Youghal Agglomeration - D0139-01

WASTE WATER DISCHARGE LICENCE REVIEW

IRISH WATER

June 2021

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18/06/2021

RE: Youghal Waste Water Discharge Licence Review Application

Please find attached the Waste Water Discharge Licence Review Application for the Youghal Agglomeration in accordance with the Waste Water Discharge Authorisation Regulations, 2007 (S.I. No. 684 of 2007), as amended. Irish Water requests the Agency to prioritise this application as the Youghal Wastewater discharge licence was the subject of a High Court Judicial review.

The application fee of €22,500 has been made electonically and a receipt has been received.

I trust the above is satisfactory.

Yours Sincerely,

Peter Keegan

Peter Keegan

Environmental Licensing Specialist

This is a draft document and is subject to revision.

Waste Water Discharge Licence Application Form

EPA Ref. Nº: *(Office use only)*	

Environmental Protection Agency
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Tracking Amendments to Draft Application Form

Version No.	Date	Amendment since previous version	Reason
V.1.0	08/01/2020	N/A	

Environmental Protection Agency

Application for a Waste Water Discharge Licence under the Waste Water Discharge (Authorisation) Regulations 2007 as amended.

CONTENTS

ABOUT THIS APPLICATION FORM

This form is for the purpose of making an application for a Waste Water Discharge Licence under the Waste Water Discharge (Authorisation) Regulations 2007 as amended, or for the review of an existing Waste Water Discharge licence.

The Application Form **must** be completed in accordance with the instructions and guidance provided in the *Waste Water Discharge Licensing Application Guidance Note*. The Guidance Note gives an overview of Waste Water Licensing, outlines the licence application process (including the number of copies required) and specifies the information to be submitted as part of the application. The Guidance Note and application form are available to download from the Licensing page of the EPA's website at http://www.epa.ie/pubs/forms/lic/wwda/.

A valid application for a Waste Water Discharge Licence must contain the information prescribed in the Waste Water Discharge (Authorisation) Regulations 2007 as amended. Regulation 16 of the Regulations sets out the statutory requirements for information to accompany a licence application. This application form is designed in such a way as to set out these questions in a structured manner and not necessarily in the order presented in the Regulations. In order to ensure a legally valid application in respect of Regulation 16 requirements, please complete the Regulation 16 Checklist provided in Annex 2.

This Application Form does not purport to be, and should not be considered, a legal interpretation of the provisions and requirements of the Waste Water Discharge (Authorisation) Regulations 2007 as amended. While every effort has been made to ensure the accuracy of the material contained in this Application Form, the EPA assumes no responsibility and gives no guarantee or warranty concerning the accuracy, completeness or up-to-date nature of the information provided herein and does not accept any liability whatsoever arising from any errors or omissions.

Should there be any contradiction between the information requirements set out in the Application Form and any clarifying explanation contained in the accompanying Guidance Note, then the requirements in this Application Form shall take precedence.

PROCEDURES

The procedure for making and processing of applications for waste water discharge licences, and for the processing of reviews of such licences, appear in the Waste Water Discharge (Authorisation) Regulations 2007 as amended, and is summarised below. The application fees that shall accompany an application are listed in the Third Schedule to the Regulations.

Prior to submitting an application the applicant must publish (within the two weeks prior to date of application) in a newspaper circulating in the area, and erect at the point nearest to the waste water treatment plant concerned or, if no such plant exists, at a location nearest the primary discharge point, a notice of intention to apply.

An application for a licence must be submitted using this application form with the correct fee, and should contain relevant supporting documentation as attachments. The application should be based on responses to the form and include supporting written text and the appropriate use of tables and drawings. Where point source emissions occur, a system of unique reference numbers should be used to denote each discharge point. These should be simple, logical, and traceable throughout the application.

The application form is divided into a number of sections of related information. The purpose of these divisions is to facilitate both the applicant and the Agency in the provision of the information and its assessment. **Please adhere to the format as set out in the application form and clearly number each section and associated attachment, if applicable, accordingly.** Attachments should be clearly numbered, titled and paginated and must contain the required information as set out in the application form. Additional attachments may be included to supply any further information supporting the application. Any references made should be supported by a bibliography.

All questions should be answered. Where information is requested in the application form, which is not relevant to the particular application, the words "not applicable" should be clearly written on the form. The abbreviation "N/A" should not be used.

Additional information may need to be submitted beyond that which is explicitly requested on this form. Any references made should be supported by a bibliography. The Agency may request further information if it considers that its provision is material to the assessment of the application. Advice should be sought from the Agency where there is doubt about the type of information required or the level of detail.

Information supplied in this application, including supporting documentation will be put on public display and be open to inspection by any person.

Applicants should be aware that a contravention of the conditions of a waste water discharge licence is an offence under the Waste Water Discharge (Authorisation) Regulations 2007 as amended.

The provision of information in an application for a waste water discharge licence which is false or misleading is an offence under

Regulation 35 of the Waste Water Discharge (Authorisation) Regulations 2007 as amended.

Note: Drawings. The following guidelines are included to assist applicants:

- *All drawings submitted should be titled and dated.*
- *All drawings should have a unique reference number and should be signed by a clearly identifiable person.*
- *All drawings should indicate a scale and the direction of north.*
- *All drawings should, generally, be to a scale of between 1:20 to 1:500, depending upon the degree of detail needed to be shown and the size of the facility. Drawings delineating the boundary can be to a smaller scale of between 1:1000 to 1:10560, but must clearly and accurately present the required level of detail. Drawings showing the waste water treatment plant location, if such a plant exists, can be to a scale of between 1:50 000 to 1:126 720. All drawings should, however, be A3 or less and of an appropriate scale such that they are clearly legible. Provide legends on all drawings and maps as appropriate.*
- *In exceptional circumstances, where A3 is considered inadequate, a larger size may be requested by the Agency.*

It should be noted that it will not be possible to process or determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard.

SECTION A: NON-TECHNICAL SUMMARY

Advice on completing this section is provided in the accompanying Guidance Note.

A non-technical summary of the application is to be included here. The summary should identify all environmental impacts of significance associated with the discharge of waste water associated with the waste water works.

The following information must be included in the non-technical summary:

A description of:

- The waste water works and the activities carried out therein,
- the sources of emissions from the waste water works,
- the nature and quantities of foreseeable emissions from the waste water works into the receiving aqueous environment as well as identification of significant effects of the emissions on the environment,
- the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the waste water works,
- further measures planned to comply with the general principle of the basic obligations of the operator, i.e., that no significant pollution is caused,
- measures planned to monitor emissions into the environment,
- type of discharge, i.e., continuous, tidal, intermittent,
- the hours during which the waste water works is supervised or manned and days per week of this supervision,
- in the event that this is a review application, state the grounds for which this review application is being made.

Supporting information should form **Attachment Nº A.1**

A.1 Grounds for Licence Review

A review of the existing Waste Water Discharge Licence (WWDL) (Reg. No. D0139-01) for the Youghal Agglomeration is being sought in accordance with regulation 14(1)(b) of the European Union (Waste Water Discharge) Regulations 2007 to 2020.

Irish Water has progressed the Youghal Main Drainage Scheme to satisfy the requirements of Schedule C.1 of the current WWDL. The following Works were completed by December 2017:

- The upgrade of the existing drainage network and pumping stations;
- Construction of a new pumping station at Green Park;
- Construction of a new waste water treatment plant (WWWP) at the Mudlands.

It was intended that, as part of the construction of the new WWTP, a new primary discharge outfall "Ferry Point Outfall " (SW001: 210852E, 078125N) would be constructed. However, the construction of the proposed outfall was delayed for legal reasons. Irish Water no longer proposes to proceed with the construction of the Ferry Point Outfall. Irish Water are applying to the Agency for consent to the use of Dunn's Park as the permanent primary discharge point.

Irish Water undertook a marine modelling study to assess the impact, based on current loading and the organic design capacity of the wastewater treatment plant, of the treated wastewater at the Dunn's Park outfall to the tidal Blackwater Estuary. The results of this modelling show that treated wastewater at the Dunn's Park outfall location (on current and future loading of 16,000 p.e) would not prevent the receiving waterbody from meeting its WFD Objectives and there is no modelled impact on the environmental standards for designated shellfish or bathing water.

As per the '*EPA Guidance for Irish Water on Requests for Alterations to a Waste Water Discharge Licence or Certificate of Authorisation*' (Revised March 2019), Irish Water is seeking a revision to the current licence to accommodate the following:

- to consent to the use of the existing outfall at Dunn's Park (SW000) as the permanent Primary discharge location
- the authorisation of all storm water and emergency overflows.

A.2 Youghal Wastewater Treatment Plant

The new Youghal wastewater treatment plant is located approximately 1.3km north of the town centre, in an area called the Mudlands. Construction and commissioning were completed in December 2017 under Design Build Operate (DBO) Contract. The plant has been designed and built to allow for expansion for anticipated future growth. The current plant has a biological treatment capacity of 16,000 PE.

The treatment process comprises the following:

- Inlet works providing screening, grit removal, and FOG removal;
- A screened stormwater overflow (2 storm tanks);
- Four Sequence Batch Reactor (SBR) tanks for BOD removal and Nitrification;
- Balance tank for treated wastewater;
- Final effluent pumps;
- Sludge treatment facilities include a picket fence thickener, a sludge dewatering system and a sludge storage tank;
- UV treatment of the final effluent (operational during the bathing season)

The existing outfall (SW000) serving the WWTP is the Dunn's Park Outfall which comprises a 750mm diameter outfall to the Blackwater Estuary.

A.3 Sources of Emissions

The collection system in Youghal was upgraded as part of the Youghal Main Drainage Scheme. The system is a partially combined network and includes the following wastewater pumping stations:

- Dunn's Park Pumping Station
- Foxhole Pumping Station
- Strand Pumping Station
- Greenpark Pumping Station
- Summerfield Pumping Station

The discharges from the WWTP and network are listed in the table below.

