

Eve O'Sullivan

From: Licensing Staff
Subject: WWDA - EIAR scoping request
Attachments: Bandon EIAR Scoping Report request.pdf

From: Peter Keegan <pkeegan@water.ie>
Sent: Monday 12 September 2022 13:06
To: EIAPanning <eiapanning@epa.ie>
Cc: Licensing Staff <licensing@epa.ie>
Subject: RE: WWDA - EIAR scoping request

Good Afternoon,

In accordance with Regulation 17C of the European Union (Waste Water Discharge) Regulations 2007 to 2020, Please find attached request for the Agency to provide its' opinion in writing on the scope and level of detail of the information required to be included in the EIAR for the Bandon Agglomeration.

Kind regards

Peter Keegan
Environmental Licensing Specialist

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Thank you for your attention.

Tá an fhaisnéis á seachadadh dírithe ar an duine nó ar an eintiteas chuig a bhfuil sí seolta amháin agus féadfar ábhar faoi rún, faoi phribhléid nó ábhar atá íogair ó thaobh tráchtála de a bheith mar chuid de. Tá aon athsheachadadh nó scaipeadh den fhaisnéis, aon athbheithniú ar nó aon úsáid eile a bhaint as, nó aon ghníomh a dhéantar ag brath ar an bhfaisnéis seo ag daoine nó ag eintitis nach dóibh siúd an fhaisnéis seo, toirimiscithe agus féadfar é a bheith neamhdhleathach. Níl Uisce Éireann faoi dhliteanas maidir le seachadadh iomlán agus ceart na faisnéise sa chumarsáid seo nó maidir le haon mhoill a bhaineann léi. Ní ghlacann Uisce Éireann le haon dliteanas faoi ghnímh nó faoi iarmhairtí bunaithe ar úsáid thoirmiscithe na faisnéise seo. Níl Uisce Éireann faoi dhliteanas maidir le seachadadh ceart agus iomlán na faisnéise sa chumarsáid seo nó maidir le haon mhoill a bhaineann léi. Má fuair tú

Environmental Licensing Programme
Office of Environmental Sustainability
Environmental Protection Agency
PO Box 3000
Johnstown Castle Estate
Wexford

12/09/2022

IW-ER-LT0610

Dear Inspector,

RE: Bandon Wastewater Discharge Licence Review Application D0136



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In accordance with Regulation 17C of the European Union (Waste Water Discharge) Regulations 2007 to 2020, Irish Water is requesting the Agency to provide its opinion in writing on the scope and level of detail of the information required to be included in the EIAR.

In accordance with Regulation 17D (1), Please note the following.

- (a) the name and address, and telephone number and e-mail address if any, of the water services authority:

[Irish Water Colvill House](#)

[24 – 26 Talbot Street](#)

[Dublin 1](#)

[01 8925000](#)

WasteWaterLicensingSouthern@water.ie

- (b) the location, townland or postal address of the land or structure to which the request relates (as may be appropriate), and shall include a location map marked so as to clearly identify—

[Bandon WwTP and agglomeration – Please see attached EIA Scoping Report](#)

- I. the land or structure to which the request relates and the boundaries thereof in red:

[Please refer to the Section 3 of the attached EIA Scoping Report.](#)

- II. any land which adjoins, abuts or is adjacent to the land to be developed and which is under the control of the water services authority in blue:

Not applicable

- III. any wayleaves in yellow

Not applicable

(C) a description of –

- I. the nature of the proposed development

In accordance with Regulation 17 of the European Union (Waste Water Discharge) Regulations 2007 to 2020 IW is required to prepare an Environmental Impact Assessment (EIA) Report to support the licence review application for Bandon D0136.

The Licence review application for Bandon will consider operational discharges to the aquatic environment from the upgrade of the sewerage network, the discontinuation of storm water overflow discharges and the upgrade to the wastewater treatment plant.

Further details are contained in the attached EIA Scoping report.

- II. the development's specific characteristics, including its location and technical capacity

Bandon Town is served by a sewerage system that comprises gravity sewers, pumping systems, rising mains, a preliminary treatment works (PTW) and a wastewater treatment plant (WwTP). The WwTP is located to the east of the town on the banks of the River Bandon. The sewerage system is a combined system which accommodates a high proportion of stormwater. All flows from the Bandon catchment gravitate to the PTW at Glasslinn Road.

The Bandon WwTP Upgrade and Glasslinn Pumping Station (i.e., Bandon Sewerage Scheme) was completed in Q2 2021. The Bandon Watermain & Sewer Network Project are due to be completed by the end of Q4 2022. The Bandon IDA Laragh Pumping station and rising main to Bandon was completed in Q3, 2018.

The following is a list of some items covered under the scope of the above referenced projects;

- Upgrade works at the Bandon WwTP and Glasslinn Road pumping station
- Provision of a stormwater storage tank (900m³) at the WwTP to cater for 2 hours retention of flows (Formula A flow less the Full Flow to Treatment flow)
- Glasslinn pumping station is designed with the capacity to pump flows up to 217 l/s (Formula A). These flows are pumped from Glasslinn Road Pumping Station to the new inlet works at the upgraded WwTP site.
- New Rising Mains from the Glasslinn Road Pumping Station to WwTP
- An increase in treatment capacity at Bandon WwTP to 14,456 p.e.
- The removal of 12 no. storm water overflows in Bandon Town and its environs and new sections of combined sewer and storm drains.
- New Rising main from Bandon IDA Laragh to Bandon WwTP and the provision of new pumping station at IDA Laragh WwTP for collection and pumping collected loads from IDA Laragh industrial estate to the Bandon WwTP. As part of this work the Bandon IDA WwTP was decommissioned (under Bandon IDA Laragh WwTP upgrade works)

Further details are contained in the attached EIA Scoping report.

(iii) the development's likely impact on the environment.

Given the nature of the operation activities i.e., discharges to the aquatic environment, operational discharges in general have the potential to impact on the existing hydrological conditions.

However, it is important to reiterate that in this case the impacts on the water quality of the receiving aquatic waterbody will be similar to the existing situation, but with the significant benefit of the elimination of multiple overflows and the increased treatment capacity of the Bandon WwTP

The EIAR will include an assessment of the impact of the operational discharges, in combination with other plans and projects, against the pertinent objectives of relevant Directives and Regulations, including but not limited to the Water Framework Directive [2000/60/EC].


Further details are contained in the attached EIA Scoping report.

In addition to the above information, the Agency should consider the following, in their determining the scope and level of detail of the information required to be included in the EIAR

- EIAR Scoping Report – Reproduced in Appendix A
- In February 2017, Irish Water applied to Cork County Council Planning Authority under Section 34 of the Planning and Development Act, 2000 (as amended) for the Bandon Sewerage Scheme Upgrade Project (Ref. Planning Register Number: 174106). A final grant of planning was obtained on the 29th August 2017, subject to 11 no. conditions.
- In July 2016, Irish Water applied to Cork County Council Planning Authority (Planning Ref: 165851) under Section 34 of the Planning and Development Act, 2000 (as amended) for the Bandon IDA Laragh WwTP upgrade works. A conditional grant of planning was obtained on the 20th January 2017. This planning decision was subsequently appealed to An Bord Pleanála. A final grant of planning of planning was obtained from An Bord Pleanála (Ref: PL 04.247978) on the 15th June 2017 subject to 6 no. Conditions.
- Planning permission was not required for the Bandon Watermain & Sewer Network as it was classed as an exempt development.

I trust the above is satisfactory but please contact me if you require any further information or have any further queries in relation to this.

