OFFICE OF ENVIRONMENTAL SUSTAINABILITY

INSPECTORS REPORT ON A WASTE WATER DISCHARGE LICENCE APPLICATION

To:	Dr Eimear Cotter, Director	
From:	Yvonne English, Inspector	Environmental Licensing Programme
Date:	9 December 2020	
RE:	Application for a Waste Water Discharge Licence review from Irish Water, for the agglomeration named Ballymote, Reg. No. D0094-02.	

Application & Agglomeration Details	
Agglomeration Name:	Ballymote (Appendix 1)
County:	Sligo
Schedule of discharge licensed:	Discharges from agglomerations with a population equivalent of 2,001 to 10,000.
Licence review application received:	24 May 2018
Notices under Regulation 18(3)(b)[1] issued:	12 July 2019
Information under Regulation 18(3)(b) received:	2 December 2019
Site notice check:	20 June 2018
Notice under Regulation 12 issued:	21 June 2018
Information under Regulation 12 received:	6 July 2018
Site Visit:	10 July 2019
Submissions Received:	Two - 28 June 2018, 23 July 2020
Design Population Equivalent:	3,500
Actual Population Equivalent:	2,594
Type of treatment:	Current: Secondary Proposed: Secondary

[1] Waste Water Discharge (Authorisation) Regulations, 2007, as amended.

1. Review application

Sligo County Council was granted a Waste Water Discharge Licence (WWDL) D0094-01, dated 09/03/2011, in respect of the agglomeration named Ballymote, which subsequently transferred to Irish Water. An application for a review of WWDL D0094-01 was received by the Agency on 24/05/2018 from Irish Water. The reason for the review is to;

- change the location of the primary discharge point which was incorrectly reported to the Agency in the original waste water discharge licence application,
- provide for upgraded water water treatment plant (3,500 p.e.); and
- to request new emission limit values based on the assimilative capacity of the receiving water body.

Planning permission was granted in May 2017 by Sligo County Council for an upgrade to the existing Ballymote Waste Water Treatment Plant (WWTP). An Environmental Impact Assessment was not required as part of the planning process. The upgrade works are currently underway.

The existing WWTP in Ballymote provides secondary treatment. The WWTP consists of inlet works, two aeration tanks with mechanical aerators and one final settlement tank. The plant was designed to cater for 2,000 population equivalent (p.e.) and is currently overloaded as the actual p.e. of the plant is 2,594. The current primary discharge is to the Owenmore River. It was incorrectly reported in the original licence application that the primary discharge from the agglomeration was to the smaller Ballymote Stream. There are also currently two Storm Water Overflows (SWOs) in operation within the Ballymote agglomeration. There will be no change to the number or locations of these SWOs as part of the upgrade works, however, upgrade works are proposed to both overflows.

It is proposed to construct a new WWTP on the site of the current WWTP. The new WWTP will include upgraded inlet works (screens and grit removal), forward feed and storm water pumping station, storm water holding tank, aeration tanks, two secondary clarifiers and activated sludge pumps. The design p.e. of the proposed new plant is 3,500. The proposed new WWTP was due to be completed and commissioned by the end of 2020, however due to COVID 19 pandemic restrictions, construction and commissioning have been delayed. It is now expected that the new plant will be commissioned and operational in Quarter 1, 2021.

2. Discharges to waters

The following table outlines the discharges to waters from this agglomeration.

Table 1: Discharges to waters

Primary discharge point	
Receiving water name	Owenmore River
Type of receiving water	Freshwater
Normal flow	739 m^3/day (this equates to approximately 3,500 p.e at 210 litres per person per day)
Maximum flow	2,025 m^3/day
Storm water overflow(s)	
Storm water overflow(s)	Yes (two)
Receiving water name(s)	Freshwater (Owenmore River, Ballymote Stream)
Emergency overflow(s)	
Emergency overflow(s)	Yes (one)

3. Receiving waters and impact

The following table summarises the main considerations in relation to the Owenmore River downstream of the primary discharge.