			Discharge Co-ordinates		
Reference	**Type**	**Discharge Location**	**Easting**	**Northing**	**Description**
Existing – to be retained					
SW000	Primary Discharge (Current)	Lower Blackwater Estuary/Youghal Harbour	210513	078480	Operating as primary discharge
Existing – Storm Water Overflows & Emergency Overflows to be retained					
SW011	Storm Water Overflow	Lower Blackwater Estuary/Youghal Harbour	210513	078480	Gravity overflow from Dunn's Park Pumping station. (Currently listed as SW000 in the licence.) Screened to 6mm and discharging to the existing sea outfall.
SW002	Storm Water Overflow	Lower Blackwater Estuary/Youghal Harbour	210996	077419	Gravity overflow from Greenpark Pumping Station to Paxe's lane Outfall. Screened to 6mm. Designed to operate in a 20 year storm event.
SW006	Storm Water Overflow	Lower Blackwater Estuary/Youghal Harbour	210971	077130	Gravity overflow from Greenpark Pumping Station to Green Park Outfall. Screened to 6mm.
SW005	Storm Water Overflow	Youghal Bay	210527	076075	Gravity overflow from Front Strand Pumping Station to Front Strand Outfall. Screened to 6mm.
SW007	Storm Water Overflow	Lower Blackwater Estuary/Youghal Harbour	210298	078444	This the only gravity overflow available for high flow overflow to Mudlands from

					the Dunn's Park Pumping station
SW008	Emergency Overflow	Lower Blackwater Estuary/Youghal Harbour	209687	079880	Overflow from Foxhole Pumping Station
SW010	Storm Water Overflow	Youghal Bay	209412	076168	Summerfield B Overflow. Designed to operate in a 20 year storm event.

A.4 The Nature and Quantities of Emissions

Youghal WWTP treats wastewater that is predominately wastewater of domestic origin. The WWTP also treats landfill leachate which enters the network at Foxhole Pumping Station using the existing leachate storage and pumping systems at the landfill.

All flows from the network are directed to the new WWTP via the Dunn's Park Pumping Station. The total flow capacity to the WWTP from Dunn's Park PS is 300 l/s. The WWTP is designed to accommodate flows to full treatment (FFT) of 125 l/s. Excess flows above the FFT discharge to the storm storage tanks at the WWTP (with 2 hour storage capacity). When the storm water tank capacity has been reached, a signal is sent to the Dunn's Park pumping station to reduce flow to the WWTP to the FFT rate. Storm flows are recycled to the main process flow when the flow suitably decreases.

FFT is subjected to preliminary treatment which consists of screening, FOG (fat, oil and grease) removal and (aerated) grit removal, and secondary treatment which comprises Sequential Batch Reactors (SBRs) for biological treatment and nitrification.

The peak week organic loading to the plant was 11,140PE and 11,263 in 2020, while the WwTP has a current design capacity of 16,000 PE.

Monthly effluent sampling in 2019 and 2020 carried out under the licence shows the effluent discharge to be in compliance with the prescribed Emission Limit Values (ELVs).

In order to fully assess the potential for effects on the Lower Blackwater Estuary/Youghal Harbour from the treated wastewater, Irish Water has undertaken a modelling assessment (in accordance with Irish Water Marine Modelling Technical Standard). The modelling study concluded that the existing level of treatment at Youghal WWTP and the existing primary discharge location at Dunn's Park are sufficient to support the achievement of WFD objectives for receiving waters under current and future loading (16,000 p.e) scenarios.

Furthermore, the study concluded there is no impact on WFD Protected Areas including Designated Bathing Waters, Designated Shellfish Waters and European sites, under both existing a future loading scenarios.

The proposed Emission Limit Values for the Primary Discharge (SW000) are detailed below.

Parameter	Units	Limit
cBOD	mg/l	25
COD	mg/l	125
Suspended Soilds	mg/l	35
Total Nitrogen (as N)	mg/l	15
pH	-	6 – 9

A.5 Technology to Control Emissions

The WWTP is operated and maintained under DBO contract to ensure compliance with the limits set out in the current wastewater discharge licence. The operator controls the WWTP in accordance with their Operational Management Plan (OMP) which sets out how the Operation and Maintenance of the WWTP ensures compliance with emission limit values.
The DBO operator is obliged to provide adequate standby capacity to ensure that operation of the WWTP and Dunn's Park Pumping Station, is not compromised in the event of either planned maintenance or breakdown.

A.6 Further measures planned to ensure that no significant pollution is caused

Presently there are no further planned measures to alter the WWTP. It has been built and designed to accommodate the current required PE, with the capability for modular expansion in the future if required to handle predicted population growth.

A.7 Measures planned to monitor emissions into the environment

As set out in the current licence requirements, monitoring of the primary discharge and ambient water quality shall continue to be carried out at the specified frequency.

Location	Description	Easting	Northing
Influent	Influent Monitoring Location	209842	079120
Effluent	Effluent Monitoring Location	209827	079107
Ambient	Youghal U/S aSW000u	209890	080935
Ambient	Youghal D/S aSW000d	210977	077119

A.8 Hours of Supervision

The site is operated under DBO contract. The operator is obliged to provide all necessary managerial, technical, analytical, supervisory, security, administrative, sub-contractors and any other staff necessary to ensure that the works is operated and maintained, safely and efficiently on a continuous 24-hour basis.

SECTION B: GENERAL

Advice on completing this section is provided in the accompanying Guidance Note.

B.1 Application Type

Is this a review application?	Yes	No
	X	

If yes, provide the following information:

EPA Licence Register Number	**D0139-01**

State the grounds for which this review application is being made:

A review of the existing Waste Water Discharge Licence (WWDL) (Reg. No. D0139-01) for the Youghal Agglomeration is being sought as per the notice from the Agency in accordance with regulation 14(1)(b) of the European Union (Waste Water Discharge) Regulations 2007 to 2020.

Irish Water is seeking a revision to the current licence to accommodate the following:

- to consent to the use of the existing outfall at Dunn's Park (SW000) as the permanent Primary discharge location
- the authorisation of all storm water and emergency overflows.

B.2 Agglomeration Details

Name of Agglomeration	Youghal

Provide a drawing detailing the agglomeration to which the licence application relates. It should have the boundary of the agglomeration to which the licence application relates clearly marked in a continuous red line. Please note that the agglomeration boundary shall include all areas serviced by the sewer network and shall include the wastewater treatment plant. All areas of the agglomeration shall be within the agglomeration boundary. The boundary line on the map should not be impinged on by labels or any other graphic insertions.

Attachment B.1 *should contain appropriately scaled hardcopy drawings / maps (≤A3) of the agglomeration served by the waste water works showing the boundary clearly marked in red ink. This drawing / map should also be provided as geo-referenced digital drawing files (e.g., ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This geo-referenced digital drawing should be provided to the Agency at the following address: gis@edenireland.ie.*

Please refer to **Attachment B.2** for a map of the Youghal agglomeration boundary.

Applicant's Details

Name and Address for Correspondence

Only application documentation submitted by the applicant and by the nominated person will be deemed to have come from the applicant.

Name*:	Irish Water
Address:	Colvill House
	24 – 26 Talbot Street
	Dublin 1
CRO Number:	530363
Tel:	01 8925000
e-mail:	WasteWaterLicensingSouthern@water.ie

**This should be the name of the water services authority in whose ownership or control the waste water works is vested.*

Name*:	Ken Conroy (Regional Wastewater Treatment Specialist)
Address:	Colvill House
	24 – 26 Talbot Street
	Dublin 1
Tel:	01 8925000
e-mail:	WasteWaterLicensingSouthern@water.ie

**This should be the name of person nominated by the water services authority for the purposes of the application.*

B.3 Location of Associated Waste Water Treatment Plant(s)

Give the location of the waste water treatment plant associated with the waste water works, if such a plant or plants exists.

Name*:	Valerie Hannon (Regional Compliance Specialist)
Address:	Youghal WWTP
	Mudlands
	Youghal
	Co. Cork
Grid ref (6E, 6N)	209846E 79157N
Level of Treatment	Tertiary with UV (operational during bathing season)
Telephone Number:	01 8925000
e-mail:	WasteWaterComplianceSouthern@water.ie

*****This should be the name of the person responsible for the supervision of the waste water treatment plant.*

Attachment B.2 *should contain appropriately scaled hardcopy drawings / maps (≤A3) of the site boundary and overall site plan, including labelled discharge, monitoring and sampling points.*

Please refer to **Attachments B.3a and B.3b** for the site plan of Youghal WWTP and primary discharge location with and sampling points.

B.4 Description of Associated Waste Water Treatment Plant(s)

Provide a description of the waste water treatment plant(s), type of process units, level of treatment provided and design capacity (p.e. and flow rates) for the areas of the waste water works where discharges occur.

The WwTP at Youghal has a design capacity of 16,000 PE with the capability for future expansion to 24,000 PE.

The treatment process comprises the following:

1. Inlet works providing screening, grit removal, and FOG removal.
2. A screened stormwater overflow (2 storm tanks)
3. Four Sequence Batch Reactor (SBR) tanks for BOD removal and Nitrification
4. Balance tank for treated wastewater
5. Final effluent pumps
6. Sludge treatment facilities include a picket fence thickener, a sludge dewatering system and a sludge storage tank
7. UV treatment of final effluent

Inlet pumping station

Dunn's Park Pumping Station consists of 3 low level foul pumps and 2 high flow pumps which convey the wastewater to the inlet works. Flows of up to 300 l/s are pumped to the inlet works and undergo preliminary treatment (screening and grit removal). Flows in excess of flow to full treatment (125 l/s) are spilled to two storm tanks following grit removal with the first storm tank acting as a blind tank (to capture the first storm flush).

When the storm water tank capacity has been reached, a signal is automatically generated to Dunn's Park pumping station to reduce flow to the WWTP to the FFT rate.

Storm flows are recycled to the main process flow upstream of FFT measurement when the flow decreases below FFT minus DWF with flow being returned at an appropriate rate likely to be equivalent to DWF.

Preliminary Treatment

Flows entering the treatment plant undergo screening, de-gritting and grease removal. This unit consists of screens, screening compactors operating in a duty / assist / common stand-by mode. Each combined unit is fitted with a 6mm manual bypass screen. The tank is aerated to assist grit removal. A slow rotating screw drains the screenings and transports the waste to a collection sump. Gross solids are removed using a minimum of duty/standby automatic 6 mm screens (in 2 directions) capable of treating all flows up to 300 l/s.

FOG removal is provided at the plant. A maximum of 20 mg/l FOG is permitted to pass through to full treatment.

Sequential Batch Reactors (SBRs)

There are 4 no. identically sized SBR tanks at the treatment plant and they are operated on a predetermined schedule consisting of the following phases: Fill/Anoxic, Fill/Aerate, Aerate, Settle and Decant. The SBR tanks provide the following functions:

- Balance Tank
- Anoxic Tank
- Aeration Basin
- Settlement Tank

The SBR cell contents are mixed (tanks are installed with mixers) without aeration, to provide an anoxic environment to facilitate nitrification. After a short period, aeration is provided by fine bubble diffusers and blowers to achieve BOD removal. Only two tanks can be in “Aerate” mode at any given time. Once aeration has finished, the Settlement phase begins, followed by Decanting of the clarified effluent.