Yours sincerely,



Peter Keegan

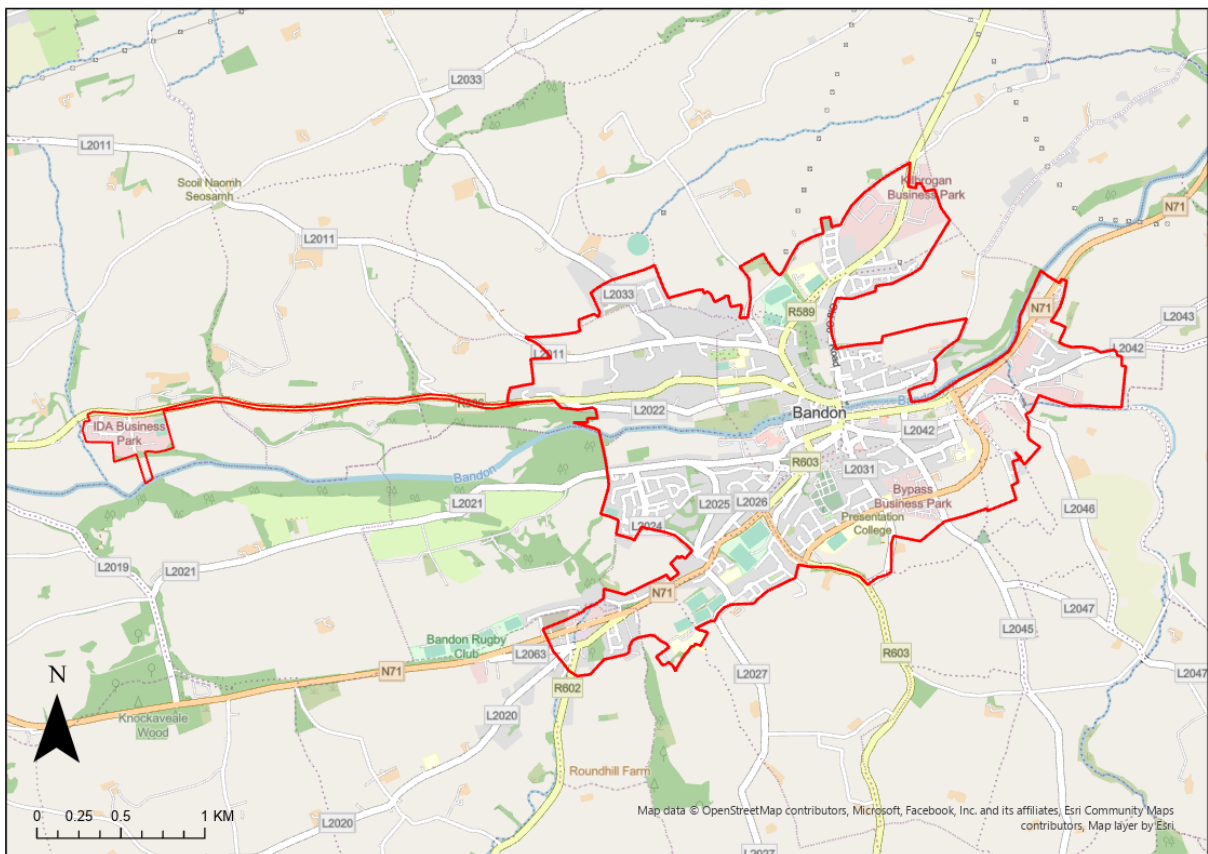
Asset Strategy



Irish Water
Uisce Éireann

BANDON WASTE WATER DISCHARGE LICENCE REVIEW – D0136-01

ENVIRONMENTAL IMPACT ASSESSMENT REPORT - SCOPING REPORT



SEPTEMBER 2022

IRISH WATER

BANDON WASTE WATER DISCHARGE LICENCE REVIEW

EIAR SCOPING REPORT

Nicholas O'Dwyer Ltd
Consulting Engineers
Nutgrove Office Park
Nutgrove Avenue
Dublin 14

SEPTEMBER 2022

PROJECT NO. 20893					
Revision	Reason for Revision	Prepared by	Reviewed by	Approved by	Issue Date
-	Initial Issue	NOD	RC/UD	CAS	24/06/2022
Rev A	For Client Review	NOD	RC/UD	CAS	29/08/2022
Rev B	Revision after Client Review	NOD	CAS	CAS	30/08/2022
Final	Final	NOD	CAS	CAS	09/09/2022

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1. INTRODUCTION

This document is the Scoping Report for the preparation of the Environmental Impact Assessment Report (EIAR) for the Bandon agglomeration operational discharges.

It is submitted for opinion as to the scope and content of an EIAR to be prepared and submitted to the EPA in support of the Bandon Waste Water Discharge Licence (D0136-01) review.

1.1. Background Information

Bandon Town is served by a sewerage system that comprises gravity sewers, pumping systems, rising mains, a preliminary treatment works (PTW) and a wastewater treatment plant (WwTP). The WwTP is located to the east of the town on the banks of the River Bandon. The sewerage system is a combined system which accommodates a high proportion of stormwater. All flows from the Bandon catchment gravitate to the PTW at Glasslinn Road.

Upgrades works at Bandon WwTP were required so as improve the treatment processes at the WwTP thereby resulting in an improved effluent discharge quality. The upgraded plant was designed to meet the Emission Limit Values (ELVs) stipulated in the Waste Water Discharge Licence (WWDL D0136-01). The upgrade works also included the replacement of existing plant and equipment that had exceeded their normal operational life. These upgrade works fall under the *Bandon Wastewater Treatment Plant and Glasslinn Road Pumping Station Upgrade Project (i.e., Bandon Sewerage Scheme)* and this project was completed in Q2 2021. Further details on this project are provided in **Section 1.1.1** below.

The upgraded Bandon WwTP has a design capacity of 14,465 p.e (population equivalent) and therefore has adequate capacity to treat the current load of 9,744 p.e (AER, 2021). The civil and structural works will also allow for the upgrade of the capacity of the plant to the 30-year design horizon of 18,111 p.e.

The upgrades at the WwTP at Bandon will ensure that there is adequate treatment capacity within the treatment plant to meet the needs of the area served as well as ensuring that there will be effective management of the wastewater treatment process to protect the environment and public health.

Surface water flooding associated with heavy rainfall and exceedance of the drainage system is a problem in Bandon Town. A separate Irish Water project, the *Bandon Watermain and Sewer Network Project*, which is due to be completed by end of 2022, will help increase flow capacity in the system, reduce sewage discharges to the Bandon River and will help in alleviating sewer flooding currently being experienced in the town. Further details on this project are provided in **Section 1.1.2** below.

As part of this WWDL Review, the Bandon IDA Laragh Agglomeration (A0362-01) is to be amalgamated into the current Bandon agglomeration. The Bandon IDA Laragh agglomeration previously included a WwTP that serviced the industrial estate which mostly related to food processing. The plant consisted of a grease trap, inlet screening and 2 no. aeration tanks. The plant also consisted of a redundant sludge tank and wasting pumps. The treated effluent was discharged *via* an outfall weir at the end of the plant and flowed to the River Bandon. This WwTP was decommissioned in Q1 of 2019 as it was overloaded due to poor quality influent from the food manufacturing process and associated extreme high and low flows in line with production schedules. The WwTP was replaced with a new pumping station with associated storage. A new rising main was constructed to transfer

flows from new Pumping Station to the existing Bandon Town wastewater network. Further details on this project are provided in **Section 1.1.3** below.

1.1.1. Bandon Wastewater Treatment Plant and Glasslinn Road Pumping Station Upgrade (Bandon Sewerage Scheme)

In August 2018, Irish Water was granted planning permission for the Bandon Sewerage Scheme which involved the key infrastructure elements listed below. The upgraded WwTP is designed to meet the existing Emission Limit Values (ELVs) stipulated in the Waste Water Discharge Licence (WWDL D0136-01) and the 10 year design horizon of 14,456 p.e with civil works in place to allow for upgrade to the 30 year design horizon of 18,111 p.e.

WwTP

- Installation of new inlet screening & grit removal units.
- Construction of a new reinforced concrete stormwater storage tank. The new stormwater storage tank has a capacity of 900 m³ to cater for 2 hours retention of flows (Formula A flow less the Full Flow to Treatment flow). Once the capacity of the stormwater storage tank is exceeded the excess water is discharged to the river Bandon *via* SW002 (NGR 150368E, 055690N).
- Retention and refurbishment of the existing Primary Sedimentation Tanks including replacement of the out-of-date mechanical & electrical equipment.
- Replacement of the existing surface aeration system in the Aeration Ditch with a more efficient system.
- Upgraded sludge wasting and recycling system. This involved the installation of new Return Activated Sludge (RAS) pumps, new Waste Activated Sludge (WAS) pumps, instrumentation and electrical control.
- Replacement of the existing sludge dewatering building to house the new sludge dewatering equipment.
- Installation of an additional Picket Fence Thickener (PFT) and upgrade of the existing PFT and Sludge Holding Tank, complete with sludge feed pumps to the sludge dewatering plant.
- Provision of a new back-up generator and bunded fuel tanks at the WwTP to provide for continued operation of the WwTP in the event of an interruption in the power supply. The primary purpose for the new generator is to provide additional resilience for the WwTP and reduces the risks of flooding in the Bandon Sewer Network in the event of a mains power failure.
- Provision of a telemetry system to communicate signals between all pumping stations within the collection network supported by a web-enabled SCADA system at the WwTP and if necessary at Irish Water's Control Centre.
- Hydraulic upgrade of interconnecting pipelines.
- New chemical storage tank (Plan area circa 5m²), emergency shower and eyewash, chemical dosing pumps and delivery pipework.

The upgraded WwTP was designed to meet the future 10-year design capacity of 14,456 PE and to meet the ELVs as per Schedule A.1 of the WWDL D0136-01 (Tech Amendment A), as tabled below.

