Monaghan
COUNTY COUNCIL
COMHAIRLE CONTAE
MHUINEACHÁIN

Arts
047 71114

Community &
Enterprise
047 30500

County Library
047 51143

County Museum
047 82928

Environment
047 30593

Finance
047 30589

Fire/Building Control
047 30521

Higher Education
Grants
047 30550

Housing Estate
Management
047 30529

Housing Loans/Grants
047 30527

Human Resource
Management
047 30586

Motor Tax
047 81175

Planning
047 30532

Register of Electors
047 30547

Roads
047 30597

Water Services
047 30504

10th April 2010

Administration,
Environmental Licensing Programme,
Office of Climate, Licensing & Resource Use,
Environmental Protection Agency,
Headquarters,
PO Box 3000,
Johnston Castle Estate,
Co. Wexford.

Re: Notice in Accordance with Regulation 25(c) (ii) of the Waste Water Discharge (Authorisation) Regulations 2007

A Chara,

Further to your correspondence of the 7th April 2010, please find enclosed the following documentation and accompanying CD-ROMs relating to our application for nine Waste Water Discharge Certificates of Authorisations (A0020-01, A0029-01, A0031-01, A0032-01, A0033-01, A0034 -01, A0035-01, A0036-01 and A0037-01):

- Appropriate Assessment for each agglomeration - Original + 1 copy
- Amended Non-Technical Summary for each agglomeration - Original + 1 copy
- CD-ROM of each Appropriate Assessment & Amended Non-Technical Summary

I trust you will find everything in order, however should you require any further information, please do not hesitate to contact me.

Mise le Meas,

Mark Johnston

Senior Executive Engineer.

Monaghan County Council

Clontibret Waste Water Discharge Certificate of Authorisation (A0031-01)

Appropriate Assessment Screening for the purposes of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No 684 of 2007)

Date: May 2010

Contents

Tables

Figures

1 Introduction

1.1 Background

As required under the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No 684 of 2007), Monaghan County Council submitted nine Certificates of Authorisation applications to the EPA on 22nd December 2009. The WwTW's concerned are Threemilehouse, Tydavnet, Clontibret, Knockatallon, Oram, Carrickroe, Drum, Magheracloone and Tyholland.

This report has been produced to support the Waste Water Certificate of Authorisation application for the Clontibret agglomerations (EPA Application Register Numbers A0031-01) and to form a response to the EPA correspondence of 7th April 2010 (in line with Regulation 25 c (ii) of the Waste Water Discharge (Authorisation) Regulations 2007) which requested Monaghan County Council to:

"*Assess the likelihood of significant effects of the waste water discharges from the above agglomerations on the relevant European sites by referring to Circular L8/08 "Water Services Investment and Rural Water Programmes - Protection of Natural Heritage and National Monuments" issued by the Department of Environment Heritage and Local Government. In particular, the flow diagram in Appendix 1 should be completed within one month of the date of this notice. If significant effects are likely then an appropriate assessment must be carried out and a report of this assessment forwarded to the Agency within one month of the date of this notice*".

1.2 Appropriate Assessment Legislation

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora - the "Habitats Directive" - provide legal protection for habitats and species of European importance. The Directives requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conversation status and provides the legislation to protect habitats and species of community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000 sites.

Natura 2000 sites are Special Areas of Conservation (SAC) designated under the Habitats Directive and Special Protection Areas (SPA) designated under the Conservation of Wild Birds Directive (79/409/EEC). Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects affecting Natura 2000 sites.

Article 6(3) establishes the requirement for Appropriate Assessment:

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.

Article 6(4) of the Directive deals with alternative solutions, the test of "imperative reasons of overriding public interest" (IROPI) and compensatory measures:

If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

1.3 Waste Water Discharge (Authorisation) Regulations, 2007

All discharges to the aquatic environment from sewerage systems owned, managed and operated by water service authorities will require a waste water discharge licence or certificate of authorisation from the EPA. The authorities are required to apply to the Agency for a licence or certificate of authorisation by set dates depending on the population equivalent of the area served by the sewer network.

The authorisation process provides for the Agency to place stringent conditions on the operation of such discharges to ensure that potential effects on the receiving water bodies are strictly limited and controlled. In overall terms the aim is to achieve good surface water and ground water status in addition to complying with standards and objectives established for associated protected areas by 2015 at the latest.

