweed	Persicaria wallichii	Throughout the State
Hottentot -fig	Carpobrotus edulis	Throughout the State
Japanese knotwced	Pallopia japonica	Throughout the State
Large-flowered waterweed	Egeria densa	Throughout the State
Mile-a-minute weed	Persicaria perfoliata	Throughout the State
New Zealand pigmyweed	Crassula helmsii	Throughoui the State
Parrot's feather	Myriophyllum uquaticum	Throughout the State
Rhododendron	Rhododendron ponlicum	Throughout the State
Salmonberry	Rubus spectabilis	Throughout the State
Sea-buckthorn	Hippophae rhamnaides	Throughout (he State
Spanish bluebell	flyacinthoides hispanica	Throughout the State
Three-cornered leek	Alliwn triquetrum	Throughout the State
Wakame	Unduria pirmatifida	Throughout the State
Water chestnut	Trupa ntrtans	Throughout the State
Water fern	Azolla filiculoides	Throughout the State
Water lettuce	Pistia stratiotes	Throughout the State
Water-primrose	Ludwigia (all species)	Throughout the State
Waterweeds	Elodea (all species)	Throughout the State
Wire weed	Sargassum muticum	Throughout the State

Part 2: ANIMALS

A: animals to which Regulations 49 and 50 apply throughout the State or in particular places or categories of places.

First column	Second column	Third Column
Common name	Scientific name	Geographical application
A colonial sea squirt	DJdemnum spp.	Throughout the State
A colonial sea squirt	Perophora japonica	Throughout the State
All freshwater crayfish species except the white-clawed crayfish	All freshwater crayfish species except Austropotamobius paliipes	Throughout the State
American bullfrog	Ranu catesbeiana	Throughout the State
American mink	Neovison vison	Throughout the State
American oyster drill	Urosalpinx dnerea	Throughout the State
Asian oyster drill	Ceratoslonia inornalum	Throughout the State
Asian rapa whelk	Rapana venosa	Throughout the State
Asian river clam	Corbiculu flunrinea	Throughout the State
Bay barnacle	B alarms improvisus	Throughout the State
Black rat	Rattus reams	Offshore islands only
Brown hare	Lepus europaeus	Throughout the State
Brown rat	Rattits norvegicus	Offshore islands only
Canada goose	Branta canadensis	Throughout the State
Carp	Cyprinus carpio	Throughout the State
Chinese mitten crab	Eriocheir sinensis	Throughout the State
Chinese water deer	Hydropotes inermis	Throughout the State
Chub	Leuciscus cephalus	Throughout the State
Common toad	Bufo bufo	Throughout the State
Coypu	Myocastor coy pus	Throughout the State
Dace	Leuciscus leuciscus	Throughout the State
Freshwater shrimp	Dikero gamin arus villosus	Throughout the State
Fox	Vulpes vulpes	Offshore islands only
Grey squirrel	Sciurus cnrolinensis	Throughout the State
Greylag goose	Anser anser	Throughout the State
Harlequin Ladybird	Harmonia axyridis	Throughout the State
Hedgehog	Erinaceus eiiropaeus	Offshore islands only
Irish stoat	Musteta erminea hibemiais	Offshore islands only
Japanese skeleton shrimp	Caprella mutica	Throughout the State
Muntjac deer	Muntiacus reevesi	Throughout the State
Muskrat	Ondatra zibethicus	Throughout the State
Quagga Mussel	Dreissena rostrifonnis	Throughout the State
Roach	Rutilus rutilus	Throughout the State
Roe deer	Capreolus capreolus	Throughout the Stale
Ruddy duck	Oxyuru jamaicensis	Throughout the State