Table 1.1 Current Emission Limit Value (ELV's) for Bandon WwTP as per D0136-01

Parameter	Emission Limit Value
Biological Oxygen Demand	25 mg/l
Chemical Oxygen Demand	125 mg/l
Suspended Solids	35 mg/l
Ortho-P (as P)	3 mg/l
Ammonia (as N)	3 mg/l
pH	6 - 9

Glasslinn Road Pumping Station

- Upgrade (replacement) Works to Glasslinn Road Pumping Station.
- New Rising Mains from the Glasslinn Road Pumping Station to WwTP.
- Screening and pumping of storm water from Glasslinn Road Pumping Station to River Bandon.
- Decommissioning and demolition of existing tanks and structures.
- The wastewater pumping station is designed with the capacity to pump flows up to 217 l/s (Formula A). These flows are pumped from Glasslinn Road Pumping Station to the new inlet works at the upgraded WwTP site.
- During normal operation overflows are not expected.
- Once flows greater than 217 l/s enter the Glasslinn Road Pumping Station site, all flows over 217 l/s cascade into the wet well of the storm water pumping station via a new storm screen.
- Storm water flows up to a 1 in 5 year return period (1855 l/s) are screened. A 6mm solids separation screen with a minimum solids capture ratio of 80% (based on "Formula A" flow) is to be installed.
- The wet well for the storm pumping station also provides overflow storage capacity on-site at Glasslinn Road Pumping Station. The capacity of the wet well of the storm pumping station is 250m³ which provides over 2 hours of dry weather flow back-up storage.
- When the wastewater pumping station discharge flowrate falls below 217 l/s, a storm return pump is mobilised to pump storm flows from the storm wet well back to the wet well of the wastewater pumping station to reduce the frequency that stormwater discharges to the Bandon River.
- In the event that the capacity of the storm pumping station wet well is exceeded then excess flows are pumped directly to the River Bandon *via* a new overflow pipeline. Any discharges to the receiving water are significantly diluted by stormwater. The capacity of the overflow is sufficient for the 1 in 30-year storm event arriving at Glasslinn Road Pumping Station from the Bandon Sewer Network minus the Formula A flows being pumped to the WwTP; that is 2568 l/s.
- The overflow pipeline was installed in order to control spills from the pumping station wet well and to avoid flooding of the Pumping Station site, neighbouring land and Bandon Town.
- Construction of a new ESB substation to cater for the increased electrical load.

- Provision of a new back-up generator and bunded fuel tanks at the Pumping Station to provide for continued operation of the Pumping Station in the event of an interruption in the power supply. The primary purpose for the new generator is to provide additional resilience for the Pumping Station, and reduces the risks of flooding in the Bandon Sewer Network in the event of a mains power failure.
- A minimum of 2 no. suitable openings were provided in each of the covers of the wet wells of the storm and wastewater pumping station to facilitate the removal of grit/sedimentation that may build up in the deep chambers.
- Installation of an additional HDPE diameter rising main from the Pumping Station to the WwTP inlet works. The new rising main was sized to cater for the full flow to preliminary treatment (*i.e.*, 217l/s) and has the minimum internal diameter required to achieve compliance with the relevant IW standards and Code of Practice.
- Both the existing 350mm diameter (approx. *dia.* only) rising and the 175mm diameter (approx. *dia.* only) rising main were retained and integrated into the permanent works as stand-by delivery pipework to the new inlet works.
- Flow measurement on new rising main; existing 350mm diameter rising main and on existing 175mm diameter rising main.

1.1.2. Bandon Watermain & Sewer Network Project

The Bandon Watermain & Sewer Network Project will increase flow capacity in the system, reduce sewage discharges to the Bandon River and will reduce surcharging of drainage pipe networks in the town. Works relating to this project are due to be completed by the end of 2022.

The existing Bandon agglomeration contains 14 SWOs on the sewer network which frequently discharge untreated wastewater to the River Bandon in the absence of any stormwater storage.

The removal of the storm water overflows in the existing network and installation of new combined sewers as part of the Bandon Watermain and Sewer Network Project will result in an increased flow to the Glasslinn Road Pumping Station PTW during flood conditions.

The project consists of the following:

- The removal of 12 no. storm water overflows in Bandon Town and its environs.
- New sections of combined sewer.
- New sections of storm drains.
- New sections of water mains.
- Replacement of defective water mains.
- Associated ancillary works.

1.1.3. Bandon IDA Laragh WwTP Upgrade

The Bandon IDA Laragh WwTP upgrade which was completed in Q3, 2018 comprised of the provision of a new Pumping Station to collect wastewater from the existing industrial estate and the pumping of the collected load to the Bandon WwTP for treatment. As part of this work the Bandon IDA WwTP was decommissioned.

The Bandon Laragh pumping station has been designed with the capacity to pump stormwater ("Formula A") flows. Therefore, during normal operation to the pumping station or during storm events overflows are not expected. In addition, tanks associated with the IDA WwTP were retained to provide overflow storage on-site. The storage capacity of the on-site WwTP tank is 80m³. This provides a minimum of 24 hours future dry weather flow storage and up to 84 hours existing average flow storage. In the context of best practice this volume of storage is considered an extra-large volume of storage for a pumping station. A 6mm solids separation screen with a minimum solid capture rate of 80% (based on "Formula A" flow) has been installed at the SWO point. This will provide primary treatment in the event that effluent spills to the outfall (SW017).

The existing outfall was converted into the emergency overflow for the new pumping station. This outfall will only be used in the case of a "catastrophic breakdown" of the pumping station. This overflow controls spills from the sump and avoids flooding of the site and neighbouring land. Although these spills would be extremely rare, measures were included in the design in order to avoid such spills during emergency breakdown events. These measures are in accordance with established best practice. The measures include:

- Duty/Standby pump arrangement with automatic changeover;
- Additional on-site storage capacity in excess of the industry standard 2-hour Dry Weather Flow storage of the pump sump, further details below;
- Call-out alarm system to notify the caretaker of failure of the pumps/loss of power supply/high water level/overflow;
- A bauer connection is provided on the rising main in order to facilitate over pumping (whereby a mobile pump could be brought to site as a temporary measure during repair);
- A mobile generator connection point to facilitate back up power;
- Uninterruptible Power Supply for up to 30 minutes is provided for all instrumentation, controllers, alarms and data storage systems. This ensures alarms are sent in the event of a loss of power.
- The SWO operates in compliance with the definition of 'Storm Water Overflow' as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995.

The storage capacity of the existing on-site WwTP tank is 80m³. This provides a minimum of 24 hours future dry weather flow storage and up to 84 hours existing average flow storage. In the context of best practice this volume of storage is considered an extra-large volume of storage for a pumping station and can be achieved in this instance by using the existing WwTP tanks located on site. A 6mm solids separation screen with a minimum solid capture rate of 80% (based on "Formula A" flow) was installed at the overflow point. This provides primary treatment in the event that effluent spills to the existing WwTP outfall *i.e.*, the proposed emergency outfall.

The removal of the Storm Water Overflows in the existing network and installation of new combined sewers as part of the Bandon Watermain and Sewer Network Project will result in an increased flow to the Glasslinn Road Pumping Station Pre-Treatment Works (PTW) during flood conditions.

Due to these changes, the incoming design flows to the PTW will increase from 1,597 l/s to 2,988 l/s for the 30-year rainfall event. A new 1200mm diameter pipeline will be

constructed to accommodate these flows and will terminate at the PTW at Glasslinn Road Pumping Station.

The Bandon Sewerage Scheme, the Bandon IDA Laragh WwTP upgrade and the Bandon Watermain and Sewer Network Project have been designed to ensure that emissions from the works will not result in the contravention of any relevant EU Directives and National Regulations.

1.2. Planning Permission

In February 2017, Irish Water applied to Cork County Council Planning Authority under Section 34 of the Planning and Development Act, 2000 (as amended) for the Bandon Sewerage Scheme (Ref. Planning Register Number 174106). A final grant of planning was obtained on the 29th August 2017 subject to 11 no. conditions.

In July 2016, Irish Water applied to Cork County Council Planning Authority (Planning Ref: 165851) under Section 34 of the Planning and Development Act, 2000 (as amended) for the Bandon IDA Laragh WwTP upgrade works. A conditional grant of planning was obtained on the 20th January 2017. This planning decision was subsequently appealed to An Bord Pleanála. A final grant of planning of planning was obtained from An Bord Pleanála (Ref: PL 04.247978) on the 15th June 2017 subject to 6 no. Conditions.

Planning permission was not required for the Bandon Watermain & Sewer Network as it was classed as an exempt development.

1.3. Construction Programme

The Bandon WwTP Upgrade and Glasslinn Pumping Station (*i.e.*, Bandon Sewerage Scheme) was completed in Q2 2021.