1.4 Methodology

1.4.1 Initial Screening of Projects

In order to identify potential ecological constraints, all water services projects (in this case the Clontibret Waste Water Treatment Plants and associated discharges), should be subjected to initial screening in accordance with the initial screening checklist in the *Circular L8/08 Water Services Investment and Rural Water Programmes – Protection of Natural Heritage and National Monuments (September 2008)* (see **Table 1** below). This process will confirm if the project is required to be screened for impacts (as per Appendix 1 Circular L8/08 DoEHLG Sept 2008).

Table 1: Initial Screening for Waste Water Services Infrastructure Projects

Initial Screening (as per DoEHLG Circular L8/08 September 2008)
1. Is the development in or on the boundary of a nature conservation site NHA/SAC/SPA?
2. Will nationally protected species be directly impacted? Wildlife Acts (1976 and 2000), Flora Protection order (S.I. 94 of 1999)?
3. Is the development a surface water discharge or abstraction in the surface water catchment, or immediately downstream of a nature conservation site with water dependant qualifying habitats/ species?
4. Is the development a groundwater discharge or abstraction in the ground water catchment or within 5km of a nature conservation site with water-dependant qualifying habitats/species?
5. Is the development in the surface water or groundwater catchment of salmonid waters?
6. Is the treatment plant in an active or former floodplain or flood zone of a river, lake, etc?
7. Is the development a surface discharge or abstraction to or from marine waters and within 3km of a marine nature conservation site?
8. Will the project in combination with other projects (existing and proposed) or changes to such projects affect the hydrology or water levels of sites of nature conservation interest or the habitats of protected species?

1.4.2 Appropriate Assessment Screening (Stage 1)

Where initial screening reveals that a project is required to be screened for impacts, an Appropriate Assessment Screening must be carried out in accordance with the Appendix 1 Flow Diagram of the DoEHLG Circular 08/08 (see **Figure 1** below).

The flow diagram in the DoEHLG Circular 08/08 will be used to screen for impacts. If the conclusion of the screening outlined in this Natura 2000 Screening Protocol is to "Assess Impacts", then Stage 2 Appropriate Assessment will be required to be carried out.

This screening methodology is designed to assist those planning and designing water services solutions when determining whether Appropriate Assessment for Natura 2000/European sites or habitats & species listed in the annexes of the EU Birds and Habitats Directives is necessary or not. It also should also be applied to Natural Heritage Areas (NHAs).

1.4.3 Appropriate Assessment (Stage 2)

In Stage 2 of this process, the impact(s) of the project or plan on the integrity of the European Site is considered with respect to the Conservation Objectives of the site.

The impact of the discharges from the WwTW on the integrity of the European Designated Site(s) will be considered with respect to the Conservation Objectives of the site. This involves acquiring adequate information on the project, in this case the WWTWs, predicting the likely effects (direct, indirect, short and long term, isolated, interactive and cumulative) and their impacts on the conservation objectives and status of the European Designated Site. Finally, mitigation measures will need to be identified and assessed against the adverse effects the project is likely to cause.

This Appropriate Assessment process has been prepared in accordance with EPA guidance notes and Department of Environment Heritage and Local Government Circular Letter L8/08 (September 2008) with data from the NPWS, EPA and Water Matters web site, in combination with Monaghan County Council data.