Table 2: Receiving waters

Characteristic	**Classification**	**Comment**
Receiving water name	Owenmore River	WFD Code: IE_WE_35O060250
Designations	Templehouse & & Cloonacleigha Loughs SAC	SAC (Site code: 000636)
Receiving water monitoring stations	BrS.S.W of Emlaghfad (EPA RS Code: RS35O060200) 1km d/s Ballymote Stream (EPA RS Code: RS35O060250)	1.6 km upstream of SW001 on Owenmore River 0.5 km downstream of SW001 on Owenmore River
Biological quality rating (Q value)	Upstream - Q 3-4 (2018) Downstream - Q4 (2018)	RS35O060200 – 1.6 km upstream RS35O060250 – 0.5 km downstream
WFD status	Good	Good Status to be protected

Mass balance calculations were carried out using the monitoring information provided by the Agency's Office of Evidence and Assessment to determine the impact of discharges on the Owenmore River. The mass balance calculations are based on the 95%ile flow in the receiving water, the mean background concentration of each parameter in the receiving water, the normal effluent discharge rate (739m^3/day) and the maximum permitted concentration of the parameter in the effluent (Table 3). This

is a cumulative assessment of the receiving waterbody as the background concentration takes into account any upstream discharges or impacts on the receiving waterbody.

The estimated 95%ile flow for the Owenmore (Sligo) at the OPW station 35004 Big Br, located just upstream of the primary discharge (E165726 N313177) is 0.17m^3/s.

Table 3: Mass Balance Calculations.

Parameter	Background Concentration (mg/l)	Proposed ELVs for discharge (mg/l)	Contribution from discharge (mg/l)	Predicted downstream concentration (mg/l)	Relevant standard (mg/l)
BOD	0.9	25	1.15	2.05	2.6 Note 1
Orthophosphate	0.022	1	0.046	0.068	0.075 Note 1
Total Ammonia	0.055	1.5	0.065	0.12	0.14 Note 1

Note 1: 95%ile EQS for Good status specified in the European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended.

An emission limit value (ELV) of 1 mg/l is recommended for orthophosphate, 1.5 mg/l for ammonia and 25 mg/l for BOD in the RL. The limits are set based on the mass balance calculations and in accordance with the combined approach.

The WWTP is currently being upgraded with an initial expected completion date of the end of 2020, however, due to COVID 19 pandemic restrictions, construction and commissioning have been delayed. It is now expected that the new plant will be commissioned and operational in Quarter 1, 2021. The waste water discharge licence application states that the upgraded works will achieve the following treated effluent standards: 25mg/l for BOD, 2 mg/l for orthophosphate and 5 mg/l for ammonia. In general, this type of treatment plant has the capability to achieve standards of 15 - 25 mg/l for BOD, 1 -3 mg/l for orthophosphate and 2 - 5 mg/l for ammonia in the discharge. Based on this information the emission limit values for BOD and orthophosphate in the RL are achievable. As the WWTP will be operating under capacity, with appropriate configuration, operation and controls of the new waste water treatment plant it is anticipated that the emission limit values for ammonia are achievable. The stricter ELVs are being set having regard to the mass balance calculations and the environmental quality standards for the receiving water.

The RL has set ELVs of 25 mg/l for cBOD, 125 mg/l for chemical oxygen demand (COD), 35 mg/l for suspended solids (SS). These limits are in accordance with UWWT Regulations, 2001, as amended and the combined approach. The RL has also set limits of 1 mg/l for orthophosphate and 1.5 mg/l for ammonia. These ELVs are being set having regard to the mass balance calculations and the environmental quality standards for the receiving water.

Schedule A: Discharges & Discharge Monitoring of the recommended licence (RL) specifies the Emission Limit Values (ELVs) to which the discharge from the Ballymote agglomeration must conform. The proposed new ELVs are not as stringent as those set in the original licence (D0094-01), as the original licence application incorrectly reported that the primary emission from the agglomeration was to the smaller Ballymote Stream. As stated, the primary discharge is to the larger Owenmore River. The ELVs shall apply from the date of grant of the licence. Monitoring of the discharges will take place as per this schedule of the RL.

Storm Water Overflows There are two SWOs associated with the Ballymote agglomeration. As part of the proposed upgrade works there will be no change to the number or location of these SWOs, however, upgrade works are proposed for both SWOs. As outlined in the WWDL application form, the SWOs are in compliance with the criteria as set out in the DoEHLG 'Procedures and Criteria in relation to Storm Water Overflows', 1995.