The Bandon Watermain & Sewer Network Project are due to be completed by the end of Q4 2022.

The Bandon IDA Laragh Pumping station and rising main to Bandon was completed in Q3, 2018.

1.4. Bandon WWDL D0136-01

The Bandon WWDL was granted on the 10th July 2015 and was subsequently amended on the 2nd December 2021 (Technical Amendment A).

The primary discharge (SW001) is to the River Bandon at NGR 150411E, 055785N.

The Emission Limit Value (ELV's) for Bandon WwTP are shown in **Table 1.1** above.

According to the licence (D0136-01), there are four pumping stations within the catchment. Bridge Street Pumping Station and O'Mahony Avenue Pumping Station are both local pumping stations. Glasslinn Road Pumping Station and Watergate Street Pumping Station both contain 1 no. SWO (SW003 and SW004, respectively) that discharges to the River Bandon. Watergate Street Pumping Station pumps waste water flows from the north of the catchment across the river to Glasslinn Road Pumping Station. Preliminary treatment is provided at the Glasslinn Road Pumping Station consisting of coarse screening, fine screening and grit removal. From Glasslinn Road Pumping Station waste water is pumped to the Bandon WwTP.

There are currently 14 no. SWOs within the agglomeration as shown in **Table 3.2**.

Table 3.2. Current Operational Discharges Licensed under D0136-01

Current Licence Name	Location	Asset	SWO Discharge Location Coords (NGR) as per D0136-01		Receiving Waterbody	To be Decommissioned
SW001	Primary discharge from WwTP	WwTP	150411	55785	BANDON_090	No
SW002	Dual Function Overflow (SWO & EO) from WwTP	WwTP	150368	55690	BANDON_090	No
SW003	Glasslinn Road Pumping Station	Pumping Station	150077	55316	BANDON_090	To be decommissioned. <i>Note: There will be a new overflow at the new Glasslinn Pumping Station (SW016)</i>
SW004	Dual Function Overflow (SWO & EO) from Watergate Street Pumping Station	Pumping Station	149316	55104	BANDON_090	No
SW005	Bandon River	Network SWO	149265	55150	BANDON_090	Yes
SW006	Bandon River	Network SWO	149552	55172	BANDON_090	Yes
SW007	Bandon River	Network SWO	149096	55045	BANDON_080	Yes
SW008	Bandon River	Network SWO	149738	55164	BANDON_090	Yes
SW009	Bandon River	Network SWO	149281	55040	BANDON_090	Yes
SW010	Bandon River	Network SWO	149250	55069	BANDON_080	Yes
SW011	Bandon River	Network SWO	149929	55254	BANDON_090	Yes
SW012	Bridewell River	Network SWO	149297	54974	BANDON_090	Yes

Current Licence Name	Location	Asset	SWO Discharge Location Coords (NGR) as per D0136-01		Receiving Waterbody	To be Decommissioned
SW013	Bridewell River	Network SWO	149116	54830	BANDON_090	Yes
SW014	Bridewell River	Network SWO	148826	54484	BANDON_090	Yes
SW015	Bridewell River	Network SWO	148562	54290	BANDON_090	Yes

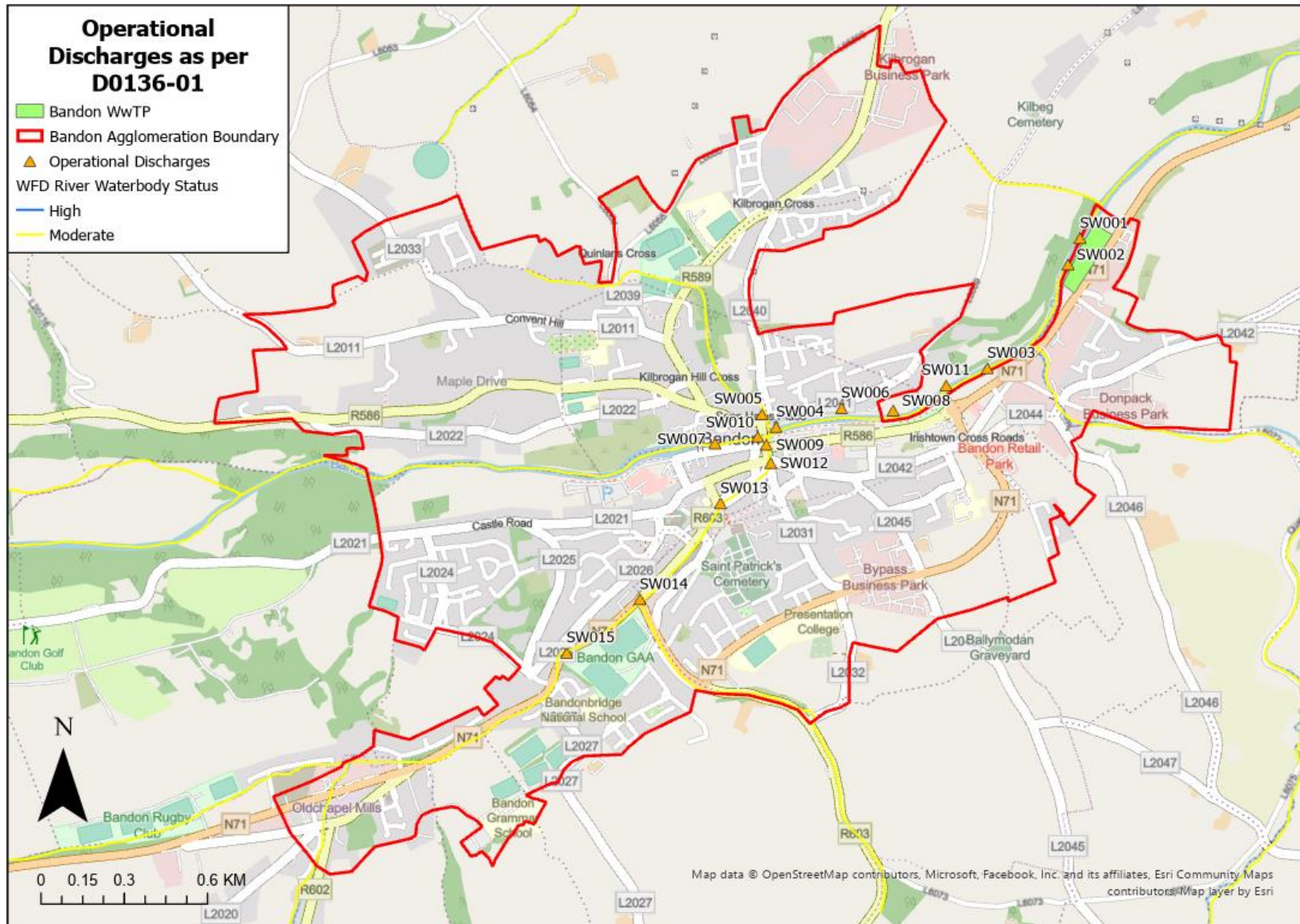


Figure 1.1. D0136-01 Operational Discharges for the current Bandon Agglomeration

1.4.1. Need for D0136-01 WWDA Review

Following an examination of the Bandon WWDL in June 2021, the EPA concluded that the WWDL does not satisfy the environmental requirements of the WWDA 2007 regulations, as amended. The reasoning for their conclusion and recommendation for a review of the current WWDL D0136-01 was based on the following:

1. The licence was granted over 3 years ago.
2. Planning permission has been granted for proposed development works associated with the licence.
3. The agglomeration is included in Irish Water's investment plan.
4. There has been a material change, which could not reasonably have been foreseen when the licence was granted, in relation to the receiving waters, namely, the deterioration of the status of the Bandon River (Bandon_090) from 'Good' to 'Moderate'.

The agglomeration boundary will also be updated as part of the licence review along with the inclusion of additional storm water overflow discharge locations.

1.4.2. Legislation

Irish Water intend to submit a licence review of the existing Waste Water Discharge Licence (WWDL) (Reg No. D0136-01) for the Bandon Agglomeration in accordance with Regulation 14(1)(b) of the Waste Water Discharge (Authorisation) Regulations, 2007- 2020 (as amended) to the Environmental Protection Agency (EPA).

The subject matter of the review involves a wastewater discharge licence application from a wastewater treatment plant with a capacity of greater than 10,000 population equivalents. Therefore, a mandatory Environmental Impact Assessment Report (EIAR) is required for this particular Project, as per Regulation 17 of the relevant Waste Water Discharge Regulations, 2007- 2020.

Regulation 17C (1) of the Waste Water Discharge Regulations, 2007- 2020 outlines the scope and level of detail required during EIAR Scoping process and states the following:

17C. (1) EIAR Scoping Request

'(a) Subparagraph (b) applies where, before a water services authority submits an EIAR to the Agency, the authority requests the Agency to give the authority an opinion in writing on the scope and level of detail of the information required to be included in the report.