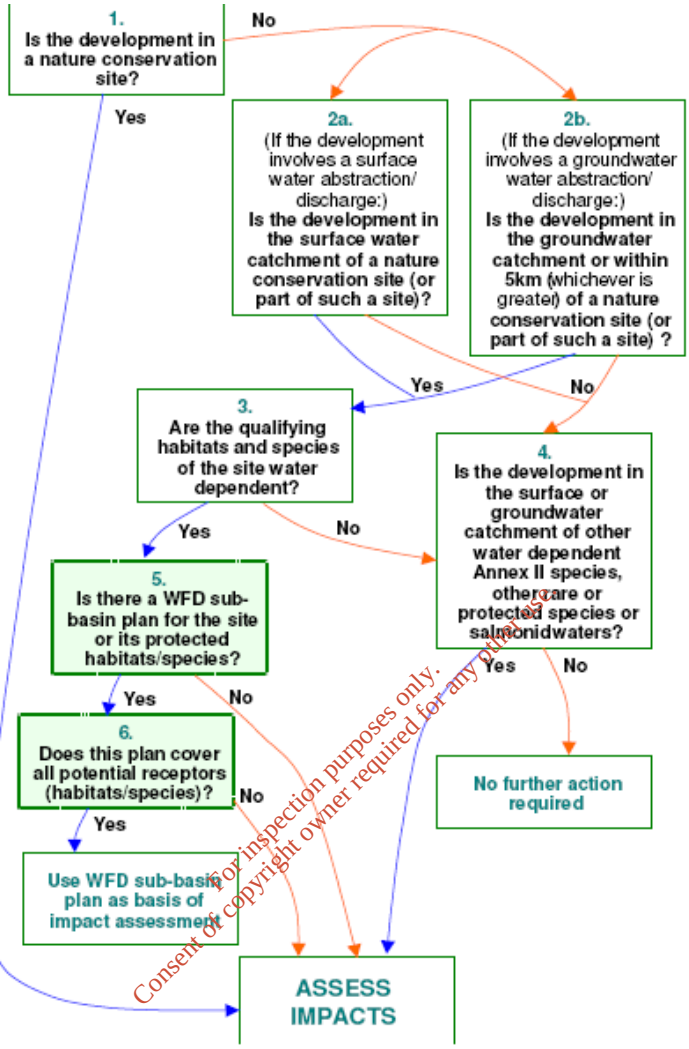


Figure 1. Flow Diagram for Screening Water Services Infrastructure Projects (Source: DoEHLG Circular L08/08 Sept 2008)

2 Pre Screening

As per the DoEHLG Circular 08/08, pre-screening is required to determine whether water services projects (in this case, Clontibret Waste Water Treatment Plant Discharge) must be screened for impacts. If the answer is "yes" to any of the pre-screening questions, Stage 1 Appropriate Assessment Screening, must be carried out. If the conclusion of the screening outlined in the Natura 2000 Screening Protocol is to "Assess Impacts", then an Appropriate Assessment must be prepared.

The requirement to screen for impacts will be determined in the sub section below.

2.1 Clontibret WWTW

2.1.1 Background

The Waste Water Works serving Clontibret and the immediate environs comprises a network of gravity sewers, and associated rising main and a Waste Water Treatment Works. The plant is currently overloaded with a PE of approximately 306 (Design PE 150). There are plans to construct a new treatment plant and converting the existing plant into a transfer pumping station. However this is dependent on funding.

The primary discharge of the Waste Water Works is to a tributary of the Cor River (at National Grid Reference 275451E, 330410N) in the townland of Lisglasson, County Monaghan. The associated Waste Water Treatment Plant is located at 275435E 330409N also in the townland of Lisglasson, County Monaghan.

The River Cor flows in a northerly direction along the eastern boundary of the waste water treatment plant. This water course is situated within the Neagh Bann IRBD river basin and Blackwater River catchment. The Cor River is not identified as a "sensitive" waterway under the Urban Waste Water Treatment Regulations S.I. 254 2001 nor is it classified as a "salmonid river" under S.I. 293 of 1988. The Blackwater River, however, of which the River Cor is a tributary, is classified as "sensitive" from the confluence of the River Shambles to Newmills Bridge.

There are no Natura 2000 Sites (SPA's and SAC's) or NHA's directly upstream or downstream of the wastewater treatment plant (see **Figure 2**).

Further information on the Clontibret Waste Water agglomeration is contained in Monaghan County Council's Waste Water Certificate of Authorisation application (Ref: A0031-01).

2.1.2 Clontibret Pre-Screening

Table 2. The Requirement to Screen the Clontibret WwTW for Impacts

Clontibret WwTW	Answer
1. Is the development in or on the boundary of a nature conservation site NHA/SAC/SPA?	No
2. Will nationally protected species be directly impacted? Wildlife Acts (1976 and 2000), Flora Protection order (S.I. 94 of 1999)?	No
3. Is the development a surface water discharge or abstraction in the surface water catchment or immediately downstream of a nature conservation site with water dependant qualifying habitats/ species?	No
4. Is the development a groundwater discharge or abstraction in the ground water catchment or within 5km of a nature conservation site with water-dependant qualifying habitats/species?	No
5. Is the development in the surface water or groundwater catchment of salmonid waters?	No
6. Is the treatment plant in an active or former floodplain or flood zone of a river, lake, etc.?	No
7. Is the development a surface discharge or abstraction to or from marine waters and within 3km of a marine nature conservation site?	No
8. Will the project in combination with other projects (existing and proposed) or changes to such projects affect the hydrology or water levels of sites of nature conservation interest or the habitats of protected species?	No

The Clontibret WWTW is not in or on the boundary of an NHA, SAC or SPA (**Figure 2**). The discharge is not immediately downstream or upstream or in the catchment of a nature conservation sites with water dependent habitats or species. The nearest designated sites are the Tassan Lough NHA (approximately 6.3km South East of the WWTW) and Wrights Wood NHA (approximately 9.3km West of the WWTW).