Birds Directive [2009/147/EC] & Habitats Directive [92/43/EEC]

The Ballymote WWTP discharges upstream via the Owenmore River, into the Templehouse & Cloonacleigha Loughs SAC[2] (Site Code: 000636). The site is protected for habitats listed under Annex 1 of the Habitats Directive.

Appendix 2 lists the European Sites assessed, their associated qualifying interests and conservation objectives along with the assessment of the effects of the activity on the European Sites.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the proposed activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Site(s) at Templehouse & Cloonacleigha Loughs SAC.

The proposed activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it cannot be excluded, on the basis of objective information, that the proposed activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the proposed activity was required, and for this reason determined to require the applicant to submit a Natura Impact Statement.

This determination is based on the following:

- There may be potential for significant effects on the qualifying interests of the downstream European sites.

An Inspector's Appropriate Assessment has been completed and has determined, based on best scientific knowledge in the field and in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, pursuant to Article 6(3) of the Habitats Directive, that the proposed activity, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site, in particular Templehouse & Cloonacleigha Loughs SAC, having regard to it's conservation objectives and will not affect the preservation of the site at favourable conservation status if carried out in accordance with this recommended licence and the conditions attached hereto for the following reasons:

- The ELVs set in the RL were established in accordance with the combined approach and will not compromise the achievement of environmental objectives and environmental quality standards established in the *European*

[2] SAC: Special Area of Conservation designated under the *Habitats Directive,* Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

Communities Environmental Objectives (Surface Water) Regulations 2009 as amended in relation to the receiving water.

- Condition 3.5 requires that all storm water overflows shall be in compliance with the criteria for storm water overflows, as set out in the DoECLG *'Procedures and Criteria in Relation to Storm Water Overflows'*, 1995 and any other guidance as may be specified by the Agency.
- Condition 3.3 requires the licensee to take such measures as necessary to ensure that no deterioration in the quality of the receiving waters shall occur as a result of the discharge.
- The RL specifies conditions the licensee must undertake to identify measures to minimise any environmental damage associated with discharges from the waste water works following anticipated events or accidents/incidents.

In light of the foregoing reasons no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of this European Site Templehouse & Cloonacleigha Loughs SAC.

4. Ambient Monitoring

Schedule B: Ambient Monitoring of the RL specifies the parameters, analysis method and frequency for which ambient monitoring of the primary discharge shall be carried out. The requirements for ambient monitoring in *Schedule B: Ambient Monitoring* are sufficient to monitor for potential impacts on the status of the receiving water as a result of the discharge.

5. Combined Approach

The Waste Water Discharge (Authorisation) Regulations, 2007, as amended, specify that a 'combined approach' in relation to licensing of waste water works must be taken, whereby the emission limits for the discharge are established on the basis of the stricter of either or both, the limits and controls required under the Urban Waste Water Treatment Regulations, 2001, as amended, and the limits determined under statute or Directive for the purpose of achieving the environmental objectives established for surface waters, groundwater or protected areas for the water body into which the discharge is made. The RL as drafted gives effect to the principle of the Combined Approach as defined in Waste Water Discharge (Authorisation) Regulations, 2007, as amended.

6. Programme of Improvements

The WWTP in Ballymote currently provides secondary treatment for wastewater from the Ballymote agglomeration. However as outlined above, this WWTP is currently overloaded. There is a programme of improvements in place for the agglomeration. The Ballymote WWTP is listed within Irish Water's Capital Investment Plan 2017 – 2021. Planning permission was granted on 16th May 2017 for the proposed upgrade of the WWTP. The works to be carried out include: upgrade works to the Ballymote WWTP to increase the capacity of the plant from 2,000 p.e. to 3,500 p.e., construction of a storm water tank at the treatment works and upgrade works to the storm water overflows. The proposed new WWTP was due to be completed and commissioned by the end of 2020, however due to COVID 19 pandemic restrictions, construction and commissioning have been delayed. It is now expected that the new plant will be commissioned and operational in Quarter 1, 2021.

The RL as drafted does not specify any specified improvements and the proposed emission limits will apply from the date of grant of the licence. Condition 5.1 of the RL requires the licensee to prepare and submit to the Agency a programme of infrastructural improvements to maximise the effectiveness and efficiency of the waste water works. The conditions and emission limit values specified in the RL will ensure no deterioration in the quality of the receiving waters as a result of the discharge.