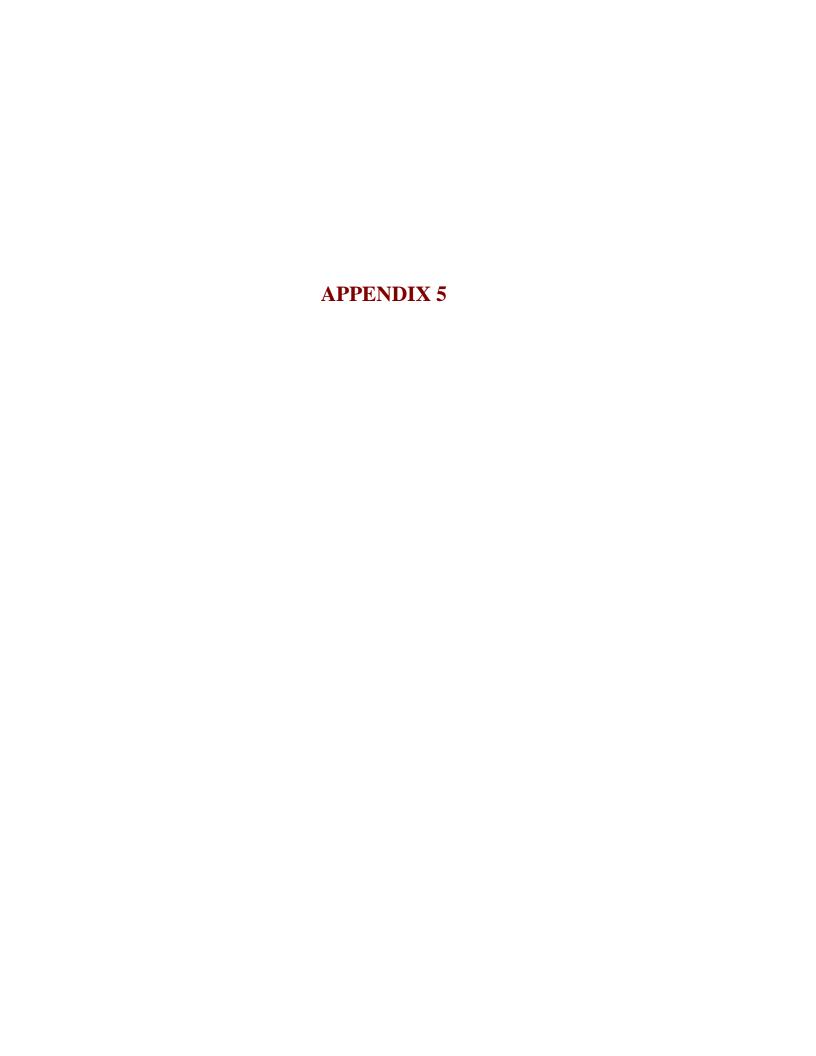
First column	Second column	Third Column
Siberian chipmunk	Tamias sibiricus	Throughout the State
Slipper limpet	Crepidnla fornicala	Throughout the State
Stalked sea squirt	Styela clava	Throughout the State
Tawny owl	Strix aluco	Throughout the Slate
Wild boar	Sus xcrofa	Throughout the State
Zebra mussel	Dreissena polymorpha	Throughout the State

## B: animals to which specified provisions of Regulations 49 and 50 apply.

First column	Second column	Third Column
Common name	Scientific name	Geographical application
Fallow deer	Dania damn	Throughout the State
Sika deer	Cervus nippon	Throughout the State

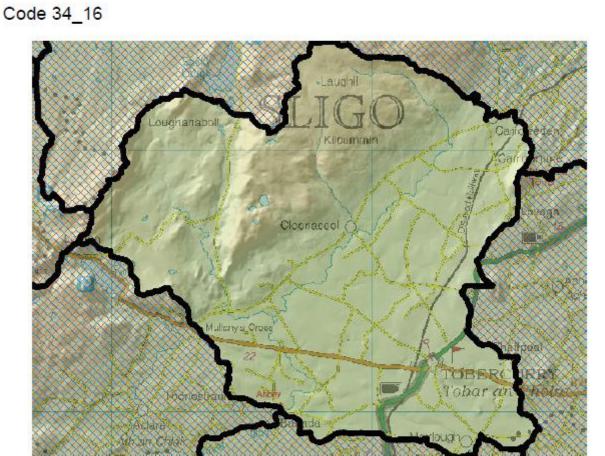
## Part 3: VECTOR MATERIALS

First column	Second column	Third Column
Vector material	Species referred to	Geographical application
Blue mussel (Mytitus edulis) seed for aquaculture taken from places (including places outside the State) where there are established populations of the slipper iimpet (Crepiditla fornicata) or from places within 50 km. of such places	Mussel (Mytilus edulis) Slipper limpet (Crepidula fornicata)	Throughout the State
Soil or spoil taken from places infested with Japanese knotweed (Fallopia japonica), giant knotweed (Fallopia sachalinemis) or their hybrid Bohemian knotweed (Fallopia x bahemica)	Japanese knotweed (Fallopia japonica) Giant knolweed (Fallopia sachalinensis) Bohemian knotweed (Fallopia x bohcmica)	Throughout the State