Wrights Wood NHA is a hilltop woodland which is noted for its species content, comprising very old Goat Willow trees (*Salix caprea*) and younger coppiced ash trees (*Fraxinus excelsior*). The woodland is likely to have been planted as it appears to be even – aged. The open canopy nature of it is such that a diverse range of species have developed as ground flora. These include Herb Robert (*Geranium robertianum*),

Wood Avens (*Geum urbanum*) and Germander Speedwell (*Veronica chamaedrys*). Wrights Wood is one of the best examples of coppiced ash woodland in Monaghan County.

Tassan Lough NHA (Site Code 001666) is listed as a proposed Natural Heritage Area. It is noted for its bedrock geology, comprising Silurian outcrops which support particular habitats which include some rare plant species. The lough is fringed with common reeds and further back from the shoreline, where the rock outcrops are located, areas of grassland and sphagnum mosses are thriving.

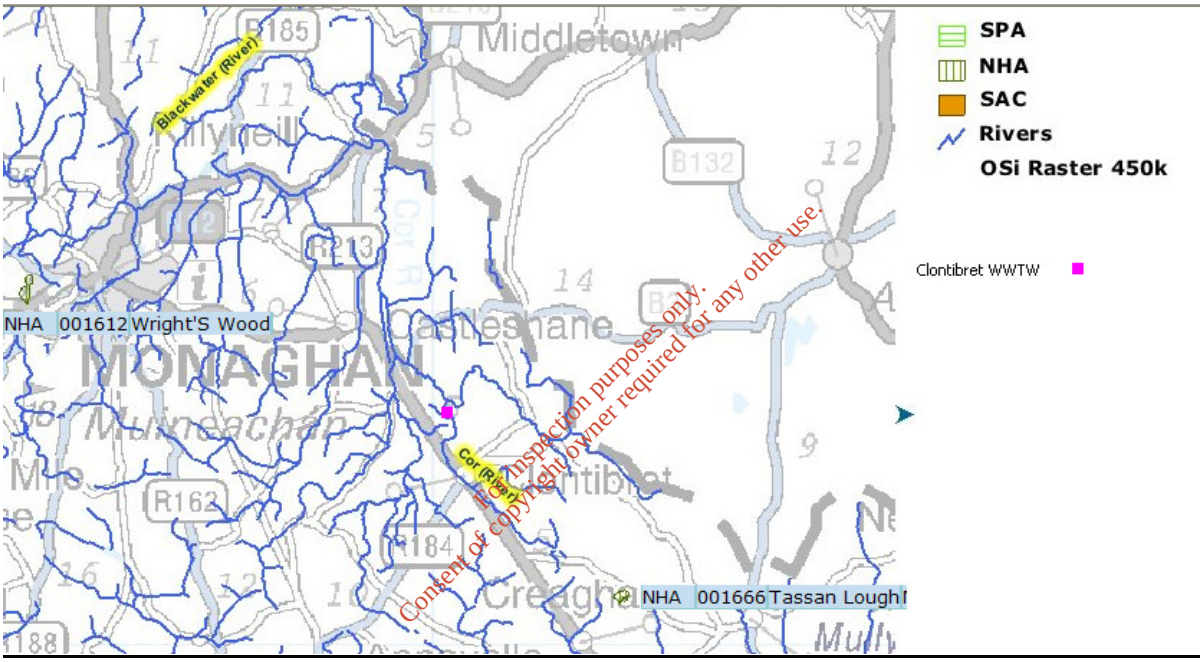


Figure 2. Nearest Designated Site to Clontibret WWTW **(Source: EPA ENVision)**

As the answer to **all** of the questions is 'no', the Screening Stage 1 of the Appropriate Assessment process is not required. However, in order to comply with the letter from the EPA dated 7th April 2010 which states that "*in particular, the flow diagram in Appendix 1 should be completed and the results of each section recorded*", the Screening Stage 1 and the Appendix 1 Flow Diagram of *Circular L8/08* have been completed for this project.

3 Stage 1-Screening

3.1 Introduction

As noted in Section 1.3.2, where initial screening reveals that a project is required to be screened for impacts, an Appropriate Assessment Screening must be carried out in accordance with the Appendix 1 Flow Diagram of the DoEHLG Circular 08/08. However, as noted in Section 2.1.2, Screening Stage 1 is not required as a result of the pre-screening stage, but is has been completed in this instance, in order to comply with the EPA letter dated 7th April 2010.