Final Effluent Balance Tank

Treated effluent from the SBRs enters the final balance tank and from there it is pumped to the discharge at the outfall. The pumps operate in duty/standby mode.

Final Effluent:

The final effluent currently outfalls at Dunn’s Park (SW000) which comprises a 750mm diameter outfall to the Blackwater Estuary.

Sludge treatment

Towards the end of the decant phase, Waste Activated Sludge (WAS) is removed from each of the SBR cells via WAS pumps which operate continuously during the waste period and conveyed to the picket fence thickener. Sludge is then pumped to the centrifuge for dewatering. The pumps are positive displacement and operate in a duty / standby mode. The sludge cake then enters a skip to be removed off site.

Secondary Discharges

There are no secondary discharges in the agglomeration.

The secondary discharge SW003 (TPEFF0500DO139SW003) from Foxhole Pumping Station, as listed in the current waste water discharge licence has been decommissioned.

Storm Water Overflows

The stormwater overflows associated with pumping stations in the agglomeration are as follows:

- Dunn's Park Pumping Station (SW011 and SW007)
- Front Strand Pumping Station (SW005)
- Greenpark Pumping Station (SW006 and SW002)
- Summerfield Pumping Station (SW010)

Note Foxhole Pumping Station does not have an associated SWO but operates as an emergency overflow (SW008).

Please refer to **Attachments B.4a and B.4b** for the Youghal WWTP process schematics.

B.5 (i) Population Equivalent of Agglomeration

The population equivalent (p.e.) of the agglomeration to be, or being, served by the waste water works should be provided and the period in which the population equivalent data was compiled should be indicated.

Actual Population Equivalent	11,140 (Peak Week)
Design Population Equivalent	16,000
Data Compiled (Year)	2019 (AER)
Method of Compilation, e.g., direct measure	Based on Irish Water's interim load methodology.

B.5 (ii) Pending Development

Where planning permission has been granted for development(s), but development has not been commenced or completed to date, within the boundary of the agglomeration and this development is being, or is to be, served by the waste water works provide the following information;

- information on the calculated population equivalent (p.e.) to be contributed to the waste water works as a result of those planning permissions granted,
- the percentage of the projected p.e. to be contributed by the non-domestic activities, and
- the ability of the waste water works to accommodate this extra hydraulic and organic loading without posing an environmental risk to the receiving water habitat.

No significant developments are identified where planning permission has been granted but not completed.

B.5 (iii) FEES

State the relevant class of waste water discharge as per Column 1 of the Second Schedule, and the appropriate fee as per Columns 2 or 3 of the Third Schedule of the Waste Water Discharges (Authorisation) Regulations 2007 as amended.

Class of waste water discharge	Fee (in €)
Discharges from agglomerations with a population equivalent of: Licence Review – Discharges from agglomerations with a PE of > 10,000	€22,500

B.6 Primary Discharge Point

Provide information on the primary discharge point, as defined in the Waste Water Discharge (Authorisation) Regulations as amended, associated with the waste water works.

Type of Discharge	750mm diameter pipe.
Unique Point Code	SW000
Location	Lower Blackwater M Estuary / Youghal Harbour
Grid ref (6E, 6N)	210513E 078480N
Source of Emission	Wastewater Treatment Plant – Treated Effluent
Monitoring Point Location (6E, 6N)	209827E 079107N
Monitoring Frequency	Monthly
Composite Sampler Provided	Yes
Receiving Water Name	Lower Blackwater Estuary / Youghal Harbour
Receiving Water Type	Transitional
Receiving Water WFD Code	IE-SW-020-0100

Attachment B.3 *should contain appropriately scaled hardcopy drawings / maps (≤A3) of the primary discharge point, including labelled monitoring and sampling points associated with the discharge point.*

Please refer to **Attachment B.3.b** for a map of the primary discharge point and associated monitoring locations.

B.7 Secondary Discharge Point(s)

Provide information on **all** secondary discharge point(s) associated with the waste water works. Please refer to Guidance Note for information on Secondary discharge points.

Not applicable. There are no secondary discharges in the agglomeration.

Type of Discharge	Not applicable
Unique Point Code	
Location	
Grid ref (6E, 6N)	
Source of Emission	

Monitoring Point Location (6E, 6N)	
Monitoring Frequency	
Composite Sampler Provided	
Receiving Water Name	
Receiving Water Type	
Receiving Water WFD Code	

Attachment B.4 *should contain appropriately scaled hardcopy drawings / maps (≤A3) of the secondary discharge point(s), including labelled monitoring and sampling points associated with the discharge point(s).*

Not applicable

B.8 Storm Water Overflow Point(s)

Provide information on **all** storm water overflow point(s) associated with the waste water works.

Unique Point Code	SW011
	Currently listed as SW000 in the licence.
Storm Water Device Location (6E, 6N)	210283E, 078356N
Discharge Location (6E, 6N)	210513E, 078480N
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows*', 1995	Yes
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	Not Applicable

Unique Point Code	SW002
Storm Water Device Location (6E, 6N)	210848E, 077199N
Discharge Location (6E, 6N)	210996E, 077419N
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows*', 1995	Yes
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	This was decommissioned but was reinstated following local flooding. This SWO is required in order to accommodate the 1 in 20 year flood event.

Unique Point Code	SW005
Storm Water Device Location (6E, 6N)	210643E, 076374N
Discharge Location (6E, 6N)	210527E, 076075N
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows*', 1995	Yes
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	Not Applicable

Unique Point Code	SW006
Storm Water Device Location (6E, 6N)	210848E, 077199N
Discharge Location (6E, 6N)	210971E, 077130N
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows*', 1995	Yes
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	Not Applicable

Unique Point Code	SW007
Storm Water Device Location (6E, 6N)	210283E, 078356N
Discharge Location (6E, 6N)	210298E, 078444N
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows*', 1995	Yes
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	The current licence requires that the discharge as a SWO to cease and discharge point to operate as an EO, however, this is the only gravity overflow available for high flows from the Dunn's Park Pumping station and is to remain to operate as a SWO.

Unique Point Code	SW010
Storm Water Device Location (6E, 6N)	209336E, 076222N
Discharge Location (6E, 6N)	209412E, 076168N
Does this Storm Water Overflow comply with the criteria as set out	Yes

in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows*', 1995	
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	This was decommissioned but was reinstated following local flooding. This SWO is required in order to accommodate the 1 in 20 year flood event.

Attachment B.5 *should contain appropriately scaled hardcopy drawings / maps (≤A3) of storm water overflow point(s) associated with the waste water works, including labelled monitoring and sampling points associated with the discharge point(s).*

Please refer to Attachment B.8 for maps of storm water overflow points.

B.9 Emergency Overflow Point(s)

Provide information on **all** emergency overflow point(s) associated with the waste water works.

Unique Point Code	SW008
Emergency Overflow Device Location (6E, 6N)	209685E, 079869N
Discharge Location (6E, 6N)	209687E, 079880N

Attachment B.6 *should contain appropriately scaled hardcopy drawings / maps (≤A3) of emergency overflow point(s) associated with the waste water works, including labelled monitoring and sampling points associated with the discharge point(s).*

Please refer to Attachment B.9 for maps of emergency overflow points.

B.10 Leachate

Leachate Accepted at the plant	**Yes**	**No**
		X
Quantity of Leachate accepted (m^3/annum)	enters via the network.	

B.11 Industrial, Commercial and Trade Inputs

Applicants should provide details of any significant industrial inputs into the waste water treatment works.

Industrial Inputs	Type	Quantity (m3/annum)
W0068-03	Leachate	Unknown

B.12 Abstractions

Applicants should submit the following information for each abstraction point (including drinking water) which potentially impacts on, or is potentially impacted by the waste water treatment works. The zone of contribution for the

abstraction point should be delineated and any potential risks from the waste water discharge to the water quality at that abstraction point identified.

Abstraction Code	Abstraction Volume (m^3/day)	Distance upstream/downstream	Easting (6E-digit GPS Irish National Grid Reference)	Northing (6E-digit GPS Irish National Grid Reference)
Not applicable				

Note: Attach any risk assessment that may have been carried out in relation to the abstraction point(s) listed.

Attachment B.7 *should contain any supporting information.*
Not Applicable

B.13 Planning Authority and/or Public Authority

Give the name of the planning authority, or authorities, in whose functional area the discharge or discharges take place or are proposed to take place.

Name:	An Bord Pleanála (ABP)
Address:	64 Marlborough Street,
	Dublin 1
Tel:	01-858 8100
e-mail:	bord@pleanala.ie

Planning Permission relating to the waste water works which is the subject of this application:- (tick as appropriate)

has been obtained	**X**	***is being processed***	
is not yet applied for		***is not required***	

Local Authority Planning File Reference Nº:	EC87.EC2006

Attachment B.8a *should contain* ***the most recent*** *planning permission, including a copy of* ***all*** *conditions, a copy of the planning inspector's report and where an EIAR was required, copies of any such EIAR and any certification associated with the EIAR, should also be enclosed. Where planning permission is not required for the development, provide reasons, relevant correspondence, etc.*
Youghal Urban District Council applied to An Bord Pleanála for certification of the EIS for the Youghal WwTP scheme on 19 September 2001. An Bord Pleanála approved the EIS on 20 March 2002 and development of the scheme including the WwTP proceeded under this certification.

The Dunn's Park outfall was constructed during the 1970s, at which time planning permission was not required for local authority development. The Dunn's Park outfall has been used to discharge effluent (both untreated and treated) from Youghal on a continuous basis since it was constructed. It therefore has an established use as a discharge outfall point. The Dunn's Park outfall is currently operating as the primary discharge outfall point for the Youghal WWTP, and this review application will allow for these operations to continue. No works are proposed to the outfall which would require a grant of

permission and no planning permission is required for the continued use of the outfall.

An EIAR screening was commissioned by Irish Water which considered the proposed use of Dunn's Park (SW000) discharge outfall as a permanent discharge location. As the wastewater discharge licence application relates to a wastewater treatment plant with a capacity greater than 10,000 PE, it was concluded that an EIAR is required. The EIAR will be submitted in due course following consultation with the Agency regarding the scope and level of detail of the information required to be included in the EIAR as per regulation 17(c) of the European Union (Waste Water Discharge) Regulation 2007 to 2020.

Please refer to **Attachments B.13a and B.13b** for details of the ABP Inspector's report and certification of the EIS for the Youghal WwTP Scheme. Please refer to **Attachment B.13.c** for the EIAR screening report relating to this review application.