# WFD Cycle 2

Catchment Moy & Killala Bay
Subcatchment Moy\_SC\_010



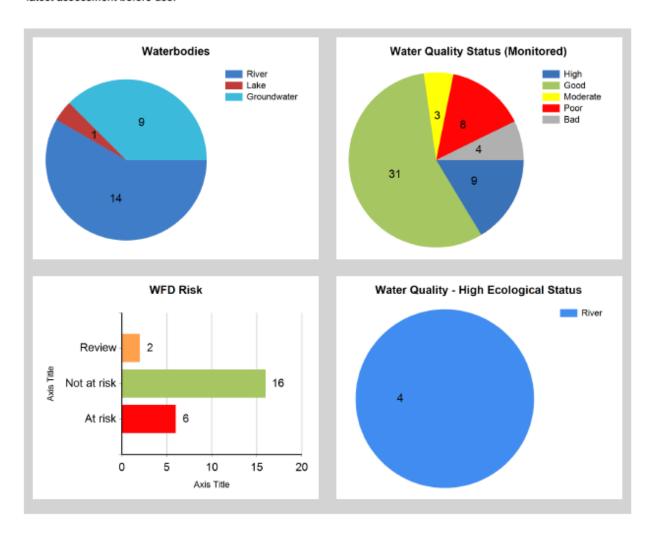
Ordnance Survey Ireland. All rights reserved. Licence Number EN 0059208

Generated on: 15 Jan 2019

#### **Assessment Purpose**

This assessment has been produced as part of the national characterisation programme undertaken for the second cycle of Water Framework Directive river basin management planning. It has been led by the EPA, with input from Local Authorities and other public bodies, and with support from RPS consultants.

The characterisation assessments are automatically generated from the information stored in the WFD Application. They are based on information available to the end of 2015 but may be subject to change until the final 2018-21 river basin management plan is published. Users should ensure that they have the most up to date information by downloading the latest assessment before use.



#### Evaluation of PrioritySubcatchment Issues

In three At Risk water bodies, Tubbercurry\_010, \_020 and Tubbercurry Stream\_010, a wastewater works is the likely significant pressure causing less than Good ecological status. The water quality in all three water bodies will be monitored for improvements following upgrade works of the wastewater treatment works.

The ecological status of Mad\_010 improved from Poor to Moderate in 2013-2015. Sligo Council will continue to monitor for improvements in water quality. If the water quality doesn't improve, a local catchment assessment will be carried out to determine the significant pressures affecting the water body.

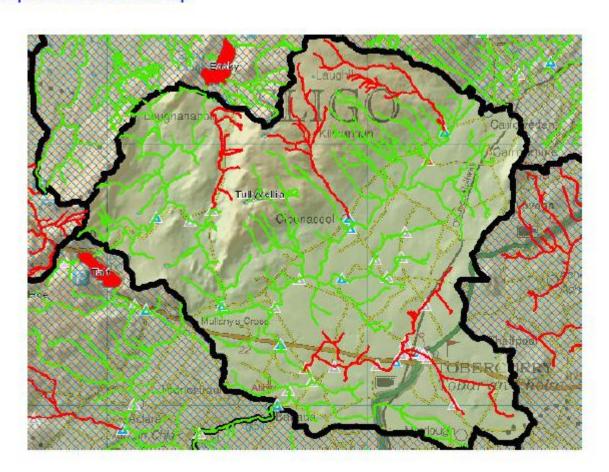
Loughnaboll\_010, which has High status objectives, is At Risk, as it failed to maintain High ecological status in 2013-2015 (Good status was returned in 2013-2015). Forestry, and upstream hydromorphological impacts will be investigated as potential significant pressures.

Three other water bodies, Moy 34\_40, Owenaher\_010 and Lenyvee, also have High status objectives. All three are Not at Risk, as they returned High ecological status in 2013-2015.

Following discussion with Sligo County Council and a review of the available data, the two unassigned water bodies Corsallagh Stream\_010 and Tullyvellia lake, were deemed to be Not at Risk

All remaining water bodies in the subcatchment are also deemed to be Not at Risk.