This Screening exercise will identify the likely impacts (if any) from the Clontibret waste water discharge effluent on the **Tassan Lough NHA** and **Wrights Wood NHA** and will consider whether these effects are likely to be significant.

3.2 Step 1 Management of the Site

The Clontibret agglomeration and its discharge are neither directly connected to nor necessary to the management of the Tassan lough NHA and Wrights Wood NHA.

3.3 Step 2 Description of the Project

3.3.1 General

A brief description of the WwTW and associated discharge is given in this section. Further information is contained within the Waste Water Discharge Certificate of Authorisation application File Ref A0032-01.

The Waste Water Works serving the Clontibret and the immediate environs comprises a network of gravity sewers, and associated rising main and a Waste Water Treatment Works with a design capacity of 150 PE. The plant is currently overloaded with a PE of approximately 306.

The primary discharge of the Waste Water Works is to a tributary of the Cor River (at National Grid Reference 275451E, 330410N) in the townland of Lisglasson, County Monaghan. The associated Waste Water Treatment Plant is located at 275435E 330409N also in the townland of Lisglasson, County Monaghan.

The Clontibret Waste Water Treatment Plant (WWTP) discharges directly into the River Cor, a tributary of the Blackwater River at NRG 275451E 330410N. The River Cor flows in a northerly direction along the eastern boundary of the waste water treatment plant. This water course is situated within the Neagh Bann IRBD River Basin and Blackwater River catchment.

The Cor River is not identified as a "sensitive" waterway under the Urban Waste Water Treatment Regulations S.I. 254 2001 nor is it classified as a "salmonid river" under S.I. 293 of 1988. The Blackwater River, however, of which the River Cor is a tributary, is classified as "sensitive" from the confluence of the River Shambles to Newmills Bridge. The overall River Water Framework Directive status for the Cor River is 1a, hence the water body is at risk of failing to meet good status in 2015

The treated effluent has an average BOD concentration of 34.3 mg/l and average suspended solids concentration of 32 mg/l and COD concentration of 85.5mg/l. Average concentrations of nutrients are as follows; orthophosphate 24.84 mg/l (P), average Total Phosphorus 3.6mg/l (P) and Total Nitrogen 7.5mg/l (N). The level of dangerous substances in the effluent show a level below those in the Water Quality (Dangerous Substances) Regulations 2001.

Water quality on the River Cor has remained at Q3 since 2001 (EPA Water Quality Details).

3.3.2 Clontibret Waste Water Treatment Plant

Inlet Works

Unscreened sewage flows by gravity from the connected houses. The inlet works comprises of a flume and grit trap. Level and flow measurement is available. Flow is measured using level measurement on the flume. Flow is piped to the two settling tanks immediately adjacent to the inlet works. Hand stops are provided at the inlet works to direct the flow to either of the two tanks, or to isolate either.

Photograph 1 Inlet Works

Treatment

Two settlement tanks are located side by side. Floated sludge is trapped by an underflow baffle, preventing it from entering the zone of the v-notch weir.

Photograph 2 Settlement Tanks

The settled sewage is treated by means of a compact system, the BMS Aerotor. It is a combined fixed film reactor and active aeration system mounted on a horizontal shaft, similar in operation and process to a rotating biological contactor.

The flow passes from the Aerotor to a humus tank. Flows enter the humus tank through a diffuser drum ensuring the flow is directed evenly toward the v-notched weir.

Photograph 3 Humus Tank

Effluent passes over the v-notched weir, is collected in a channel and piped to the discharge point. A sludge draw-off is provided for settled sludge (as seen above).

Sludge

The primary settling tanks are de-sludged every two months. The sludge is tankered to Monaghan WWTP for further treatment.

Future plans for Clontibret:

A new treatment plant is proposed at a different location. The existing plant would be retained only as a transfer pumping station and network extensions would be provided to serve houses in the south-east of the village. This is funding dependent.