B.14 Notices and Advertisements

Regulations 10 and 11 of the Waste Water Discharge (Authorisation) Regulations 2007 as amended, require all applicants to advertise the application in a newspaper (within two weeks prior to date of application) and by way of a site notice. See *Guidance Note.*

Attachment B.9 *should contain a copy of the site notice and an appropriately scaled drawing (≤A3) showing its location.* ***The original application must include the original page of the newspaper in which the advertisement was placed****. The relevant page of the newspaper containing the advertisement should be included with the original and one (1) copy of the application.*

Please refer to **Attachment B.14a, B.14b and B.14c** for the Site Notice, the location of the site notice and for the newspaper advertisement.

B.15 Capital Investment Programme

State whether a programme of works has been prioritised for the development of infrastructure to appropriately collect, convey, treat and discharge waste water from the relevant agglomeration. If a programme of works has been prioritised provide details on funding allocated to the capital project. Provide details on the extent and type of work to be undertaken and the likely timeframes for this work to be completed.

Irish Water has progressed the Youghal Main Drainage Scheme to satisfy the requirements of Schedule C.1 of the current WWDL. The following Works were completed by December 2017:

- The upgrade of the existing drainage network and pumping stations
- Construction of a new pumping station at Green Park
- Construction of a new waste water treatment plant (WWWP) at the Mudlands.

No further Capital Investment is proposed at this time.

Attachment B.10 *should contain the most recent development programme, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.*

Not Applicable

B.16 Significant Correspondence

Provide a summary of any correspondence resulting from a Section 63 notice or a compliance correspondence issued by the Agency in relation to the waste water works under the Environmental Protection Agency Act 1992 as amended, or the Waste Water Discharge (Authorisation) Regulations 2007 as amended.

There have been no Section 63 notices issued by the Agency in relation to the wastewater works under the Environmental Protection Agency Act 1992 as amended. As of 08 June 2021, there are no open Compliance Investigations with the EPA.

Attachment B.11 *should contain a summary of any relevant correspondence issued in relation to a Section 63 notice/ compliance correspondence.*

Not Applicable

B.17 Foreshore Act Licences.

Provide a copy of the most recent Foreshore Act licence issued in relation to discharges from the waste water works issued under the Foreshore Act 1933 as amended.

Please refer to **Attachment B.17** for a copy of the most recent foreshore licence issued in which the consent

Attachment B.12 *should contain the most recent licence issued under the Forsehore Act 1933 as amended, including a copy of* ***all*** *conditions attached to the licence and any monitoring returns for the previous 12-month period, if applicable.*

SECTION C: DISCHARGES & MONITORING

Advice on completing this section is provided in the accompanying Guidance Note.

- Give particulars of the source, location, nature, composition, quantity, level and rate of discharges arising from the agglomeration and, where relevant, the period or periods during which such emissions are made or are to be made.

The table below provides details of the discharges in the agglomeration

Discharge point code	Discharge point type	Source	Receiving WB name	6E digit Irish National Grid Ref, discharge	6N digit Irish National Grid Ref, discharge	Rate / period of discharge
SW000	Primary	WwTP final effluent	Lower Blackwater Estuary/Youghal Harbour	210513	078480	3812.7 (m^3/day) (2019 data)
SW011	Storm Water Overflow	Dunn's Park Pumping Station	Lower Blackwater Estuary/Youghal Harbour	210513	078480	Currently undergoing a monitoring programme. Data will be reported to the Agency once appropriate period is available.
SW006	Storm Water Overflow	Greenpark Pumping Station	Lower Blackwater Estuary/Youghal Harbour	210971	077130	
SW005	Storm Water Overflow	Strand Holding Tank	Youghal Bay	210527	076075	
SW002	Storm Water Overflow	Greenpark Pumping Station	Lower Blackwater Estuary/Youghal Harbour	210996	077419	
SW007	Storm Water Overflow	Dunn's Park Pumping Station	Lower Blackwater Estuary/Youghal Harbour	210298	078444	
SW010	Storm Water Overflow	Summerfield B Pumping Station	Youghal Bay	209412	076168	
SW008	Emergency Overflow	Foxhole Pumping Station	Lower Blackwater Estuary/Youghal Harbour	209687	079880	Not measured

- Undertake and provide details of a risk-based assessment of the discharge in order to identify the relevant priority substances for monitoring. This assessment shall be undertaken in accordance with *"Guidance on the Screening for Priority Substances for Waste Water Discharge Licences"* issued by the Agency. Provide details of the sources of any priority substances detected during the risk based assessment of discharges, that would be likely to give rise to exceedances of the relevant standards set in the European Communities Environmental Objectives (Surface Waters) Regulations 2009 as amended. Provide information on measures that are necessary to reduce or eliminate priority substances in the discharge(s).

The majority of the sources of the waste water in Youghal is essentially domestic in nature. Treated landfill leachate is added to the network at the Foxhole Pumping Station using the existing leachate storage and pumping systems at the Youghal Civic Amenity Site (located at the Mudlands). Cork County Council are obliged under their waste licence (Reg No. W0068-03) to carry out quarterly sampling of their landfill leachate (available on: http://www.epa.ie/licsearchdownload/CombinedFileView.aspx?regno=W0068-03&classification=Enforcement). Monitoring results show that parameters were within the typical concentrations recorded in landfill leachate.

- Details of all discharges of waste water from the agglomeration should be supplied. Tables C.1(a) & (b), should be completed for the primary discharge point from the agglomeration and Tables C.2(a) & (b) should be completed for **each** secondary discharge point, where relevant. Individual Tables must be completed for each discharge point.

  Tables C.1(a) & (b) have been completed in Annex 1 of this application.

  There are no secondary discharges from the agglomeration.

- Describe the existing or proposed measures, including emergency procedures, to prevent unintended waste water discharges and to minimise the impact on the environment of such discharges.

  The WWTP operator has an emergency plan and procedure prepared in line with the requirements of section 3 EP2 – EP7 of the Performance Management System (PMS) as developed by the Water Services National Training Group for management of Design, Build and Operate (DBO) contracts operational and maintenance aspects.

- Regulation 16(1)(h) of the Waste Water Discharge (Authorisation) Regulations 2007 as amended, requires all applicants to provide the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application.

  The existing monitoring and sampling programme will be continued in accordance with the relevant standards and frequencies as set out by Irish Water and to comply with the WWDL

  Please refer to **Attachment C.1.a** for effluent monitoring data associated with the primary discharge from the WWTP for the period between January to December 2019 and 2020 inclusive.

- Attach associated monitoring data for the receiving water for the 12 months preceding the making of the application. This data should be provided for the primary discharge point and each of the secondary discharge points, if applicable.

  Monitoring associated with the primary discharge point is carried out at monitoring stations TW38003144BR2001 (Youghal U/S) and TW38003144BR2002 (Youghal D/S).
  The EPA also carried out monitoring in Blackwater Estuary/Youghal Harbour as shown below.

Station Name & Location	Easting	Northing
TW38003144BR2001 - Youghal U/S	209890	080935
TW38003144BR2002 - Youghal D/S	210977	077119
BR250 - Youghal Bay / Clonard	211079	073356
BR240 - Youghal Bay / Redbarn	211331	074992
BR280 - Whiting Bay	214711	076544
BR270 - North of Caple Island	209618	070637

Please refer to **Attachment C.1.b** for monitoring data pertaining to Lower Blackwater Estuary/Youghal Harbour for the period between January 2019 to December 2020 inclusive.

- Regulation 16(1)(l) of the regulations requires applicants to give details of compliance with any applicable monitoring requirements and treatment standards.

  The final effluent from the WWTP was compliant with monitoring requirements for 2019 and 2020 (as shown in **Attachment C.1.a)**.

- For waste water treatment plants with coastal discharges, provide evidence that the end of the discharge pipe is below the mean spring tide low water line.

  Please refer to mapping in Attachment B.3.b showing the mean spring tide low water line relative to the current primary discharge. The current discharge location is below the mean spring tide low water line.

Attachment C.1 *should contain all supporting information.*

Please refer to **Attachment C.1.a** for Effluent monitoring data and to **Attachment C.1.b** for Ambient monitoring data

SECTION D: EXISTING ENVIRONMENT & IMPACT OF THE DISCHARGE(S)

Advice on completing this section is provided in the accompanying Guidance Note.

Detailed information is required to enable the Agency to assess the existing receiving environment. This section requires the provision of information on the ambient environmental conditions within the receiving water(s) upstream and downstream of any discharge(s).

Where applicable, information on the state of the existing environment should be addressed in the EIAR. **In such cases, it will suffice for the purposes of this section to provide adequate cross-references to the relevant sections in the EIAR.** If there is no EIAR associated with the development, information on the existing environment should be provided here.

An EIAR screening was commissioned by Irish Water which considered the proposed use of Dunn's Park (SW000) discharge outfall as a permanent discharge location. As the wastewater discharge licence application relates to a wastewater treatment plant with a capacity greater than 10,000 PE, it was concluded that an EIAR is required. The EIAR will be submitted in due course following consultation with the Agency regarding the scope and level of detail of the information required to be included in the EIAR as per regulation 17(c) of the European Union (Waste Water Discharge) Regulation 2007 to 2020.

D.1. Assessment of Impact on Receiving Surface or Ground Water

The Youghal WWTP discharges to the Lower Blackwater Estuary/ Youghal Harbour waterbody, which has a WFD status of Moderate (WFD Code IE_SW_020_0100). It drains a large upstream catchment with numerous known point and diffuse sources of pollution upstream of Youghal. The River Blackwater is tidal from Youghal upstream to Lismore so that there is potential for pollutants to be carried both upstream and downstream to reach sensitive receptors along the Blackwater Estuary.

Irish Water conducted the Marine Modelling Study to assess the impact of wastewater discharges from the primary outfall (SW000) located at Dunn's Park. This study was carried out in accordance with Irish Water's Marine Modelling Technical Standard (IW-TEC-100-015, Version 2, December 2019).

The output of the Marine Modelling Study concluded that the recommended emission limit values for the primary discharge location at Dunn's Park (SW000) will not prevent the receiving water achieving its Water Framework Directive objective. The findings of the Marine Modelling Study are set out in the Marine Modelling Study Report, included as Attachment D.1 (Marine Modelling Study Report).

The recommended emission limit values for Dunn's Park (SW000) primary discharge location are:

Parameter	Units	Limit
cBOD	mg/l	25
COD	mg/l	125
Suspended Soilds	mg/l	35
Total Nitrogen (as N)	mg/l	15
pH	-	6 – 9

- Provide summary details and an assessment of the impacts of any existing or proposed emissions on the surface water or ground (aquifers, soils, sub-soils and rock environment), including any impact on environmental media other than those into which the emissions are to be made.