(b) Subject to subparagraph (c), the Agency shall, taking into account the information provided by the water services authority, in particular on the specific characteristics of the proposed waste water discharge, including its location and likely impact on the environment and the technical capacity of its associated waste water works, give an opinion in writing on the scope and level of detail of the information to be included in an EIAR, subject to consultations prescribed in Regulation 17D to be carried out by the Agency in relation to such opinion.

(c) The Agency shall give the opinion before the submission by the water services authority of the EIAR. (2) Where an opinion referred to in paragraph (1) has been provided, the EIAR shall be based on that opinion, and include the information that may reasonably be required for reaching a reasoned conclusion

on the significant effects on the environment of the proposed development, taking into account current knowledge and methods of assessment.'

This EIAR Scoping Report will be issued to the EPA, as the Competent Authority, to obtain their Scoping opinion.

2. DESCRIPTION OF THE PROJECT – SUBJECT MATTER OF EIAR

The subject matter of this EIAR scoping document are the operational discharge activities from the Bandon agglomeration after the completion of the Bandon Sewerage Scheme, the Bandon Watermain & Sewer Network Project, and the Bandon IDA Laragh WwTP Upgrade.

As noted above, the upgraded Bandon WwTP has a design capacity of 14,465 p.e (10-year design horizon) and has adequate capacity to treat the current load of 9,744 p.e (AER, 2021).

2.1. Bandon Agglomeration Operational Discharges

The operational discharges relating to this WWDL review are shown on **Table 3.1** below and **Figure 3.1**.

Table 3.1 Operational Discharges relating to the Bandon WWDA review

Discharge Name	Type	Asset	Discharge Location (NGR)	Receiving Waterbody
SW001	Primary Discharge from the WwTP	WwTP	150411E, 055785N	BANDON_090
SW002	Dual Function Overflow (SWO & EO) from WwTP	WwTP	150368E, 055690N	BANDON_090
SW004	Dual Function Overflow (SWO & EO)	Watergate Street Pumping Station	149316E, 055104N	BANDON_090
SW016	Dual Function Overflow (SWO & EO)	New Glasslinn Road Pumping Station	150070E, 055290N	BANDON_090
SW017	Dual Function Overflow (SWO & EO)	Laragh Pumping Station	145152E 054669N	BANDON_080

**All SWOs will operate in compliance with the definition of 'Storm Water Overflow' as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995*

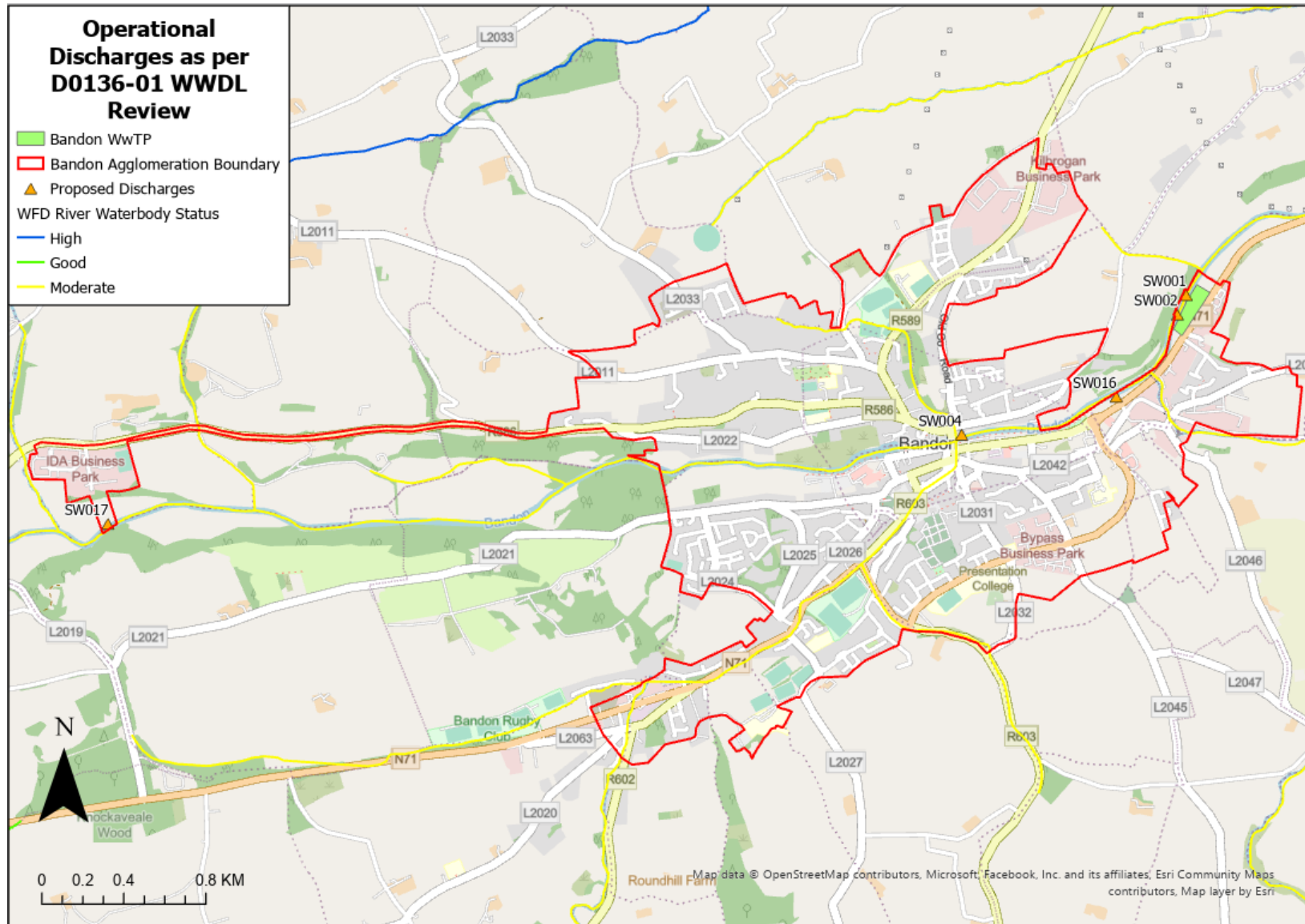


Figure 3.1. Operational Discharges relating to D0136-01 WWDL Review and Updated Agglomeration Boundary

3. CONSIDERATION OF ALTERNATIVES

The development at Bandon WwTP was required to provide for an increase in treatment capacity and was deemed the most feasible option as the existing network gravitates to Glasslinn Pumping Station and onto the WwTP where the site had capacity for expansion. The option of providing additional treatment capacity in a separate treatment facility located elsewhere in the catchment would be less feasible and would also involve diversion of flows to a new facility for treatment as well as separation and pumping of network flows and land acquisition.

4. RECEIVING ENVIRONMENT

The subject matter of this EIAR scoping document are the operational discharge activities from the Bandon agglomeration after the completion of the Bandon Sewerage Scheme, the Bandon Watermain & Sewer Network Project and the Bandon IDA Laragh WwTP Upgrade. Therefore, this document is only concerned with the likely significant effects on the receiving environment associated with the operational discharges from the agglomeration. Demolition and construction related impacts are not relevant to this EIAR scoping process.

There are a number of environmental receptors and constraints associated with the proposed operational discharge activities that will be taken into account as part of the EIAR process. These include, but are not limited to, the following:

- There are no European sites within the immediate zone of influence or directly downstream of the operational discharges. There are 2 no. SPAs located a significant distance downstream of the primary discharge (*i.e.*, Sovereign Islands SPA (Site Code 004124) *ca.* 29km downstream and Old Head of Kinsale SPA (Site Code 004021) *ca.* 36km downstream)
- There are no pNHAs in the immediate vicinity of the operational discharges. The nearest pNHAs downstream of the operational discharges are the following:
 - Bandon Valley above Inishannon – *ca.* 1.25km d/s of primary discharge
 - Bandon Valley below Inishannon – *ca.* 7.45km d/s of primary discharge
- The BANDON_100 which lies *ca.* 1.75km downstream of the primary discharge point is designated as a Drinking Water River in accordance with European Communities (Drinking Water) (No. 2) Regulations 2007 (S.I No. 278 of 2007).
- The BANDON_100 which lies *ca.* 1.75km downstream of the primary discharge point is designated as a river that intersects with a nutrient sensitive area. The Bandon Estuary Upper which lies *ca.* 5km downstream of the primary discharge point is designated as nutrient sensitive area (P limited) in accordance with the Urban Waste Water Treatment (UWWT) Directive 91/271/EEC on Urban Waste Water Treatment and S.I. No. 254 of 2001, S.I. No. 440 of 2004 and S.I. No. 48 of 2010.
- The operational discharges discharge to the BANDON_080 and the BANDON_090, both of which have a WFD 2013-2018 designation of Moderate status. In terms of BANDON_090, there has been a deterioration in the WFD from Good to Moderate. The BANDON_080 was previously Unassigned (WFD 2010-2015). The WFD objective for both waterbodies is to achieve Good status by 2027. Approximately 0.75km downstream of the primary discharge point the BANDON_090 flows into the BANDON_100 which is classed as Moderate status before flowing into Bandon Estuary Upper 2km downstream where it is classed as Poor status. The Lower Bandon Estuary is classed as Poor Status.
- The Bandon River is important for fishing and is primarily a salmon and sea trout river but also has resident brown trout and there are a number of angling associations in the area.
- The Kinsale Shellfish Area lies within the Bandon Estuary Lower and is located *ca.* 17.75km downstream of the primary discharge point.
- The presence of the Freshwater Pearl Mussel (*Margaritifera margaritifera*) is noted downstream of the operational discharges (*ca.* 2.75km). The NPWS have not deemed

part of the River Bandon which the WwTW discharge as a suitable habitat for the pearl mussel and this area is not a designated Freshwater Pearl Mussel habitat under the Environmental Objectives (Freshwater Pearl Mussel) Regulations, S.I. No. 296 of 2009 (Source: D0136-01 EPA's Inspectors Report, 2015).

Refer to **Figure 6.1** for map showing key receptors and sensitivities.

The EIAR, which will be prepared in accordance with Directive 2011/92/EU as amended by Directive 2014/52/EU (the EIA Directive) and S.I. No. 214/2020 - European Union (Waste Water Discharge) Regulations 2020, will thoroughly assess the likely significant effects on the environment from the operational discharges on the above receptors, alone and in combination with other plans and projects.

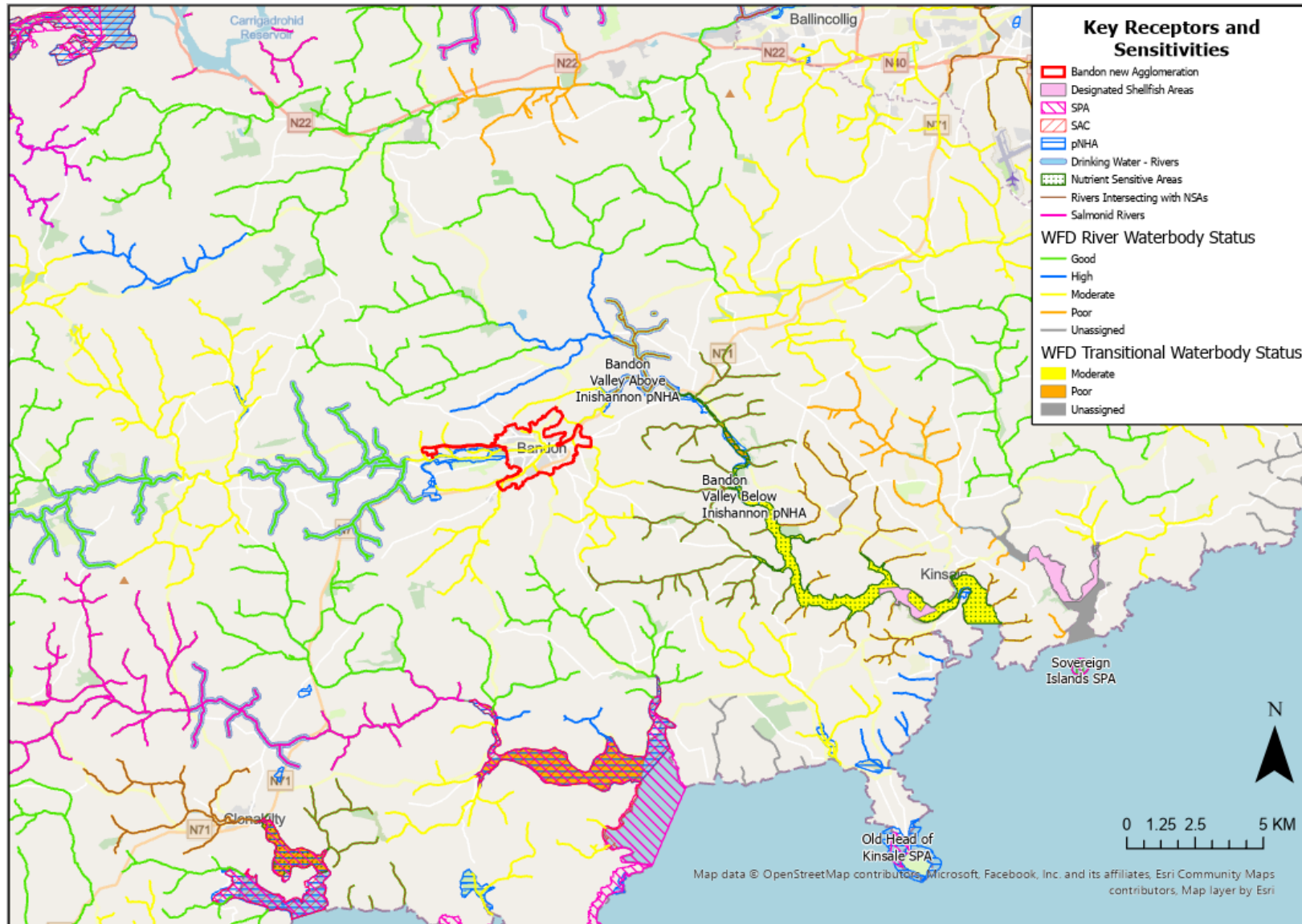


Figure 4.1. Key Receptors and Sensitivities in relation to the Bandon Agglomeration & Associated Operational Discharges

5. Environmental Impact Assessment (EIA)

5.1. General

The process by which the likely significant effects of a project on the environment are assessed is set out in the EU EIA Directive 2011/92/EU on the assessment of the effect of certain public and private projects on the environment (codification) (transposed to Irish law through the Planning and Development Regulations 2001, as amended), as amended by EIA Directive 2014/52/EU (transposed to Irish law through the European Union (Planning and Development) (Environmental Impact Assessment) Regulations S.I. 296 of 2018 and in terms of Waste Water Discharges in S.I. No. 214/2020 - European Union (Waste Water Discharge) Regulations 2020.

The EIA process has a number of key characteristics:

- It is systematic, comprising a sequence of tasks defined both by regulation and by practice;
- It is analytical, requiring the application of specialist skills from the environmental sciences;
- It is impartial, its aim being to inform the decision-makers;
- It is consultative, with provision being made for obtaining feedback from interested parties, including local authorities and statutory agencies; and
- It is interactive, allowing opportunities for environmental concerns to be addressed during the planning, design, and implementation of a project.

The process may be summarised succinctly as follows:

1. Screening – Is EIA Required?
2. Scoping – If EIA is Required, what aspects of the Environment should be considered?
3. Preparation of EIAR
4. EIAR informs the EIA process being conducted by the Competent Authority which in this case is the EPA as part the WWDA process.

5.2. EIA Screening Process

The project has been screened against Regulation 17 of the Waste Water Discharge Regulations (S.I. No. 214/2020) which states the following: -

'17. The principal Regulations are amended by substituting the following Regulation for Regulation 17 –

"Certain applications to be accompanied by an EIAR

17. An application in respect of the waste water discharge from—

(i) a waste water treatment plant with a capacity of greater than 10,000 population equivalent as defined in Article 2, point (6), of the Urban Waste Water Treatment Directive, and

(ii) a waste water treatment plant specified in accordance with paragraph (6)(c) or (8)(b)(ii) of Regulation 18 or paragraph (3)(c) or (5)(b)(ii) of Regulation 25,

shall, subject to and in addition to compliance with the requirements of Regulation 16, be accompanied by a copy of an EIAR, which shall be submitted in electronic form (which shall be searchable by electronic

means as far as practicable) and such other form as may be specified by the Agency”.

The project involves a WWDA application for a wastewater treatment plant with a capacity of greater than 10,000 population equivalents as defined in Article 2, point (6), of the Urban Waste Water Treatment Directive. Therefore, a mandatory EIA, and the preparation of an EIAR is required for this particular project to inform the WWDA process.

5.3. EIA Scoping Process

The scoping stage, albeit not a statutory stage of the EIA process, is considered a key element of the EIA process and signifies commencement of the development of an EIAR.

‘Scoping’ is a process of deciding what information and the level of same that should be contained in an EIAR, and what methods should be used to gather and assess that information. It is defined in the European Commission Guidance as: -

‘determining the content and extent of the matters which should be covered in the environmental information to be submitted in the EIAR’.