3.3.3 In Combination Impacts

This Appropriate Assessment screening process only relates to the Clontibret WWTW discharge. The discharge has the potential to only have an effect on the aquatic environment, hence it can be inferred that in combination effects need only apply to other plans and projects that have an impact on the aquatic environment. Based on the above, a review of industrial and municipal discharges to surface water in the vicinity was undertaken. The only surface water discharge upstream or downsteam of the waste water discharge is from Kabeyun Ltd (W0121-01). Surface water emissions from the composting facility are from clean roof-water and yard water and contaminated run-off. As part of the Waste Licence conditions the licensee is required to provide for effective segregation of clean roof-water and contaminated surface water from the yards and to collect and store the contaminated surface water. The EPA monitoring results for the receiving waterbody upstream and downstream of the WWTW discharge point and also downstream of the compositing facility, indicate a Q value of 3. This would indicate that other diffuse sources such as agricultural run-off from pastures, arable lands, crop cultivation are contributing to the status of the water body. These run-offs are likely contain elevated levels of nutrients, namely nitrogen and phosphorus, suspended solids and residues of pesticides and herbicides.

Taking the above on board and the fact that the NHA's are not located up gradient and down gradient of the discharge, no significant combination impacts are predicted on the Tassan Lough NHA and Wrights Wood NHA.

3.4 Step 3 Characteristics of the Site

3.4.1 General Description

Tassan Lough NHA

Tassan Lough NHA (Site Code 001666) is listed as a proposed Natural Heritage Area. It is noted for its bedrock geology, comprising Silurian outcrops which support particular habitats which include some rare plant species. The Lough is fringed with common reeds and further back from the shoreline, where the rock outcrops are located, areas of grassland and sphagnum mosses are thriving. This small Lough is situated in an area of Silurian outcrops, about 7km north-west of Castleblaney.

Silurian outcrops bound the Lough on its southern side, with grassland around it's other aspects. Very few species colonise the outcrops, Heath Grass is the main grass, Cross-Leaved Heath and Ling are the two dominant herbs, with a Lichen. The Lough is fringed with an extensive band of Common Reed with Common Pondweed inside the reed.

Between the shoreline and the rock outcrops is an area of wet grassland with patches dominated by Sphagnum moss. Purple Moor Grass and Velvet Bent are the two dominant grasses. The main herbaceous species are Marsh Cinquefoil; Bog Bean and Bog Asphodel, with Round-leaved Sundew abundant on small hummocks.

The area is ecologically interesting not because of rare species but as an example of the type of community to be found in Silurian area.

Wrights Wood NHA

Wrights Wood NHA is a hilltop woodland which is noted for its species content, comprising very old Goat Willow trees (*Salix caprea*) and younger coppiced ash trees (*Fraxinus excelsior*). The woodland is likely to have been planted as it appears to be even – aged. The open canopy nature of it is such that a diverse range of species have developed as ground flora. These include Herb Robert (*Geranium robertianum*), Wood Avens (*Geum urbanum*) and Germander Speedwell (*Veronica chamaedrys*). Wrights Wood is one of the best examples of coppiced ash woodland in Monaghan County.

3.4.2 NHA Qualifying Interest

Tassan Lough NHA

The Qualifying Interest for the site is "*lake in Silurian outcrops area/ heath/ reed/ bog/ moss/rare species*".

The Conservation Objective of this site is to maintain the qualifying interests for this NHA at favourable conservation status.

The qualifying interests for which the NHA is designated are water dependent. However, the designated site is not located upstream or downstream of the discharge location or in the discharge's receiving water catchment. Therefore, no significant effects on the NHA's integrity and qualifying interests resulting from the Clontibret WWTW discharge are likely and no further assessment is required.

Wrights Wood NHA

The Qualifying Interest for the site is "*Woodland with old and young trees/coppiced ash woodland/ berries*".

The Conservation Objective of this site is to maintain the qualifying interests for this NHA at favourable conservation status.

The qualifying interests for which the NHA is designated are not water dependent and the designated site is not located upstream or downstream of the discharge location or in the discharge's receiving water catchment. No significant effects on the NHA's integrity and qualifying interests are likely, therefore no further assessment is required.