The treated Youghal wastewater discharges into the Lower Blackwater Estuary water body (IE_SW_020_0100). This water body has a Water Framework Directive Status of "Moderate" overall for 2013-2018, due to moderate biological status. The supporting chemistry, for the same period, is indicative of 'Good' status.

The outputs of cycle 2 (Blackwater (Munster) Catchment Summary) highlighted at the time that the Blackwater estuary system was impacted by excess macroalgae in the lower reaches. It is noted that the "Macroalgae Status or Potential" for the 2013-2018 monitoring period is currently indicative of "Good" status. It is also noted that "Nutrient conditions" have improved from 'Moderate' in 2010-2015 to 'Good' in 2013-2018 monitoring period.

The Lower Blackwater Estuary has an 'Intermediate' trophic status (TSAS 2013-2019, most recent 3 year dataset (dataset provided electronically by the EPA April 2020) due to failing on chlorophyll (at 90 percentile) and dissolved oxygen (at 5 percentile), however it passes for Winter and Summer Nutrients, BOD and Opportunistic algae.

Load apportionment modelling previously undertaken by the EPA indicates that wastewater contributes <5% of the N load and that agriculture contributes 90%. Agriculture has been identified as a significant pressure. (https://wfd.edenireland.ie/catchment/18)

Ambient monitoring was undertaken in the vicinity of the existing primary discharge (Dunn's Park outfall) in 2019 & 2020. The results of this sampling do not show any significant impacts on the receiving waters when compared to the environmental quality standards in the Surface Water Regulations. All ambient monitoring samples are indicative of Good status (or High in the case of BOD) in the receiving water body.

Irish Water commissioned the Marine Modelling Study to assess the treated wastewater discharge from the Dunn's Park outfall to the lower Blackwater Estuary. The model concluded that for all WFD and TSAS parameters (BOD, MRP and DIN), the mixing zone extents would be less than 50m, outside of which the EQS indicative of "Good" status would be met.

The Marine Modelling Study concluded that the recommended emission limit values at the existing primary discharge location at Dunn's Park are sufficient to support the achievement of WFD objectives for the receiving waters under current and future loading scenarios. Furthermore, the study concluded that the existing level of treatment at Youghal WWTP and the existing primary discharge location at Dunn's Park do not impact on WFD Protected Areas including Designated Bathing Waters, Designated Shellfish Waters and European sites, under both existing and future loading scenarios.

Further details on the Marine Modelling Study are provided in the modelling section overleaf and full details are contained in the Marine Modelling Study Report included as Attachment D.1.

- Where a discharge is being made to a small stream, provide evidence that there is a background flow in the stream all year round.

  There are no proposed discharges to small streams.

- Provide details and evaluate any direct or indirect discharges to groundwater that may be associated with the waste water treatment plant in accordance with the EPA Guidance document *'Guidance on the Authorisation of Direct Discharges to Groundwater'* (2014) and the Agency published *'Guidance on the Authorisation of Discharges to Groundwater'* (2011).

  There are no direct or indirect discharges to groundwater.

- Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Give details of any designation under any Council Directive or Regulations that apply in relation to the receiving water.

  The treated Youghal wastewater discharges into the Lower Blackwater Estuary water body (IE_SW_020_0100).

Waterbody name	WFD Code	Waterbody Type	WFD Status 2013-2018	TSAS 2013-2019 (most recent 3 year dataset)
Lower Blackwater M Estuary / Youghal Harbour	IE_SW_020_0100	Transitional	Moderate (overall) Supporting Chemistry indicative of Good status Nutrient conditions are indicative of Good status	Intermediate
Youghal Bay	IE_SW_020_0000	Coastal	Moderate (overall) Supporting chemistry indicative of Moderate status Nutrient conditions are indicative of High status	Intermediate

The Blackwater Estuary Lower (IW_SW_020_0100) is a designated nutrient sensitive area under the Urban Waste Water Treatment Regulations, 2001, as amended. The EPA has determined that Total Nitrogen is the appropriate limiting nutrient. Therefore, given that the p.e. of the agglomeration is between 10,000 and 100,000 p.e., the WWTP has been designed to achieve an Annual Mean of 15 mg/l for Total Nitrogen, in accordance with the Urban Waste Water Treatment Regulations 2001, as amended.

There are three designated bathing waters in the vicinity of the discharge point(s).

- Youghal Front Strand, at Good water quality in 2019,
- Youghal Claycastle, at Excellent water quality in 2019, and
- Redbarn, at Excellent water quality status in 2018.

Both Youghal Front Strand and Youghal Claycastle have improved in quality status since 2018.

There are two designated SAC and two designated SPAs that apply in relation to the receiving water. These are Blackwater River (Cork/Waterford) SAC (002170, Ballymacoda (Clonpriest and Pillmore) SAC (000077), the Blackwater Estuary SPA(004028) and Ballymacoda Bay SPA (004023), and Helvick Head to Ballyquin SPA (004192).

o Provide information demonstrating that emissions from the agglomeration or any premises, plant, methods, processes, operating procedures or other factors which affect such emissions will comply with, or will not result in the contravention of the;

- Water Framework Directive 2000/60/EC,
- Birds Directive 79/409/EEC,
- Groundwater Directives 80/68/EEC & 2006/118/EC,
- Drinking Water Directives 80/778/EEC,
- Urban Waste Water Treatment Directive 91/271/EEC,
- Habitats Directive 92/43/EEC,
- Environmental Liabilities Directive 2004/35/EC,
- Bathing Water Directive 76/160/EEC,
- Marine Strategy Framework Directive 2008/56/EC, and
- European Communities Environmental Objectives (Surface Waters) Regulations 2009 as amended.

The Youghal WwTP complies with the above Directives, where applicable. There are no further improvements planned at this time to the wastewater treatment plant.

o Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.

No transboundary or long-distance effects are envisaged with regard to the proposed development.

- This section should also contain full details of any modelling of discharges from the agglomeration. Full details of the assessment and any other relevant information on the receiving environment should be submitted as **Attachment D.1.**

Please refer to **Attachments D.1** for the Marine Modelling Study reports

The Marine Modelling Study was commissioned to assess the impact of the treated wastewater from the Dunn's Park outfall to the Lower Blackwater Estuary. This study was carried out in accordance with Irish Water's Technical Standard for Marine Modelling (IW-TEC-100-015).

The Technical Standard sets out a defined process for all modelling studies carried out on behalf of Irish Water, including:

- Phase 1 Model Scoping;
- Phase 2 Marine Surveys;
- Phase 3 Model Build, Calibration and Validation;
- Phase 4 Scenario Analysis and Reporting.

A report is prepared for each phase of a marine modelling study. A copy of the report produced for Phase 4 (the Marine Modelling Survey Report) is reproduced in **Attachment D.1.d**

Phase 1 – Model Scoping

The purpose of the Model Scoping Report was to review the available data and available tools, and propose a modelling strategy and monitoring campaign to support the development of a water quality model to assess the impact of the treated effluent from the primary discharge at Dunn's Park on receiving waters and protected areas.

The outcome of this study was that a dispersion model was required to assess the impact of the treated wastewater on the concentrations of BOD, DIN, MRP, ammonia (and inferred unionised ammonia), E.Coli and Intestinal Enterococci in receiving waters.

To capture the effect of tidal propagation and to assess the potential impact on "upstream" waterbodies, the model extents were proposed to extend to the upstream tidal boundaries on the main Blackwater channel and major tributaries, including inter-tidal creeks. Downstream the model extents were proposed to extend far enough offshore, and east and west so as to capture all potential WFD protected areas (Designated Bathing Waters and Designated Shellfish Waters).

Model development was proposed to be supported by marine surveys including establishment of a temporary meteorological station, bathymetric surveys, ADCP current profiling, water level monitoring, conductivity-temperature-depth profiling, continuous conductivity and temperature measurement, and water quality sampling. These datasets were augmented by available OPW and EPA hydrometric and tidal measurement datasets.

AECOM Ireland Ltd proposed that either a 2D or 3D dispersion modelling approach would be required, with the final decision to be informed by marine surveys.

Full details of Phase 1 are provided in the Model Scoping Report, **Attachment D.1.a**

Phase 2 - Surveys

A survey of the Blackwater River, tributaries and Youghal Harbour was successfully completed over a period covering 7th January to 18th February 2020. The survey included continuous recording of water levels, salinity and temperature at different sites and three 13-hour vessel-based ADCP and CTD profiling surveys covering spring, neap and intermediate tides. Meteorological data was collected via a temporary weather station established at the WWTP for the survey period.

Full details of the surveys are provided in the Survey Interpretive Report, **Attachment D.1.b**

Phase 3 – Model Build, Calibration and Validation

Initial investigations showed that a 2D model was not suitable to adequately represent the complex mixing processes which were influenced by transient stratification in parts of the study area. A decision was therefore made to develop a 3D model during the model development stage. The development of the model domain (i.e the model extents) and mesh (i.e the resolution of the model) is presented in Section 3.1 of the Calibration and Validation Report.

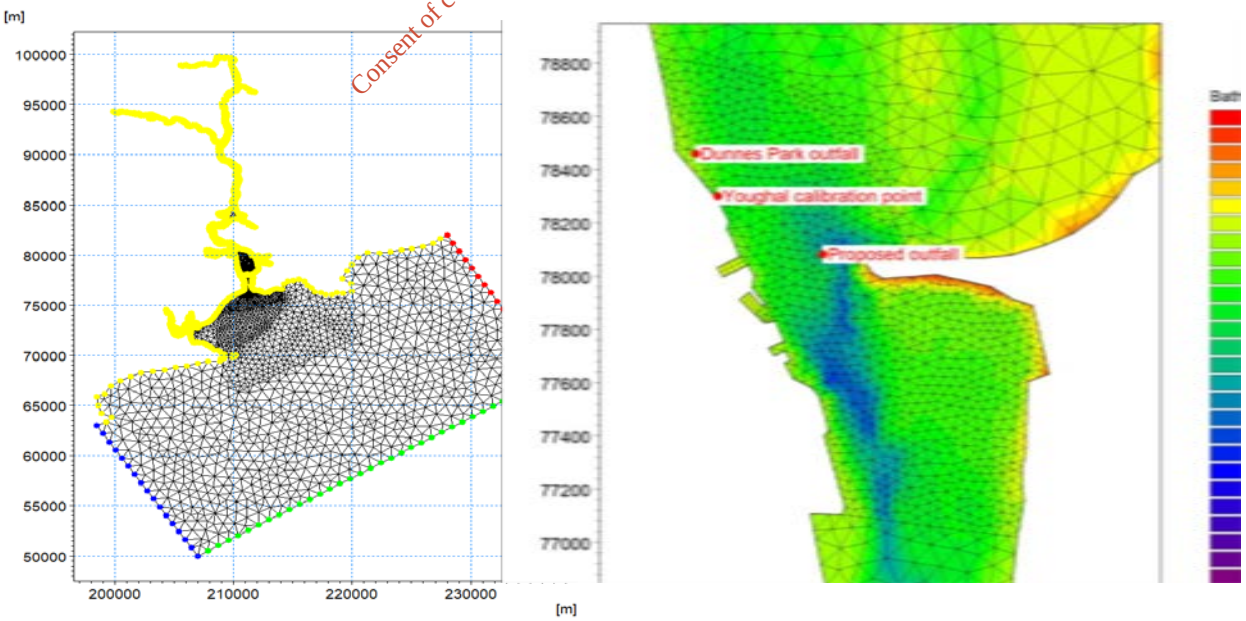


Figure 1 – Model Extents and mesh resolution (Refer to Figures 3-2 and 3-6 in Calibration and Validation Report)

The calibrated hydrodynamic model showed that the lower estuary and area just outside of the estuary mouth are dynamic mixing zones between freshwater from the rivers and the sea water. These areas undergo periods of being vertically well mixed and periods of being stratified. The balance of this mixing is critical to the advection and dispersion of the different parameters.