7. Compliance with EU Directives

In considering the application, regard was had to the requirements of Regulation 6(2) of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended, notably:

Table 4: Compliance with EU Directives/Regulations

Compliance with Directives/Regulations	Description and Conditions in RL
Urban Waste Water Treatment Directive [91/271/EEC]	Compliant in 2018
Water Framework Directive [2000/60/EC]	Good status to be protected
EC Environmental Objectives (Surface Water) Regulations 2009 (S.I. No. 272 of 2009), as amended	Schedule A of RL sets ELVs to contribute towards achieving the environmental objectives.
Drinking Water Directive	No drinking water abstractions downstream of the discharge
Bathing Water Directive [2006/7/EC]	No bathing waters present
Dangerous Substances Directive [2006/11/EC]	Condition 4 requires screening for priority substances.
Environmental Impact Assessment Directive [85/337/EEC]	An EIS / EIAR did not accompany the application
Birds Directive [2009/147/EC] & Habitats Directive [92/43/EEC]	A Natura Impact Statement was submitted and an Appropriate Assessment carried out

8. Environmental Impact Assessment Considerations

EIA Screening

As the Waste Water Discharge (Authorisation) Regulations 2020 do not provide for transitional arrangements for waste water discharge applications on-hand, the Agency is directly applying the EIA Directive and has carried out EIA screening.

EIA, as respects the matters that come within the functions of the Agency, is not required for the Ballymote wastewater licence review application.

Having considered the information provided by the applicant, which satisfies the requirements of Annex II A of the EIA Directive (in so far as it respects the matters that come within the functions of the Agency), the authorisation is unlikely to give rise to significant effects on the environment by virtue of its nature, size or location. This determination has been made having regard to the following:

1. The wastewater discharge authorisation application is not of a project type specified in Annex I of the EIA Directive and;
2. The wastewater treatment plant serves an agglomeration with a population equivalent <10,000 which is considered small in scale.
3. Domestic wastewater is the largest contributor to the waste water treatment plant and is readily biodegradable.
4. Wastewater is treated prior to discharge to the receiving water.
5. With regard to European sites, the potential effects of discharges on European Sites and their water dependant qualifying interests were assessed under the Habitats Directive (Appropriate Assessment).
6. The cumulative effect with other existing and planned discharges are not likely to give rise to significant effects.

EIA was also not required by Sligo County Council as part of the planning permission granted in 2017 for the proposed WWTP upgrade works (planning register number PL 17/113). The Planner's Report for the planning permission '*concluded that EIA or a determination on whether there will be likely significant effects on the environment is not required*.

9. Submissions

Two submissions were received in relation to this application. The issues raised in the submissions are summarised below. However, the original submissions should be referred to at all times for greater detail and expansion of particular points.

Submission one: Finan Gallagher, Principal Environmental Health Officer, Environmental Health Department, HSE, Ardaghowen, Sligo.

Mr. Gallagher outlines that having considered the potential public health and environmental implications of this application, the HSE has no adverse comments on the application once the proposed control and monitoring measures outlined in the application are put in place and implemented.

Response: The Agency acknowledges receipt of this submission. *Schedule A: Discharges & Discharge Monitoring* of the RL as drafted specifies the Emission Limit Values and the monitoring requirements to which the primary discharge from the Ballymote agglomeration must conform. Condition 3.5 of the RL requires that all storm water overflows shall be in compliance with the criteria for storm water overflows, as set out in the DoECLG *'Procedures and Criteria in Relation to Storm Water Overflows'*, 1995 and any other guidance as may be specified by the Agency. *Schedule B: Ambient Monitoring* of the RL also specifies the parameters, analysis method and frequency for which ambient monitoring of the primary discharge shall be carried out. The requirements for ambient monitoring in *Schedule B: Ambient Monitoring* are sufficient to monitor for potential impacts on the status of the receiving water as a result of the discharge.

Submission two: Peter Sweetman and Associates, Rossport South, Ballina, Co. Mayo.

Mr. Sweetman outlines that the test for appropriate assessment screening is set out in Kelly -v- An Bord Pleanála [2014] IEHC 400 (25 July 2014). Mr. Sweetman states that it is necessary to perform appropriate assessment according to the interpretation of the Directive by the Court of Justice of the European Union (CJEU) and that the EPA does not have the right to deviate from these. Mr. Sweetman also states that any Environmental Impact Assessment must also be carried out according to the interpretations of the CJEU.