The EPA (2017) document ‘Guidelines on the Information to be contained in Environmental Impact Assessment Reports’ states that ‘All parties should be aware of the need to keep the EIAR as tightly focussed as possible. This focusses the effort and resources of all parties on the key significant issues. Scoping is usually guided by the following criteria: -

- *Use ‘Likely’ and ‘Significant’ as the principal criteria for determining what should be addressed. Any issues that do not pass this test should be omitted (scoped out) from further assessment. A section of the EIAR should describe the scoping process explaining why such issues have been scoped out and they are not being considered further. All the prescribed environmental factors need to be listed in the scoping section of the EIAR. It is important to note that the environmental factors themselves cannot be scoped out and must feature in the EIAR. Only topics and headings related to each factor can be scoped in or out. Each environmental factor should be clearly covered by one or more specific section headings in the EIAR. If scoping determines that no likely significant issues arise under any heading, then an explanatory text should be included;*
- *Precedence - where EIARs for similar projects on similar sites or for other project proposals for the same site are available, these can be useful references; and,*
- *Interactions – assessors need to be vigilant for pathways – direct and indirect – that can magnify effects through the interaction or accumulation of effects – for instance the potential for cumulative significant effects to arise from multiple non-significant impacts.*

It is important to reiterate that subject matter of this EIA relates only to the operational discharges from the Bandon agglomeration, as detailed in **Section 2** above.

The EIAR will identify, describe, and assess in an appropriate manner the direct and indirect significant effects of the operational discharges from Bandon agglomeration on each of the factors listed in Article 3 of Directive 2011/92/EU as amended by Directive 2014/52/EU as below:

‘Article 3

1. *The environmental impact assessment shall identify, describe, and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors:*

(a) population and human health;

(b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive

2009/147/EC;

(c) land, soil, water, air and climate;

(d) material assets, cultural heritage and the landscape;

(e) the interaction between the factors referred to in points (a) to (d).

2. *The effects referred to in paragraph 1 on the factors set out therein shall include the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project concerned”.*

The EIAR will include an assessment of all discharges from the wastewater works (*i.e.*, primary, storm water overflows and emergency overflows) including a cumulative assessment that aims to achieve the Water Framework Directive environmental objectives for the receiving waters *e.g.*, River Bandon.

The approach that we will adopt in the detailed impact assessments and the overall preparation of the EIAR will be based on the recommendations in the Guidelines on information to be contained in Environmental Impact Assessment Reports (EPA, 2022) and will be in line with the EIA Directive 2014/52/EU, and indeed will take account of all current guidance documents published at the time of preparing the EIAR.

The EIAR will consider the operational phase of the proposed project and will take into consideration the potential for cumulative impacts with other plans and projects, where relevant, within the surrounding area of the Bandon agglomeration.

We acknowledge that the environmental factors themselves cannot be scoped out and must feature in the EIAR and that only subtopics and headings related to each factor can and will be scoped in or out. Each environmental factor will be clearly covered by one or more specific section headings in the EIAR. However, if scoping determines that no likely significant issues will arise under any heading (*e.g.*, Land, Soils and Geology), then an explanatory text will be provided in the EIAR to clearly explain the rationale of why a detailed assessment is not required for that particular environmental topic .

To inform this scoping report we have completed an initial scoping exercise to identify the environmental topics requiring detailed assessment. Refer to **Table 7.1**.

From this preliminary scoping exercise, it is our professional opinion that the following environmental aspects will require a detailed assessment of the possible direct and indirect significant effects resulting from the operational discharges:

- Population and human health
- Biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC
- Water
- Material Assets

Table 7.1 Initial Scoping Exercise

Environmental Aspect	Scoped In/Scope Out	Rationale
Population & Human Health	In	<p>Operational discharges have the potential to impact on population and human health within the vicinity of the proposed project.</p> <p>The Bandon_100 which is ca. 1.75km downstream of the primary discharge is identified as a Drinking Water River in accordance with European Communities (Drinking Water) (No. 2) Regulations 2007 (S.I No. 278 of 2007). There is a drinking water abstraction point at Innishannon located ca. 4.5km downstream of the primary abstraction point. A Drinking Water Risk Assessment was carried out by Irish Water in 2015 and it was determined that the overall risk of the WwTP on the Drinking Abstraction is classified as Low Risk.</p> <p>The impacts on population and human health, including impacts upon any water-based activities and amenities in the area, such as local angling associations (e.g., Bandon Angling Association), will be assessed as part of the EIAR.</p>
Biodiversity with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive	In	<p>The operational phase of the proposed project may impact on existing aquatic flora, fauna, and habitats in the vicinity and downstream of the operational discharges.</p> <p>The operational discharges from the Bandon agglomeration discharge to the Bandon_090 which flows to the Bandon Valley above Inishannon pNHA ca. 1.25km downstream. This pNHA is designated for oak woodland on steep valley sides and its unmodified river bed. Otter are also present within the site. Characteristic birds include Long-eared owl, sparrowhawk, woodcocks and jay; cormorants and Grey heron fish throughout the river.</p> <p>The Bandon Estuary Upper which lies ca. 5km downstream of the primary discharge point is designated as nutrient sensitive area (P limited) in accordance with the Urban Waste Water Treatment (UWWT)</p>

Environmental Aspect	Scoped In/Scope Out	Rationale
		<p>Directive 91/271/EEC on Urban Waste Water Treatment and S.I. No. 254 of 2001, S.I. No. 440 of 2004 and S.I. No. 48 of 2010.</p> <p>Although the Bandon River is not designated as a salmonid river, it contains salmon, sea trout and also has resident brown trout.</p> <p>The Biodiversity EIAR chapter will describe the likely significant direct and indirect effects, including positive effects, of the operational discharges on biodiversity, including flora (plants), fauna (animals), fish and habitats in the aquatic receiving environment.</p>
Land, Soils and Geology	Out	<p>The subject matter of this scoping report relates only to the matters that come within the functions of the EPA. In essence, this EIA scoping report focuses only on the likelihood of significant effects (positive and negative) on the environment from the operation of the WwTW discharges. It is considered that there is no potential for impacts from the operational discharges in relation to land, soils and geology associated with the Bandon agglomeration, and therefore potential Land, Soils and Geology impacts do not warrant detailed consideration within the EIAR. However, further rationale will be provided in the EIAR on the extent of the assessment required under the Land, Soils and Geology subject matter.</p>
Water	In	<p>Given the nature of the operation activities <i>i.e.</i>, discharges to the aquatic environment, the proposed project may impact on the existing hydrological conditions. The EIAR will include an assessment of the impact of the operational discharges, in combination with other plans and projects, against the pertinent objectives of relevant Directives and Regulations, including but not limited to the Water Framework Directive [2000/60/EC].</p>
Air Quality & Climate	Out	<p>It is considered that there is no potential for impacts in relation to Air Quality & Climate associated with the operational discharges that would</p>

Environmental Aspect	Scoped In/Scope Out	Rationale
		cause unusual, significant, or adverse effects of a type that would in themselves require an EIA.
Odour	Out	It is considered that there is no potential for impacts in relation to Odour associated with the operational discharges. Therefore, at this stage it is considered that potential Odour impacts do not warrant detailed consideration within the EIAR. However, further rational will be provided in the EIAR on the extent of the assessment required under the Odour subject matter.
Noise & Vibration	Out	It is considered that there is no potential for impacts in relation to Noise and Vibration associated with the operational discharges. Therefore, potential Noise and Vibration impacts do not warrant detailed consideration within the EIAR. However, further rational will be provided in the EIAR on the extent of the assessment required under the Noise and Vibration subject matter.
Traffic & Transport	Out	It is considered that there is no potential for impacts in relation to Traffic & Transport associated with the Bandon operational discharges. Therefore, potential Traffic & Transport impacts do not warrant detailed consideration within the EIAR. However, further rational will be provided in the EIAR on the extent of the assessment required under the Air Traffic and Transport subject matter.
Archaeology, Architectural and Cultural Heritage	Out	It is considered that there is no potential for impacts in relation to Archaeology, Architectural and Cultural Heritage associated with Bandon operational discharges. Therefore, potential Archaeology, Architectural and Cultural Heritage impacts do not warrant detailed consideration within the EIAR. However, further rational will be provided in the EIAR on the extent of the assessment required under the Archaeology, Architectural and Cultural Heritage subject matter.