The water quality model has been developed for each parameter individually using the same underlying hydrodynamics. The water quality model has been calibrated for the five parameters of BOD, DIN, MRP, E.Coli and IE.

For each modelled parameter, calibration plots are prepared to compare the modelled concentrations in the receiving waters to monitoring datasets. The aim of the calibration and validation exercise is to demonstrate that the model is capable of simulating the conditions in the receiving waters. The primary dataset for validation is the long-term EPA WFD monitoring dataset, and this dataset is supported by spot measurements taken as part of the study.

A "model spin-up" time is afforded at the start of the validation process to allow the model to achieve a dynamic equilibrium whereby the modelled concentrations are no longer affected by the initial conditions - i.e the model is runs for a period of time until there is there is no longer any rising or falling trend in the modelled concentrations of any parameter. This ensures the assessment is not biased by the concentrations at the very start of the simulation, and that the model is replicating natural conditions before results are extracted for analysis

The model has been calibrated and validated for BOD, DIN, MRP, Ammonia, *E-Coli* and Intestinal Entercocci.

By way of example, Figure 2 overleaf demonstrates the model performance for DIN at EPA monitoring points at Cappoquinn (BR110), Dunn's Park (BR220), Paxes Lane (BR230) and Youghal Bay (BR240).

This plot demonstrates the tidal influence on DIN concentrations which is visible in the lower reaches of the estuary and shows that modelled concentrations at all monitoring points is within the envelope of observed concentrations from the EPA dataset. Furthermore, the median modelled concentrations are close to the EPA monitoring median concentrations.

In summary, the plot demonstrates that the model is capable of accurately simulating the long-term water quality in the receiving waters.

The water quality model was considered to have been calibrated and validated as suitable for use in investigations of the impact of the Youghal WwTP on the receiving waters.

Full details of Phase 3, including the calibration and validation of all parameters, are provided in the Calibration and Validation Report, in **Attachment D.1.c**

DIN [mg/l]

Location	Calibration Data					Modelled					Median		95%ile	
	Min	Mean	Median	95%ile	Max	Min	Mean	Median	95%ile	Max	Mod-Obs	% Obs	Mod-Obs	% Obs
Cappoquin (BR110)	1.71	2.83	2.72	4.04	4.32	2.68	2.70	2.70	2.71	2.71	-0.02	-1%	-1.33	-33%
Dunnes Park (BR220)	0.08	0.79	0.72	1.72	1.84	0.25	1.19	1.22	2.27	2.54	0.50	70%	0.55	32%
Paxes Lane (BR230)	0.11	0.80	0.53	1.98	2.85	0.23	0.91	0.75	1.90	2.36	0.22	41%	-0.07	-4%
Youghal Bay (BR240)	0.15	0.49	0.36	1.02	1.03	0.18	0.66	0.51	1.42	1.96	0.14	39%	0.40	39%

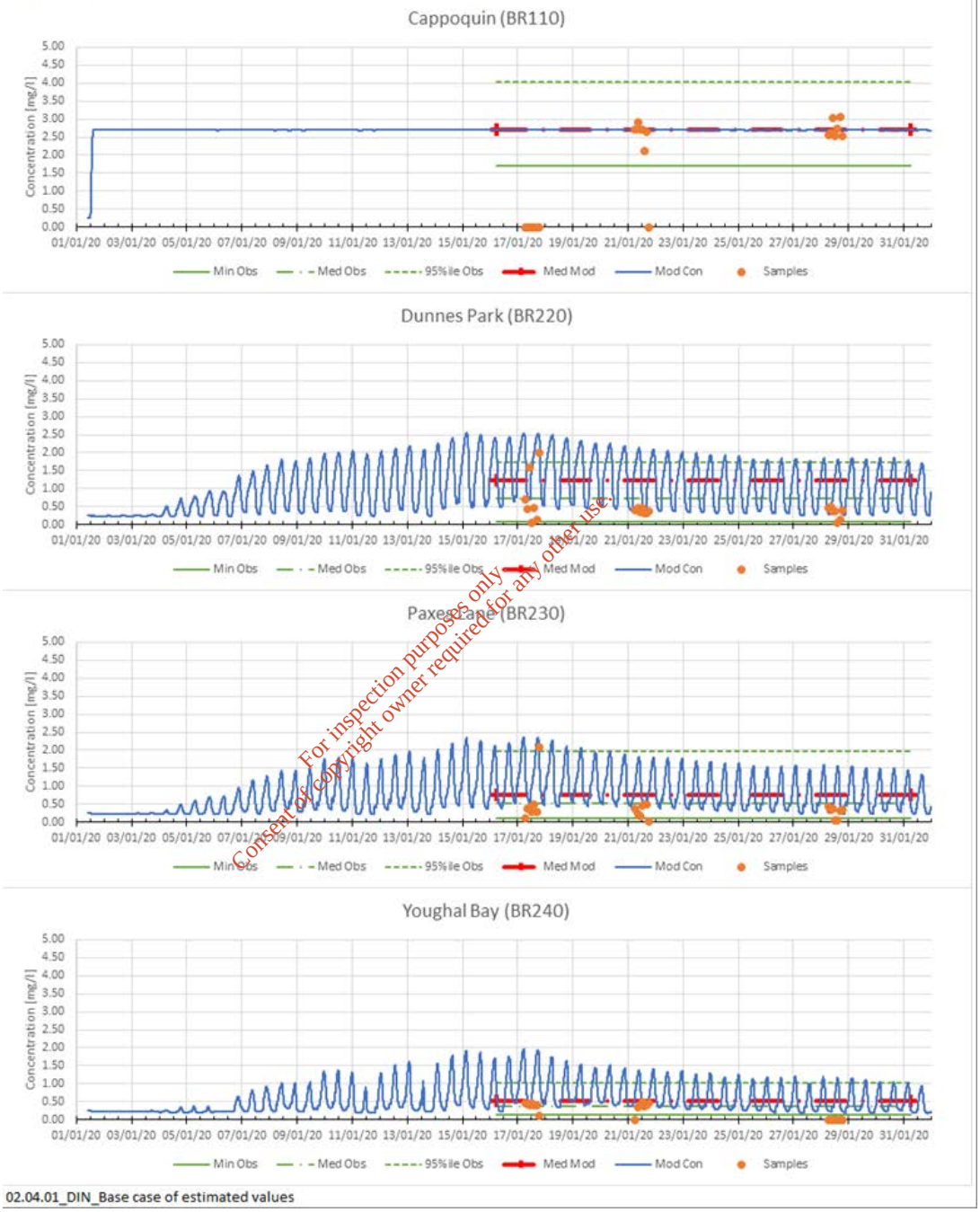


Figure 2 DIN Validation Plots showing model performance (blue and red) vs EPA WFD monitoring statistics (green) and marine survey samples (orange)

Phase 4 – Scenario Analysis and Reporting

The calibrated hydrodynamic and water quality model presented in the Calibration Report has been used to evaluate four further scenarios. These were in addition to scenarios 1 and 2 which were undertaken during Phase 3 calibration.

- Existing Baseline using the existing influent loading, current WWTP performance and existing outfall at Dunn's Park, for both summer and winter conditions (scenarios 3 and 4)
- Future Scenario using WWTP Capacity loading of 16,000 PE, modelled concentrations and existing outfall at Dunn's Park, for both summer and winter conditions (scenarios 5 and 6)

The modelled concentrations for each of the scenarios are set out below. Monitoring data from 2018-2020 from the wastewater effluent monitoring was used to ensure existing scenario concentrations were based on the treatment plant performance.

Future scenarios concentrations were based on ELVs (where available) and appropriate conservative values for other parameters. Given the presence of a TN ELV, a conservative assumption was made to assume the TN concentration at the WWTP was made up entirely of DIN, and hence a modelled concentration of 15mgN/l was used for DIN.

Loading Scenario	BOD mg/l	EC cfu/100ml	IE cfu/100ml	DIN mg N/l	MRP mg P/l	Ammonia mg N/l
Existing Summer (Scenario 3)	5	50	15	2.16	1.35	1.3
Existing Winter (Scenario 4)	5	38,730	9,683	2.16	1.35	1.3
Future summer (Scenarios 5)	25	10,000	2,500	15	10	10
Existing Winter (Scenario 6)	25	100,000	25,000	15	10	10

For each of the above scenarios the size of the mixing zone for each modelled parameter is presented in the Marine Modelling Study Report (Attachment D.1.d). In the interest of clarity, the mixing zone is defined as the immediate area at a discharge point, within which the EQS is not met.

A common feature for all parameters and loading scenarios in this Study is that the treated wastewater from Youghal WwTP has a relatively low total load of each parameter to the estuary compared to the discharges from the rivers.

The consequence of this has meant that for all parameters, the modelled *mixing zone* is less than 50m for all modelled parameters, under existing and future loading scenarios.

The hydrodynamics of the estuary have demonstrated that the estuary is flushed by freshwater on each outgoing tide and therefore it is unlikely

that the treated wastewater from the WwTP would accumulate over time within the estuary.

Because of these factors, in order to demonstrate the effects of the treated wastewater, for the purposes of illustration, the modelled plumes have also been presented at lower than EQS concentrations for information purposes.