Response: I completed an Appropriate Assessment Screening, regarding the effects of the project on European sites. An Appropriate Assessment Screening Determination was issued on 12/07/2019, which included specific reasons for determining that a Stage 2 Appropriate Assessment was required, and subsequently a NIS was requested and submitted.

The Appropriate Assessment section of this report details the results of the appropriate assessment conducted as part of the licence application and this has informed the recommended licence for the Ballymote agglomeration.

With regards to Environmental Impact Assessment, as part of the consideration of this licence application, the Agency determined whether the application should be made subject to an Environmental Impact Assessment (EIA) as respects the matters that come within the functions of the Agency. As the Waste Water Discharge (Authorisation) Regulations 2007 to 2020 do not provide for transitional arrangements for waste water discharge applications on-hand on the 29th June 2020, the Agency is directly applying the EIA Directive and has carried out EIA screening. An EIA screening determination was issued on 16/10/2020 which determined that EIA, as respects the matters that come within the functions of the Agency, is not required for the Ballymote licence review application.

10. Cross Office Liaison

Consultation was carried out with the Office of Environmental Enforcement (OEE) and it was highlighted that in general there are issues with ELV compliance failures under the current licence (D0094-01). The OEE consider the proposed upgrade works to be an appropriate solution to the current issues at the Ballymote agglomeration.

I have consulted with my colleagues in the Catchments Science and Management Unit (CSMU) of the EPA and the Ballymote agglomeration is not highlighted by the CSMU as a pressure on the receiving water. The receiving waterbody, the Owenmore River, is currently meeting it's environmental objective of good status by 2021.

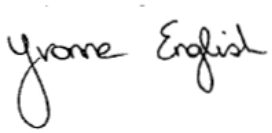
11. Charges

The RL requires that the licensee shall pay to the Agency, such sum as the Agency from time to time determines is reflective of the monitoring and enforcement regime being proposed for the agglomeration.

12. Recommendation

I recommend that a Final Licence be issued subject to the conditions and for the reasons as set out in the attached Recommended Licence.