#### Map Subcatchment Risk Map

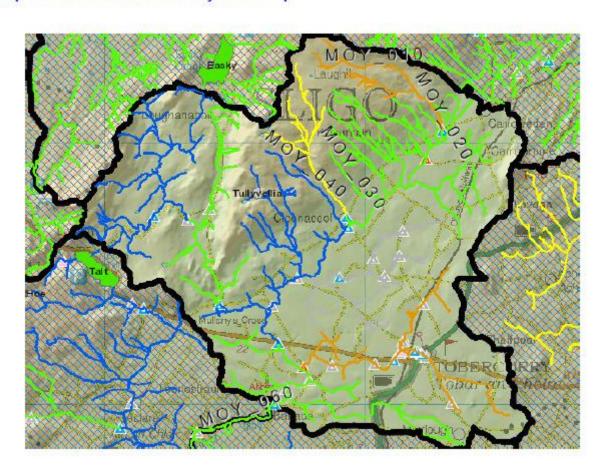


#### River And Lake Waterbodies: WFD Risk

The following river and lake waterbodies are in the subcatchment.

Code	Name	Туре	WFD Risk	Significant Pressure
IE_WE_34L070100	LOUGHANABOLL_010	River	At risk	Yes
IE_WE_34M020010	MOY_010	River	At risk	Yes
IE_WE_34M040100	MAD_010	River	At risk	Yes
IE_WE_34T020050	TUBBERCURRY_010	River	At risk	Yes
IE_WE_34T020200	TUBBERCURRY_020	River	At risk	Yes
IE_WE_34T030400	TUBBERCURRY STREAM_010	River	At risk	Yes
IE_WE_34C120400	CORSALLAGH STREAM_010	River	Not at risk	No
IE_WE_34L060300	LENYVEE_010	River	Not at risk	Yes
IE_WE_34M020050	MOY_020	River	Not at risk	Yes
IE_WE_34M020100	MOY_030	River	Not at risk	Yes
IE_WE_34M020300	MOY_040	River	Not at risk	Yes
IE_WE_34M020400	MOY_050	River	Not at risk	Yes
IE_WE_34O010050	OWENAHER_010	River	Not at risk	Yes
IE_WE_34O010100	OWENAHER_020	River	Not at risk	Yes

## Map Subcatchment Water Quality Status Map



## River And Lake Waterbodies: Water Quality Status

The water quality status of river and lake waterbodies in the subcatchment is as follows.

Code	Name	Туре	2007-09	2010-12	2010-15
IE_WE_34C120400	CORSALLAGH STREAM_010	River	Unassigned	Unassigned	Unassigned
IE_WE_34L060300	LENYVEE_010	River	High	High	High
IE_WE_34L070100	LOUGHANABOLL_010	River	Unassigned	High	Good
IE_WE_34M040100	MAD_010	River	Poor	Poor	Moderate
IE_WE_34M020010	MOY_010	River	Moderate	Moderate	Poor
IE_WE_34M020050	MOY_020	River	Good	Good	Good
IE_WE_34M020100	MOY_030	River	High	Good	Good
IE_WE_34M020300	MOY_040	River	High	High	High
IE_WE_34M020400	MOY_050	River	Good	Good	Good
IE_WE_34O010050	OWENAHER_010	River	Unassigned	Good	High
IE_WE_34O010100	OWENAHER_020	River	Good	Good	Good
IE_WE_34T030400	TUBBERCURRY STREAM_010	River	Bad	Bad	Poor
IE_WE_34T020050	TUBBERCURRY_010	River	Bad	Bad	Poor
IE_WE_34T020200	TUBBERCURRY_020	River	Poor	Poor	Poor
IE_WE_34_297	Tullyvellia	Lake	Unassigned	Unassigned	Unassigned

#### **Potentially Dependent Transitional and Coastal Waterbodies**

The Transitional and Coastal waterbodies listed below intersect spatially with river and lake waterbodies in the subcatchment ...

Code Name Type Local Authority WFD Risk	K
---	---

#### **Potentially Dependent Groundwater Waterbodies**

The groundwaters listed below interset spatially with river and lake waterbodies in the subcatchment ...