Figure 3 shows the modelled concentrations for *Ecoli* under summer and winter conditions. *Ecoli* has been selected as an example here as it provides the most discernible and identifiable impact of all modelled parameters.

The left hand box depicts the concentrations under summer decay and loading conditions, with the UV system operational. The lower plate shows the modelled concentrations locally in the vicinity of the discharge and demonstrate concentrations are very low (less than 100cfu/100ml) and would meet the requirements for Excellent Bathing Water Quality[1].

The right hand box depicts the concentrations under winter decay and loading conditions, during which time the UV is not operational. The lower plate shows the modelled concentrations immediately in the vicinity of the discharge and demonstrate that there is a localised plume (ca. 150m length, 100m width) where concentrations exceed 500cfu/100ml. Beyond this immediate area, concentrations meet the requirements for Good Bathing Water Quality[2] in the vicinity of the discharge. At both the Designated Bathing Waters and the Classified Production Area, the model shows that the requirements for Excellent Bathing Water Quality[2] are met. The model shows a very low concentration plume (ca. 10-20cfu/100ml) extending into Youghal Bay, however these concentrations are at, or close to, laboratory limit of detection levels for *Ecoli* and are not considered significant.

Full details of Phase 4, including modelling plots for all modelled parameters are provided in the Final Modelling Report, **Attachment D.1.d.**

[1] Note there is no applicable bacteria EQS in the vicinity of the discharge as the discharge does not outfall to a Designated Bathing Water, and EQS targets under the Bathing Water Regulations do not apply outside of the bathing water season.

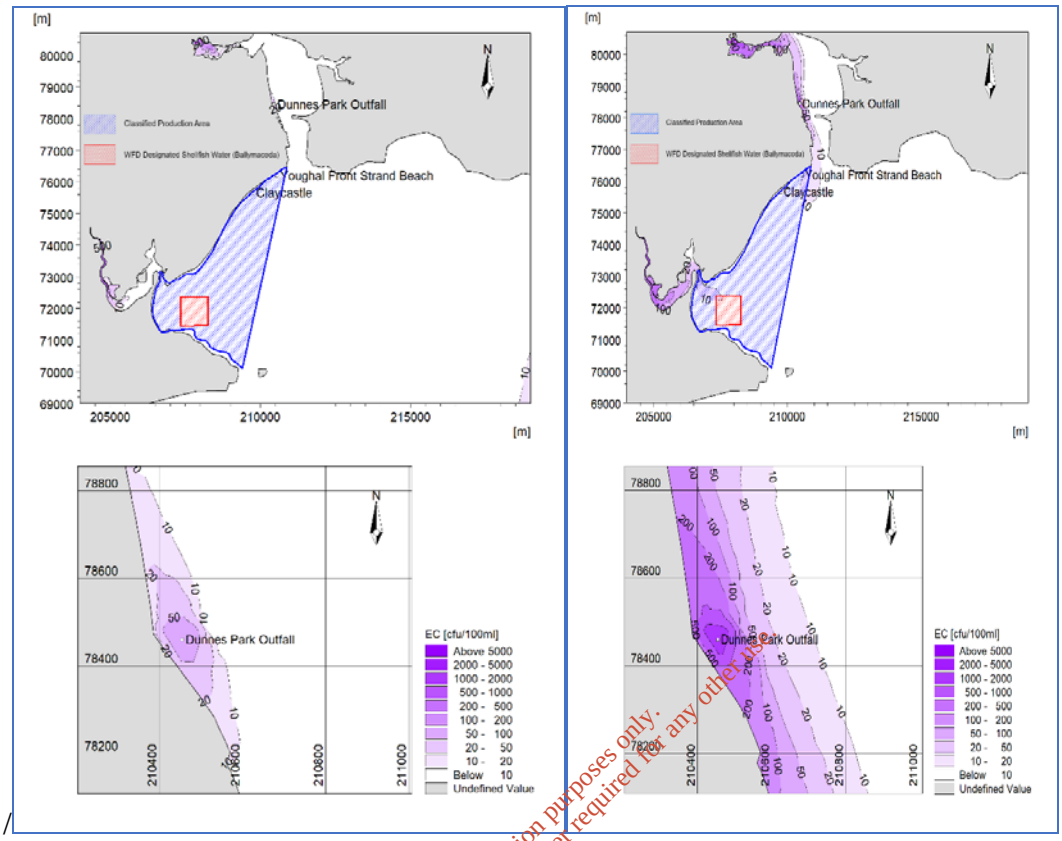


Figure 3 95%ile *E-coli* plots for Summer (left) and Winter (right)

Key Findings From Marine Modelling Study

The Marine Modelling Study concluded that treated wastewater at current or future loadings discharging from the Dunn's Park outfall did not indicate a degradation of the overall water quality of any of the receiving waterbodies, nor any degradation of the indicative quality of any WFD supporting quality element for any of the water bodies.

The study also concludes that during summer when the UV system is operational, there will be no measurable impact from the treated effluent from the Youghal WWTP discharges via the Dunn's Park outfall on the microbiological water quality of Designated Shellfish Waters or Classified Production Areas, nor any measurable impact on Bathing Water Quality at the Designated Bathing Waters, under both existing and future (16,000PE Loading) scenarios.

Under the existing winter scenario, when the UV system is not operating, there is no modelled impact on the Designated Shellfish Water (Ballymacoda Bay) under both existing and future (16,000PE Loading) scenarios.

At Designated Bathing Waters and the Classified Production Area, the winter modelled concentrations are in the region of 10-20 cfu/100ml and meet requirements for Excellent Bathing Water Quality under the existing and future (16,000PE Loading) scenarios. The magnitude of the modelled concentrations is close to laboratory limits of detection (10cfu/100ml).

In summary, the modelling study has concluded that the existing level of treatment at Youghal WWTP and the existing primary discharge location at Dunn's Park are sufficient to support the achievement of WFD objectives for receiving waters under current and future loading scenarios.

Furthermore, the study concluded that the existing level of treatment at Youghal WWTP and the existing primary discharge location at Dunn's Park do not materially impact on WFD Protected Areas including Designated Bathing Waters, Designated Shellfish Waters and European sites, under both existing a future loading scenarios.

D.2. Appropriate Assessment

- Where applicable, provide a copy of any screening for Appropriate Assessment report and Natura Impact Statement (NIS) that was prepared for consideration by any planning/public authority as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, in relation to the waste water works. Where a determination that an Appropriate Assessment is required has been made by any planning/public authority in relation to the waste water works, a copy of that determination and any screening report and Natura Impact Statement (NIS), and any supplementary information furnished in relation to any such report or statement, which has been provided to the planning/public authority for the purposes of the Appropriate Assessment shall be included.

  As part of the WWDL Review application for Youghal, that was submitted to the Agency on 20/03/2020 and withdrawn by IW on 16/06/2021. Screening for Appropriate Assessment was undertaken by the EPA on 6th April 2020 in which the Agency determined that an Appropriate Assessment of the existing discharges from the Youghal Agglomeration was required due to the potential adverse impact on the qualifying interests of the Blackwater River (Cork/Waterford) SAC (002170), Ballymacoda (Clonpriest and Pillmore) SAC (000077), Blackwater Estuary SPA (004028), Ballymacoda Bay SPA (004023), and Helvick Head to Ballyquin SPA (004192).

  A Natura Impact Statement has been prepared. A copy of this report can be found in **Attachment D.2**.

- Undertake a screening for Appropriate Assessment and submit a copy of the screening report in Attachment D.2.

  As part of the WWDL Review application for Youghal, that was submitted to the Agency on 20/03/2020 and withdrawn by IW on 16/06/2021. Screening for Appropriate Assessment was undertaken by the EPA on 6th April 2020 and the Agency determined that an Appropriate Assessment of the existing discharges from the Youghal Agglomeration is required due to the potential adverse impact on the qualifying interests of the Blackwater River (Cork/Waterford) SAC (002170), Ballymacoda (Clonpriest and Pillmore) SAC (000077), Blackwater Estuary SPA (004028), Ballymacoda Bay SPA (004023), and Helvick Head to Ballyquin SPA (004192).

A Natura Impact Statement has been prepared and is attached in **Attachment D.2**.

- Complete Table D.1 providing details of all European Sites considered as part of the screening for appropriate assessment.

  Please see completed **Table D.1**, which can be found in **Annex 1.**

- Based on the information provided above, indicate whether the discharge(s), individually or in combination with other plans or projects, is likely to have a significant effect on a European Site(s), in view of best scientific knowledge and the conservation objectives of the site(s). Provide reasons for this determination.

  In response to WWDL Review application for Youghal, that was submitted to the Agency on 20/03/2020 and withdrawn by IW on XXXX. Screening for Appropriate Assessment was undertaken by the EPA on 6th April 2020.

  The EPA determined that an Appropriate Assessment of the existing discharges from the Youghal Agglomeration was required due to the potential adverse impact on the qualifying interests of the Blackwater River (Cork/Waterford) SAC (002170), Ballymacoda (Clonpriest and Pillmore) SAC (000077), Blackwater Estuary SPA (004028), Ballymacoda Bay SPA (004023), and Helvick Head to Ballyquin SPA (004192). This determination was based on the following:

  - The proximity of the discharges to Blackwater River (Cork/Waterford) SAC, Ballymacoda (Clonpriest and Pillmore) SAC, Blackwater Estuary SPA, Ballymacoda Bay SPA and Helvick Head to Ballyquin SPA.
  - The presence of water-dependent habitats and species associated with the Blackwater River (Cork/Waterford) SAC and the presence of water-dependent habitats associated with the Ballymacoda (Clonpriest and Pillmore) SAC, Blackwater Estuary SPA and Ballymacoda Bay SPA.
  - The potential for bird species associated with Helvick Head to Ballyquin SPA, Ballymacoda Bay SPA and Blackwater Estuary SPA to forage in close proximity to the discharges.
  - The volume of the discharges from the agglomeration

- Where it cannot be excluded, on the basis of objective scientific information, following screening for Appropriate Assessment, that the discharge(s), either individually or in combination with other plans or projects, will have a significant effect on a European Site, provide a Natura Impact Statement (in Attachment D.2), as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended.

  The NIS concluded that there will be no adverse effects on the integrity of Blackwater River (Cork/Waterford) SAC, Ballymacoda (Clonpriest and Pillmore) SAC, Blackwater Estuary SPA, Ballymacoda Bay SPA and Helvick Head to Ballyquin SPA or any European Site, in view of these

site's conservation objectives and that the conservation status of the Annex I habitats, Annex II species or Annex I bird species, will not be compromised by the WwTP and agglomeration discharges either directly, indirectly or cumulatively.