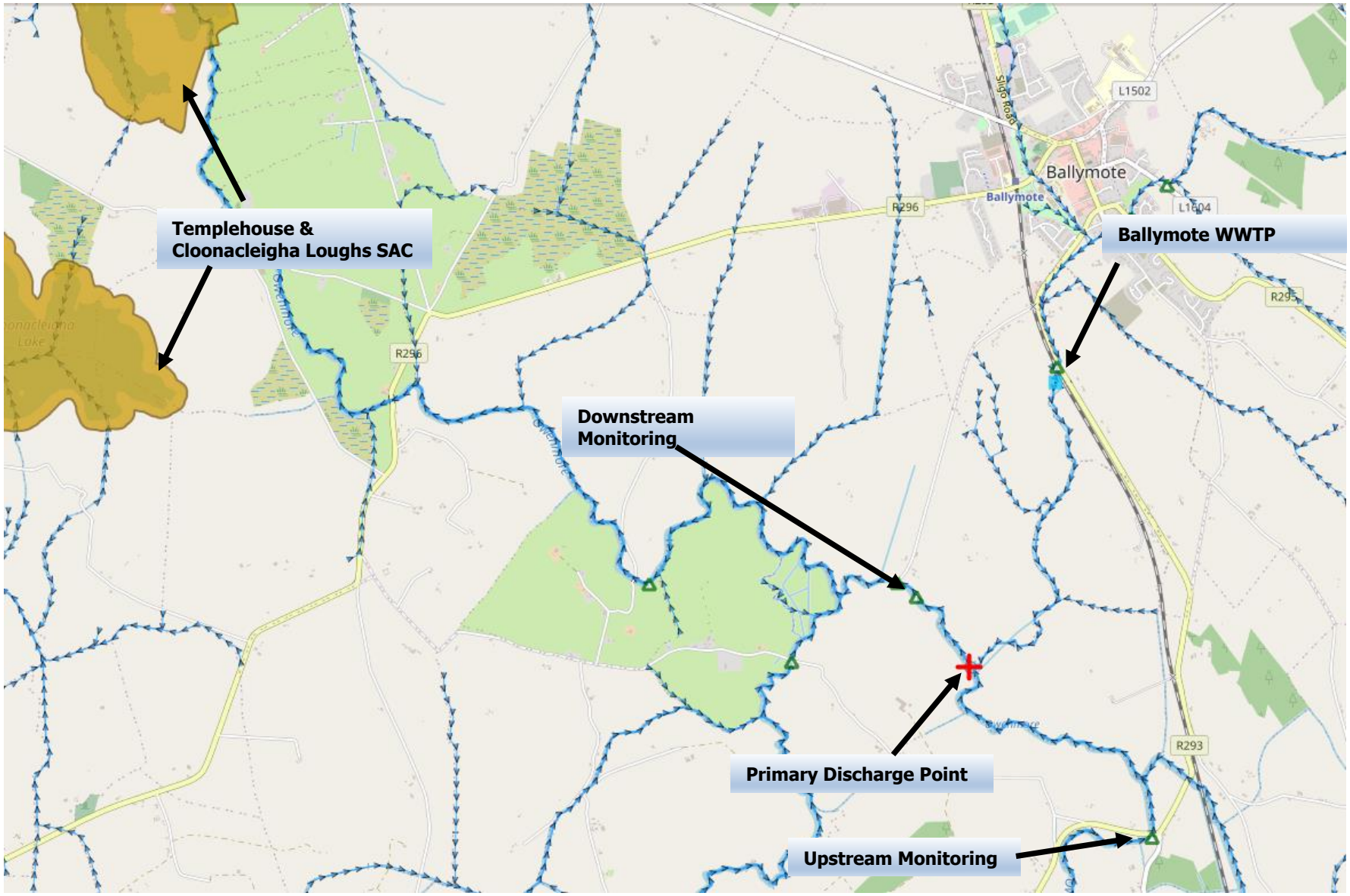
Signed



Yvonne English

Environmental Licensing Programme

Appendix 1: Map showing location of Ballymote WWTP and associated primary discharge point.



Appendix 2: Assessment of the effect(s) of discharges on a European site and proposed mitigate measures.

European Site (site code):	Templehouse & Cloonacleigha Loughs SAC (Site Code: 000636)
Distance/ Direction from discharge(s)	Approximately 7.24 km downstream of the discharge(s) on the Owenmore River.
Conservation objectives:	As per NPWS (2018) Conservation objectives for Templehouse & Cloonacleigha Loughs SAC [000636]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht (dated 21/02/2018).

Qualifying interests (* denotes a priority habitat)	**Assessment**
Habitats 3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	Discharge of effluent to water systems can lead to an altered nutrient balance (eutrophication), reduction in biological status and loss of habitat. Compliance with Environmental Quality Standards for surface water will contribute to the maintenance of favourable conservation status. **Conclusion:** The ELVs set in the RL were established in accordance with the combined approach and will not compromise the achievement of environmental objectives and environmental quality standards established in the *European Communities Environmental Objectives (Surface Water) Regulations 2009 as amended* in relation to the receiving water. The ELVs specified will also contribute to the receiving waters protecting 'good' status as required under the Water Framework Directive. Furthermore, Condition 3.5 of the RL requires that all storm water overflows shall be in compliance with the criteria for storm water overflows, as set out in the DoECLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995 and any other guidance as may be specified by the Agency. Condition 3.3 of the RL requires the licensee to take such measures as necessary to ensure that no deterioration in the quality of the receiving waters shall occur as a result of the discharge. **<u>Potential for Accidents to Arise</u>** There is the potential for accidents and emergency situations arising at a waste water works resulting in partially treated or untreated waste waters discharging to the receiving waters. Such incidents or events could lead to the breach of ELVs and the discharge of elevated levels of polluting organic matter, which would have the potential to impact on the receiving water environment. **Conclusion:** An emergency procedure plan is currently in place at the existing plant. Condition 5.1.7 of the RL requires the licensee to identify measures to minimise any environmental damage associated with discharges or overflows from the waste water works following anticipated events or accidents/incidents. Condition 4.20 of the RL requires the licensee to provide an annual statement as to the measures taken or adopted to minimise environmental damage associated with discharges or overflows from the waste water works following anticipated events or accidents/incidents.