Code	Name	Туре	Local Authority	WFD Risk
IE_WE_G_0029	Tobercurry	Groundwater	Sligo County Council	Not at risk
IE_WE_G_0032	Kilkelly Charlestown	Groundwater	Mayo County Council	Not at risk
IE_WE_G_0033	Swinford	Groundwater	Mayo County Council	Not at risk
IE_WE_G_0034	Foxford	Groundwater	Mayo County Council	Not at risk
IE_WE_G_0037	Ballymote	Groundwater	Sligo County Council	Not at risk
IE_WE_G_0038	Lavagh-Ballintougher	Groundwater	Sligo County Council	Not at risk
IE_WE_G_0039	Ballygawley	Groundwater	Sligo County Council	Not at risk
IE_WE_G_0048	Collooney	Groundwater	Sligo County Council	Review
IE_WE_G_0104	GWDTE-Turloughmore Sligo (SAC000637)	Groundwater	Sligo County Council	Review

## Protected Areas intersecting River and Lake Waterbodies

The Protected Areas listed below intersect spatially with river and lake waterbodies in the subcatchment ...

Code	Name	Туре	Waterbody Name	Association Type
IEPA5D0025	River Moy	Salmonid	MOY_010	Overlapping / partly within Protected Area
IEPA5D0025	River Moy	Salmonid	MOY_020	Overlapping / partly within Protected Area
IEPA5D0025	River Moy	Salmonid	MOY_030	Overlapping / partly within Protected Area
IEPA5D0025	River Moy	Salmonid	MOY_040	Overlapping / partly within Protected Area
IEPA5D0025	River Moy	Salmonid	MOY_050	Overlapping / partly within Protected Area

#### **Pressures**

Below is a list of all significant pressures identified in the subcatchment.

Code	Name	WFD Risk	Pressure Category	Pressure Sub Category
IE_WE_34L070100	LOUGHANABOLL_010	At risk	Forestry	Forestry
IE_WE_34L070100	LOUGHANABOLL_010	At risk	Hydromorphology	Overgrazing
IE_WE_34M020010	MOY_010	At risk	Forestry	Forestry
IE_WE_34M020010	MOY_010	At risk	Agriculture	Agriculture
IE_WE_34M020010	MOY_010	At risk	Hydromorphology	Land Drainage
IE_WE_34M040100	MAD_010	At risk	Forestry	Clearfelling
IE_WE_34M040100	MAD_010	At risk	Hydromorphology	Overgrazing
IE_WE_34T020050	TUBBERCURRY_010	At risk	Urban Waste Water	Agglomeration PE of 2,001 to 10,000
IE_WE_34T020200	TUBBERCURRY_020	At risk	Agriculture	Pasture
IE_WE_34T020200	TUBBERCURRY_020	At risk	Urban Waste Water	Agglomeration PE of 2,001 to 10,000
IE_WE_34T030400	TUBBERCURRY STREAM_010	At risk	Urban Waste Water	Combined Sewer Overflows
IE_WE_G_0048	Collooney	Review	Anthropogenic Pressures	Unknown
IE_WE_G_0104	GWDTE-Turloughmore Sligo (SAC000637)	Review	Anthropogenic Pressures	Unknown