It is therefore concluded that the Youghal WwTP and agglomeration discharges, alone or in-combination with other plans and / or projects will not give rise to adverse effects on the integrity of Blackwater River (Cork/Waterford) SAC, Ballymacoda (Clonpriest and Pillmore) SAC, Blackwater Estuary SPA, Ballymacoda Bay SPA and Helvick Head to Ballyquin SPA, or any European Site.

Attachment D.2 *should contain an Appropriate Assessment screening report and where applicable a Natura Impact Statement.*

A Natura Impact Statement has been prepared and is attached in **Attachment D.2**.

D.3. Programme of improvements

- Provide details on a programme of improvements to ensure that discharges from the agglomeration will not result in significant environmental pollution and details to ensure that all emissions from the agglomeration will comply with, or will not result in the contravention of any national or European legislation.

There are no additional investments planned.

Attachment D.3 *should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.*

SECTION E: DECLARATION

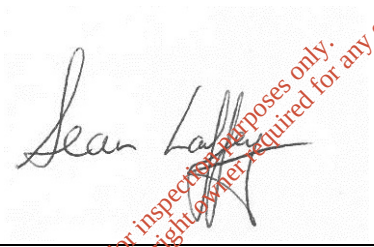
Declaration

I hereby make an application for a waste water discharge licence/revised licence, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations 2007 as amended.

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and Irish Water offices, and via the EPA's website.

This consent relates to this application itself and to any further information or submission, whether provided by me as the Applicant or any person acting on the Applicant's behalf.



Signed by : _____

Date : 15 June 2021
(on behalf of the organisation)

Print name: Sean Laffey

Position in organisation: Head of Asset Management

ANNEX 1: TABLES / ATTACHMENTS

Table C.1(a): Emissions to Surface / Ground Water – Primary Discharge Point

Discharge Point Code	SW000
Normal Volume Emitted/day (m^3/day)	4,500
Maximum Volume Emitted/day (m^3/day)	10,800
Period of Emission (avg)	24 hours per day, 365 days per year

Table C.1(b): Emissions to Surface / Ground Water – Characteristics of the Emission - Primary Discharge Point

Substance	As Discharged		
	Unit of Measurement	Sampling Method	Max Daily Average*
pH	pH	24 Hour Composite Sampler	7.9 pH Units
Temperature	°C	Not Measured	Not Measured
Suspended Solids	mg/l	24 Hour Composite Sampler	32 mg/l
Total Ammonia (as N)	mg/l	24 Hour Composite Sampler	8 mg/l
Carbonaceous Biochemical Oxygen Demand	mg/l	24 Hour Composite Sampler	14 mg/l
Chemical Oxygen Demand - Cr	mg/l	24 Hour Composite Sampler	62 mg/l
Total Nitrogen (as N)	mg/l	24 Hour Composite Sampler	11.7 mg/l
Total Phosphorus (as P)	mg/l	24 Hour Composite Sampler	2.58 mg/l
Orthophosphate (as P) - Unspecified	mg/l	24 Hour Composite Sampler	2.48 mg/l

* Max daily average refers to the maximum concentration of the relevant substance recorded from composite sample results during the monitoring period.

Note: the above data represents the maximum daily average concentrations recorded in compliance monitoring conducted in 2020 at the WWTP effluent monitoring chamber.

Table C.2(a): Emissions to Surface/Ground Water – Secondary Discharge Point
(1 table per discharge point)

Discharge Point Code	Not Applicable
Normal Volume Emitted/day (m^3/day)	
Maximum Volume Emitted/day (m^3/day)	
Period of Emission (avg)	

Table C.2(b): Emissions to Surface/Ground Water – Characteristics of the Emission - Secondary Discharge Point
(1 table per discharge point)

Substance	As Discharged		
	Unit of Measurement	Sampling Method	Max Daily Average*
pH	pH		
Temperature	◦C		
Suspended Solids	mg/l		
Total Ammonia (as N)	mg/l		
Carbonaceous Biochemical Oxygen Demand	mg/l		
Chemical Oxygen Demand - Cr	mg/l		
Total Nitrogen (as N)	mg/l		
Total Phosphorus (as P)	mg/l		
Orthophosphate (as P) - Unspecified	mg/l		

* Max daily average refers to the maximum concentration of the relevant substance recorded from composite sample results during the monitoring period.

Table D.1: List of European Sites assessed, their associated qualifying interests and conservation objectives.

	European Site Name & Site Code	**Distance / Direction of European Site from discharge(s)** (e.g. X km east downstream of the discharge(s) on the X River.)	**Qualifying interests** List all habitats and species listed in the Conservation Objectives document on the NPWS website. Denote priority habitats with an *. For species list the English Name & *Latin Name.*	**Conservation objectives** Cite the most recent Conservation Objectives document on the NPWS website for the European Site.
1	Blackwater River (Cork/Waterford) SAC (002170	Directly into SAC	• Estuaries [1130] • Mudflats and sandflats not covered by seawater at low tide [1140] • Salicornia and other annuals colonising mud and sand [1310] • Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] • Mediterranean salt meadows (Juncetalia maritimi) [1410] • Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] • Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] • Margaritifera (Freshwater Pearl Mussel) [1029] • Petromyzon marinus (Sea Lamprey) [1095] • Lampetra fluviatilis (River Lamprey) [1099]	NPWS (2012) Conservation Objectives: Blackwater River (Cork/Waterford) SAC 002170. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

			• Alosa fallax (Twaite Shad) [1103] • Salmo salar (Salmon) [1106] • Lutra (Otter) [1355]	
2	Ballymacoda (Clonpriest and Pillmore) SAC (000077	This coastal site stretches north-east from Ballymacoda to within about 6 km of Youghal, Co. Cork	• Estuaries [1130] • Mudflats and sandflats not covered by seawater at low tide [1140] • Salicornia and other annuals colonising mud and sand [1310] • Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] • Mediterranean salt meadows (Juncetalia maritimi) [1410]	NPWS (2015) Conservation Objectives: Ballymacoda (Clonpriest and Pillmore) SAC 000077. Version 2. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
3	Blackwater Estuary SPA (004028	Directly into SPA	• Wigeon (Anas penelope) [A050] • Golden Plover (Pluvialis apricaria) [A140] • Lapwing (Vanellus vanellus) [A142] • Dunlin (Calidris alpina) [A149] • Black-tailed Godwit (Limosa limosa) [A156] • Bar-tailed Godwit (Limosa lapponica) [A157] • Curlew (Numenius arquata) [A160] • Redshank (Tringa totanus) [A162] • Wetland and Waterbirds [A999]	NPWS (2012) Conservation Objectives: Blackwater Estuary SPA 004028. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
4	Ballymacoda Bay SPA (004023)		• Wigeon (Anas penelope) [A050] • Teal (Anas crecca) [A052]	NPWS (2015) Conservation Objectives: Ballymacoda Bay SPA 004023. Version 1.

			• Ringed Plover (Charadrius hiaticula) [A137] • Golden Plover (Pluvialis apricaria) [A140] • Grey Plover (Pluvialis squatarola) [A141] • Lapwing (Vanellus vanellus) [A142] • Sanderling (Calidris alba) [A144] • Dunlin (Calidris alpina) [A149] • Black-tailed Godwit (Limosa limosa) [A156] • Bar-tailed Godwit (Limosa lapponica) [A157] • Curlew (Numenius arquata) [A160] • Redshank (Tringa totanus) [A162] • Turnstone (Arenaria interpres) [A169] • Black-headed Gull (Chroicocephalus ridibundus) [A179] • Common Gull (Larus canus) [A182] • Lesser Black-backed Gull (Larus fuscus) [A183] • Wetland and Waterbirds [A999]	National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
5	Helvick Head to Ballyquin SPA (004192	Helvick Head to Ballyquin SPA is a linear site situated on the south-west coast of Co.	• Cormorant (Phalacrocorax carbo) [A017] • Peregrine (Falco peregrinus) [A103]	NPWS (2020) Conservation objectives for Helvick Head to Ballyquin SPA [004192]. Generic Version 7.0.

		Waterford	• Herring Gull (Larus argentatus) [A184] • Kittiwake (Rissa tridactyla) [A188] • Chough (Pyrrhocorax pyrrhocorax) [A346]	Department of Culture, Heritage and the Gaeltacht

ANNEX 2: Licence Application Checklist

Section	Attachment Number	Document	Attached by Applicant √
Non-Technical Summary	A.1	Non-technical summary	√
General	B.2	Agglomeration boundary map	√
	B.3a	Site boundary and overall site plan	√
	B.3b	Primary discharge point location map	√
	B.4a – B.4b	WWTP process schematics	√
	B.8	Storm Water Overflow location map(s)	√
	B.9	Emergency Overflow location map(s)	√
	B.12	Supporting information on Abstractions	Not Applicable
	B.13a – B.13c	Most recent planning permission, including all conditions, the planning inspectors report and an EIAR where required.	√
	B.14	A copy of the site notice, site notice location and newspaper notice	√
	B.15	Most recent Capital Investment Programme, including a copy of any approved funding	Not Applicable
	B.16	Section 63 Notices/ compliance correspondence	Not Applicable
	B.17	Most recent licence issued under the Foreshore Act 1933 as amended	√
Discharges & Monitoring	C.1	Supporting information on Discharges and Monitoring	√
Existing Environment & Impact of the Discharge(s)	D.1a – D.1d	All supporting information on the assessment of the impact on the receiving waters	√
	D.2	Appropriate Assessment screening report and where applicable a Natura Impact Statement	√
	D.3	Most recent Programme of Improvements	Not Applicable

ANNEX 3: Compliance with Waste Water Discharge (Authorisation) Regulations 2007 as amended

- Regulation 16 of the Waste Water Discharge (Authorisation) Regulations 2007 as amended sets out the information which must, in all cases, accompany a discharge licence application. Applicants should ensure that the application fully complies with the legal requirements of Regulation 16 of the 2007 Regulations as amended.

- Regulation 16(3) states that an application for a licence shall be accompanied by such fee as is appropriate having regard to the provisions of Regulations 38 and 39.

Has the appropriate fee been paid?	**Yes/No**	**Amount**
		€

- Regulation 16(4) states that an original application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under Regulation 16(3) in hardcopy or in an electronic or other format as specified by the Agency.

  The application shall include a signed original, 1 hardcopy of the application and 2 CD versions of the application (PDF files).

Has this documentation been provided?	**Yes**	**No**

- Regulation 17 states that where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency.

  Where applicable, the application shall be accompanied by 2 hardcopies of the EIAR and 2 CD versions of the EIAR (PDF files).

Has this documentation been provided where applicable?	**Yes**	**No**