Environmental Aspect	Scoped In/Scope Out	Rationale
Landscape and Visual Amenity	Out	It is considered that there is no potential for impacts in relation to Landscape and Visual Amenity associated with the Bandon operational discharges. Therefore, potential Landscape and Visual Amenity impacts do not warrant detailed consideration within the EIAR. However, further rational will be provided in the EIAR on the extent of the assessment required under the Landscape and Visual Amenity subject matter.
Material Assets	In	The proposed operational discharges may have an impact (including positive impacts) on existing material assets. The likely significant effect on natural resources, enterprises, and amenities of the area, including fishing activities and recreational activities within the surrounding waters will be assessed as part of the EIAR process.
Transboundary Effects	Out	The nature and scale of the operational discharges would not result in any significant transboundary effects that would cause unusual, significant, or adverse effects of a type that would in themselves require an EIA.
Risk of Major Accidents and/or Disasters	Out	Based the design of the WwTW and measures incorporated to prevent any unintended discharges, it is not considered that there is any risk of major accidents and/or disasters from the operational discharges. Therefore, the potential risk of major accidents and/or disasters do not warrant detailed consideration within the EIAR. However, further rational will be provided in the EIAR on the extent of the assessment required under the Risk of Major Accidents and/or Disasters subject matter.

6. EIAR STRUCTURE & METHODOLOGY

6.1. Structure of EIAR

It is proposed that the EIAR will be prepared using the “*grouped format structure*” where each environmental topic is examined in a separate chapter in the EIAR document.

The EIAR will include all necessary technical studies to address the likely significant environmental effects of the operation discharges from the Bandon agglomeration on the receiving environment.

The EIAR will be presented in three volumes as follows: -

- Volume 1 - Non-Technical Summary;
- Volume 2 - EIAR;
- Volume 3 - EIAR Appendices.

Volume 1 Non-Technical Summary will provide an outline of the proposed development (*i.e.*, operational discharges from the amalgamated agglomeration) and will highlight the key impacts and mitigation measures in non-technical language. This will be a standalone document to the EIAR.

Volumes 2 of the EIAR will consist of general information and background chapters (Chapters 1 to 5) and then the environmental assessment chapters for each environmental aspect/topic (Chapters 6 to 16). Chapters 17 and 18 will provide an examination of environmental impact interactions and a Schedule of Mitigation Measures, representing the environmental commitments associated with the operational discharges from the agglomeration. Finally, Chapters 19 and 20 will provide the Bibliography and the Abbreviations and Glossary of Terms.

- Chapter 1 - Introduction
- Chapter 2 - Need for the Development
- Chapter 3 - Alternatives Considered
- Chapter 4 - Description of the Proposed Development
- Chapter 5 - EIA Scoping, Consultation and Key Issues/Receptors
- Chapter 6 - Biodiversity
- Chapter 7 - Water
- Chapter 8 - Population & Human Health
- Chapter 9 - Material Assets
- Chapter 10 - Traffic and Transportation
- Chapter 11 - Air Quality and Climate Change
- Chapter 12 - Noise and Vibration
- Chapter 13 - Odour
- Chapter 14 - Archaeology, Architectural and Cultural Heritage
- Chapter 15 - Landscape & Visual
- Chapter 16 - Risk of Major Accidents and/or Disasters
- Chapter 17 - Interactions of the Foregoing
- Chapter 18 - Schedule of Mitigation Measures
- Chapter 19- Bibliography
- Chapter 20 - Abbreviations & Glossary of Terms

Volume 3 - Appendices will provide any additional technical data and survey and modelling reports to support the EIAR.

It is proposed that each specialist chapter requiring a detailed assessment will be structured as follows:

- **Introduction** - This section will introduce the environmental topic to be assessed and the areas to be examined in the assessment.
- **Methodology** - This section will contain the specific topic related methodologies. This will include the methodology used in describing the existing environment and undertaking the impact assessment. It is important that the methodology is documented so the Competent Authority and relevant stakeholder can clearly understand how each assessment was undertaken.
- **Receiving Environment** - An accurate description of the existing baseline environment is necessary to predict the likely significant impacts of a proposed development. To describe the existing environment, desktop reviews of existing data sources will be undertaken for each specialist area. This literature review will rely on published reference reports and datasets to ensure the objectivity of the assessment. Desktop studies as required will be supplemented by specialised field walkovers or studies in order to confirm the accuracy of the desktop study or to gather more baseline environmental information for incorporation into the EIAR document. The sensitivity of the environment to the operational discharges will also be described in this section.
- **Description of Likely Significant Effects** - This section will predict how the receiving environment will interact with the operational discharges. The full extent of the proposed developments potential effects before the consideration of any mitigation measures will be detailed in this section. In this section, potential impact impacts arising from the operational discharges will be assessed and detailed. An evaluation of the significance of the impacts will also be undertaken. This section will also address interactions and cumulative impacts with other environmental topics.
- **Mitigation Measures** - This section will provide the recommendations for mitigation measures to reduce or eliminate any significant negative impacts identified.
- **Residual Impacts** - This final section of each Chapter will identify the likely impact that will occur after the proposed mitigation measures have been put in place. These impacts will be described in detail, and an assessment of their significance undertaken as required.

6.2. Methodology

The EIAR will be prepared in accordance with Waste Water Discharge Regulations 2007-2020 and with due regard to the following EIAR guidance and indeed any other guidance available at the time of preparing the EIAR;

- Environmental Protection Agency (EPA) (2022) '*Guidelines on the Information to be contained in Environmental Impact Assessment Reports* – May 2022.
- Environmental Protection Agency (EPA) (2015) '*Advice Notes for Preparing Environmental Impact Statements Draft*'.

- Department of Housing, Planning and Local Government (DoHPLG) (2018) '*Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*' .
- European Commission (2020) '*Environmental Assessments of Plans, Programmes and Project – Rulings of the court of Justice of the European union*'.
- European Commission (2017) '*Environmental Impact Assessment of Projects – Guidance on the preparation of the Environmental Impact Assessment Report*'

The EIAR will be prepared in line with Annex IV of the EIA Directive which clearly identifies the information that must be provided for in any EIAR.

Discipline specific best practice guidance will be consulted by each specialist for each environmental topic (*e.g.*, Population & Human Health, Water, Biodiversity and Material Assets) during the preparation of the EIAR. The receiving environment, surveys/site walkovers, methodology, potential impacts, and mitigation measures will be incorporated and included within each disciplines chapter within the EIAR. The outline methodology for each discipline is outlined below and will be included in detail within the EIAR.

The scope and level of detail to be contained within each specialist chapter will be finalised after completion of this scoping process by qualified environmental specialists in each environmental field. This will ensure that all studies and assessments of impacts are scientifically robust in terms of design, execution, and analysis which will guarantee that all data obtained, and assessments performed are of a sound basis and authoritative in nature.

6.3. Proposed Approach to Detailed Assessments

6.3.1. Water

This chapter will describe the likely significant effects associated with the operational discharges on the Bandon River and downstream nutrient sensitive waterbody. An overarching component of this chapter will be assessing the impact of the operational discharges against the pertinent objectives of relevant Directives and Regulations, including but not limited to the Water Framework Directive [2000/60/EC], Urban Waste Water Treatment Directive [91/271/EEC], Habitats Directive [92/43/EC], Birds Directive [79/409/EEC] and European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2019 [S.I No. 77/2019].

6.3.2. Biodiversity

This chapter will describe the likely significant direct and indirect effects of the operational discharges on biodiversity, including flora (plants), fauna (animals), and habitats in the aquatic receiving environment. It will provide a detailed Ecological Impact Assessment (EcIA) which will be carried out in accordance with CIEEM guidelines.

Separate to this chapter, an Appropriate Assessment (AA) Screening Report will be prepared as a standalone document.

6.3.3. Population and Human Health

This chapter will describe the likely significant effects of the operational discharges on population and human health (*i.e.*, socio-economic, and public health aspects

respectively). The assessment of population and human health will require a comprehensive understanding of the baseline environment and local community which will be obtained *via* desktop studies, and discussions with local stakeholders.

In terms of the population assessment, this assessment will identify and assesses the likely significant effects on the local community and users of the receiving waters, along with the likely economic significant effects of the operational discharges at the local and regional level.

The assessment on human health will draw on the findings of other sections of the EIAR as necessary to ensure that the likely significant effects that have the potential for significant effects on human health are considered herein. In this case the key focus will be the environmentally related health issues relating to the operational discharges in relation the surrounding population and users of the receiving waters.

6.3.4. Material Assets

The methodology used to prepare this section of the EIAR will be in accordance with the EPA '*Guidelines on the Information to be contained in Environmental Impact Assessment Reports (EIAR)*' (2022), and '*Advice Notes for Preparing Environmental Impact Statements Draft September 2015*'. The likely significant effect of the operational discharges on the main enterprises of the area will be considered, including fishing activities within surrounding waters.

7. SCOPING REQUEST

In accordance with Regulation 17(D)(4), Irish Water would appreciate a scoping response not later than 4 weeks after the expiry of the notice period referred to in paragraph (2)(a) of the Regulations.