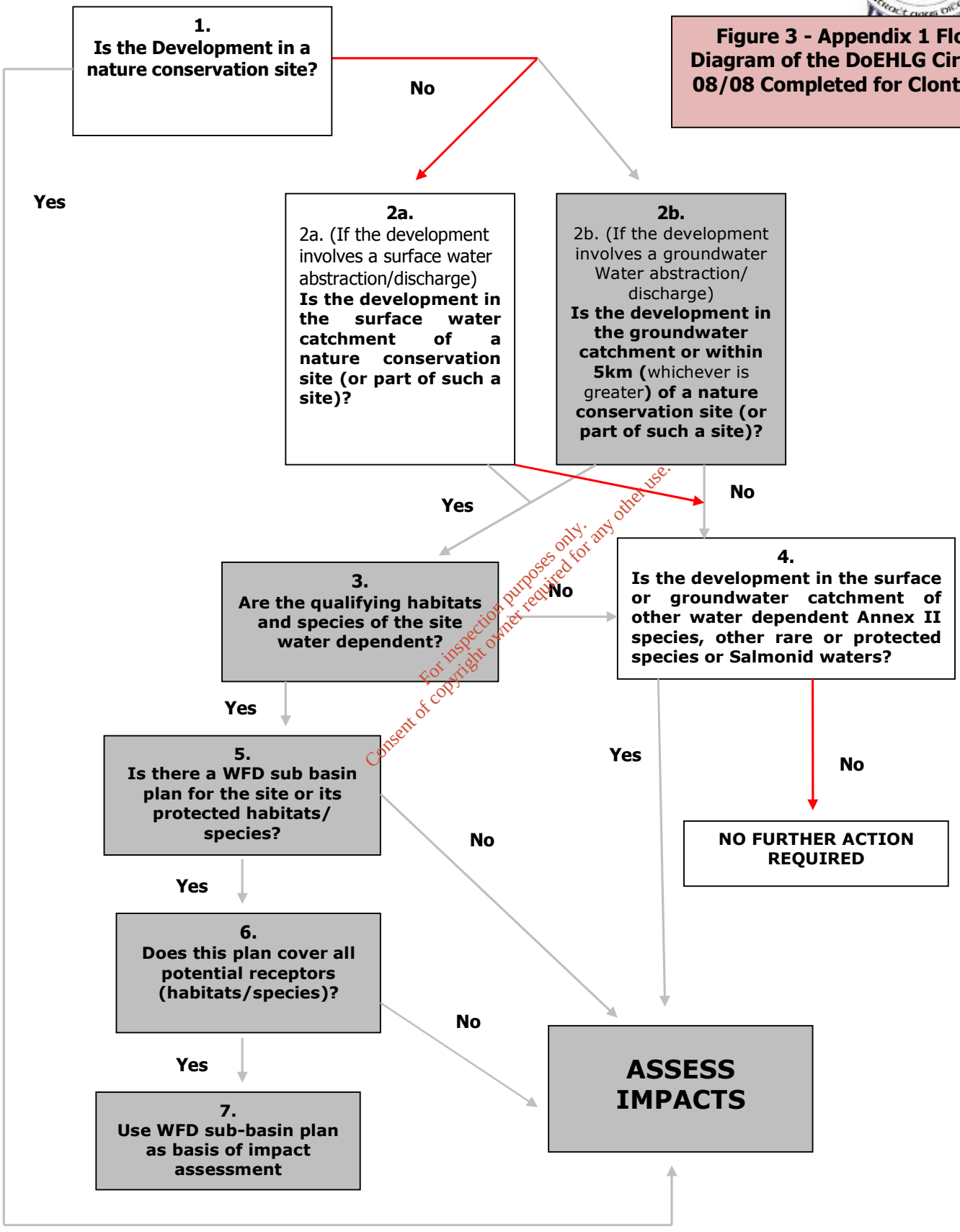
3.5 Step 4 Assessment of Significance

As per Circular L8/08 Water Services Investment and Rural Water Programmes - Protection of Natural Heritage and National Monuments issued by the DoEHLG, this section displays the outcome of the Appendix 1 Flow Diagram which was used to screen for impacts. It should be noted that the red line indicates the project-specific outcomes.

3.6 Conclusion

The discharge from the Clontibret WWTW will not have any significant adverse impacts on the conservation objectives or integrity of the Tassan Lough NHA and Wrights Wood NHA and therefore, Stage 2 of the Appropriate Assessment process was not required.

Figure 3 - Appendix 1 Flow Diagram of the DoEHLG Circular 08/08 Completed for Clontibret



CLONTIBRET WASTE WATER TREATMENT WORKS

WASTE WATER DISCHARGE CERTIFICATE OF AUTHORISATION

Revised Non Technical Summary

Monaghan County Council
County Offices
The Glen
Co. Monaghan

May 2010

Clontibret - Revised Non Technical Summary

Monaghan County Council is making an application to the Environmental Protection Agency (EPA) for a Waste Water Discharge Certificate of Authorisation for the Clontibret Waste Water Treatment Plant (WWTP) and agglomeration in compliance with the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).

Under Schedule 2 of the above regulations, the prescribed date for submission of Waste Water Discharge Licence Applications for agglomerations (with discharges with a population equivalent of less than 500 PE) is 22nd December 2009. The WWTP at Clontibret falls under this category, having an agglomeration with a design population equivalent of 150.