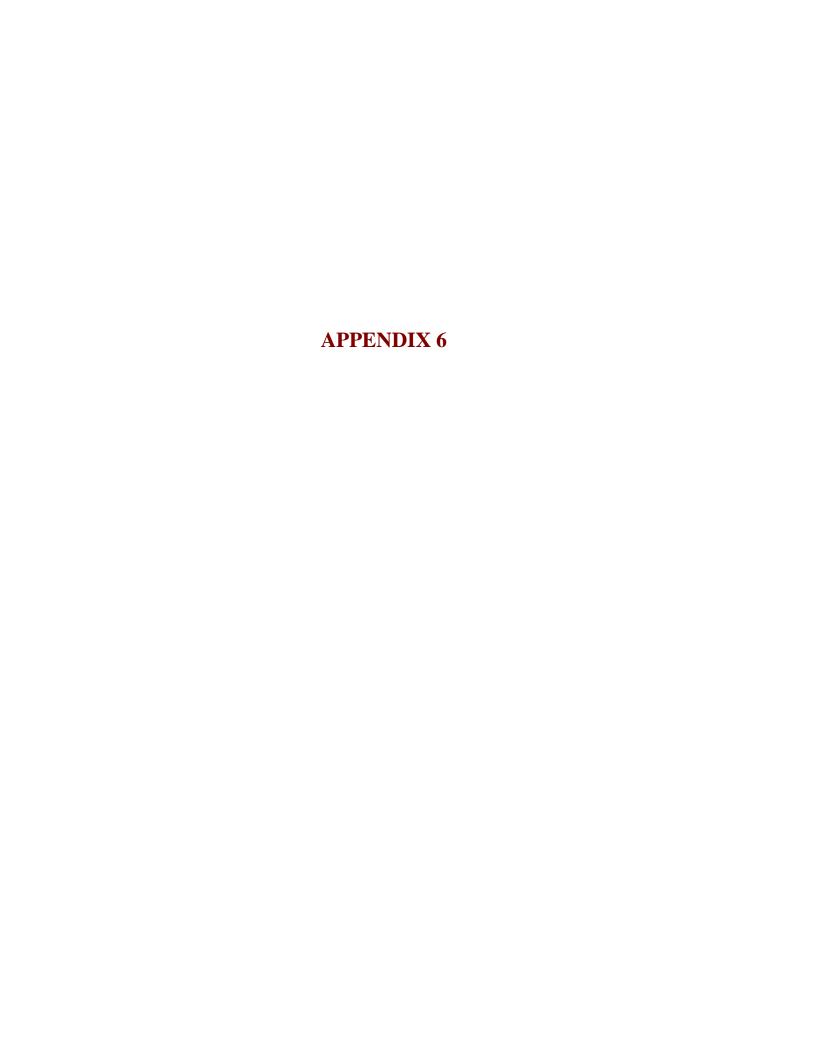
#### **Further Characterisation Actions**

The following further characterisation actions have been identified. These are necessary to help understand more fully issues in the subcatchment and their likely cause.

Code	Name	Action	Responsible Organisation
IE_WE_34T020050	TUBBERCURRY_010	IA1 Provision of Information	Sligo County Council
IE_WE_34M020010	MOY_010	IA7 Multiple Sources in Multiple Areas	Sligo County Council
IE_WE_34T020200	TUBBERCURRY_020	IA7 Multiple Sources in Multiple Areas	Sligo County Council
IE_WE_34M020010	MOY_010	IA1 Provision of Information	Environmental Protection Agency
IE_WE_34M040100	MAD_010	IA1 Provision of Information	Environmental Protection Agency
IE_WE_34L070100	LOUGHANABOLL_010	IA1 Provision of Information	Environmental Protection Agency
IE_WE_34M040100	MAD_010	IA7 Multiple Sources in Multiple Areas	Sligo County Council
IE_WE_34L070100	LOUGHANABOLL_010	IA8 High status RWB pressures	Sligo County Council
IE_WE_34T030400	TUBBERCURRY STREAM_010	IA1 Provision of Information	Sligo County Council

### SW 2013-2018

▼ Ecological Status or Potential	Poor	<b>~</b>
▼ Biological Status or Potential	Poor	<b> ~</b>
Invertebrate Status or Potential	Poor	<b> ~</b>
▼ Supporting Chemistry Conditions	Moderate	<b> ~</b>
▼ General Conditions	Moderate	
▼ Oxygenation Conditions	Fail	<b>~</b>
Dissolved Oxygen (% Sat)	Pass	<b> ~</b>
Other determinand for oxygenation conditions	Moderate	<b> ~</b>
Acidification Conditions	Pass	<b> ~</b>
pH	Pass	<b> ~</b>
Nutrient Conditions	Fail	<b>~</b>
Nitrogen Conditions	Moderate	~
Nitrate	Good	<b> ~</b>
Ammonium	Moderate	~
Phosphorous Conditions	Moderate	
Orthophosphate	Moderate	<del></del>



	Commention	Ohiostimos	-aadin 4haa		this war and and
1 ne	Conservation	Objectives t	isea in the 2	generation of	this report are

<u>River Moy SAC 002298 – 31<sup>st</sup> August 2016</u>

<u>Turloughmore (Sligo) SAC 00637 – 15<sup>th</sup> January/2021</u>

The Detailed Conservation Objectives and Supporting Documents are available for reference on the NPWS

Web site