The Waste Water Works serving the Clontibret and the immediate environs comprises a network of gravity sewers, and associated rising main and a Waste Water Treatment Works. The plant is currently overloaded with a PE of approximately 306. There are plans to construct a new treatment plant and converting the existing plant into a transfer pumping station. However, this is dependent on funding.

The plant is supervised/manned for two hours Monday to Friday and for half an hour on Saturdays and Sundays, giving a total of 11 hours a week.

The primary discharge of the Waste Water Works is to a tributary of the Cor River (at National Grid Reference 275451E, 330410N) in the townland of Lisglasson, County Monaghan. The associated Waste Water Treatment Plant is located at 275435E 330409N also in the townland of Lisglasson, County Monaghan.

The River Cor flows in a northerly direction along the eastern boundary of the waste water treatment plant. This water course is situated within the Neagh Bann IRBD river basin and Blackwater River catchment. The Cor River is not identified as a "sensitive" waterway under the Urban Waste Water Treatment Regulations S.I. 254 2001 nor is it classified as a "salmonid river" under S.I. 293 of 1988. The Blackwater River, however, of which the River Cor is a tributary, is classified as "sensitive" from the confluence of the River Shambles to Newmills Bridge.

The overall River Water Framework Directive status for the Cor River is 1a, hence the water body is at risk of failing to meet good status in 2015.

The Clontibret WWTW is not in or on the boundary of an NHA, SAC or SPA. The discharge is not immediately downstream or upstream or in the catchment of a nature conservation sites with water dependent habitats or species. The nearest designated sites are the Tassan Lough NHA (approximately 6.3km South East of the WWTW) and Wrights Wood NHA (approximately 9.3km West of the WWTW).

Taking cognisance of the DoEHLG Circular L8/08 "Water Services Investment and Rural Water Programmes - Protection of Natural Heritage and National Monuments", a pre-screening and Appropriate Assessment Screening was carried out to determine the likely impacts on the Tassan Lough NHA and Wrights Wood NHA of the Clontibret waste water discharge and to consider whether these effects are likely to be significant.

It was concluded that the discharge from the Clontibret WWTW will not have any significant adverse impacts on the conservation objectives or integrity of the Tassan Lough NHA and Wrights Wood NHA and therefore, Stage 2 of the Appropriate Assessment process was not required.

The treated effluent from the Clontibret plant has an average BOD concentration of 34.3 mg/l, average suspended solids concentration of 32 mg/l and COD concentration of 85.5mg/l. Average concentrations of nutrients are as follows: orthophosphate 24.84 mg/l (P), average Total Phosphorus 3.6mg/l (P) and Total Nitrogen 7.5mg/l (N). The level of dangerous substances in the effluent show a level below those in the Water Quality (Dangerous Substances) Regulations 2001.

There has been no change in water quality at along the Cor River since 2006. Water quality on the River Cor has remained at Q3 since 2001.

There is an EPA monitoring station upstream and downstream of the discharge point (Br in Clontibret and the 3rd Br d/s Clontibret). A Q value of 3 was recorded upstream of the discharge point (Station No. 0600 Br in Clontibret) in 2004. A previous Q value of 3 was recorded at this monitoring site from 1989 -2001. A Q value of 3 was recorded downstream of the discharge point (3rd Br d/s Clontibret) in 2004, 2001, 1998 and 1996, with a Q value of 1 in 1989.

Monaghan County Council monitors the river directly upstream and downstream of the treatment plant (see table below):

	Upstream	Downstream
BOD (mg/l)	3.7	3.9
TSS (mg/l)	16.9	20.3
Total N (mg/l N)	3.2	3.4
Ammonia (mg/l NH_3-N	0.2	0.4
Total P (mg/l)	0.2	0.2
Ortho Phosphate (mg/l)	0.236	0.76

With regard to dangerous substances (October 2009), upstream and downstream concentrations were below the detection level for 12 of the 19 parameters. No levels upstream or downstream exceeded the standards as outlined in the Water Quality (Dangerous Substances) Regulations 2001.

Due to lack of flow data on the receiving water, the assimilative capacity was unable to be calculated. However, water quality monitoring results (EPA and Monaghan County Council Data) of the receiving water (upstream and downstream) would indicate that the Environmental Objectives contained within the Surface Water Regulations 2009 (S.I. No. 272 of 2009) are not being met both upstream or downstream of the plant. This would indicate that other sources such as rural and agricultural runoff may be contributing to quality of water both upstream and downstream.