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Appendix 10-1 - Hydrological and WFD assessment – Proposed Development

Uisce Éireann

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BALLINA AND LOUGH TALT WATER SUPPLY UPGRADE

AtkinsRéalis - Baseline / Référence

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1. Introduction

1.1 Background

Uisce Éireann are proposing to undertake the Ballina and Lough Talt Water Supply Upgrade (hereafter referred to as the Proposed Development).

The Proposed Development will consist of seven “key locations” and five discrete sections of pipeline, as follows:

- Upgrade to the existing **Wherrew Raw Water Intake & Pumping Station (RWI&PS)**, Wherrew, Ballina, Co. Mayo;
- Upgrade to the existing **Lisglennon Raw Water Storage and Pumping Station (RWS&PS)**, Lisglennon, Ballina, Co. Mayo;
- **Proposed Pipeline A** – Lisglennon Raw Water Pumping Station to Lisglennon Water Treatment Plant (WTP);
- Upgrade to the existing **Lisglennon WTP**, Lisglennon, Ballina, Co. Mayo;
- **Proposed Pipeline B** – Lisglennon WTP to Existing River Moy Crossing;
- **Proposed Pipeline C** – Existing River Moy Crossing to Bonniconlon Booster Pumping Station (BPS);
- **Proposed Pipeline D** – Bonniconlon BPS to Windy Gap Break Pressure Tank (BPT);
- **Proposed Pipeline E** – Windy Gap BPT to Lough Talt WTP;
- Proposed **Bonniconlon BPS** located at Bonniconlon, Ballina, Co. Mayo;
- Proposed **Windy Gap BPT** located at the Windy Gap, Ballina, Co. Mayo;
- Repurposing the existing **Lough Talt WTP**, Co. Sligo;
- Proposed Treated Water Reservoir at the existing **Bonniconlon Reservoir** site, Ballina, Co. Mayo; and,
- All permanent and temporary works, including construction compounds, access routes, pipeline corridors, and trenchless crossings.

An overview of the Proposed Development is presented in Figure 1-1.

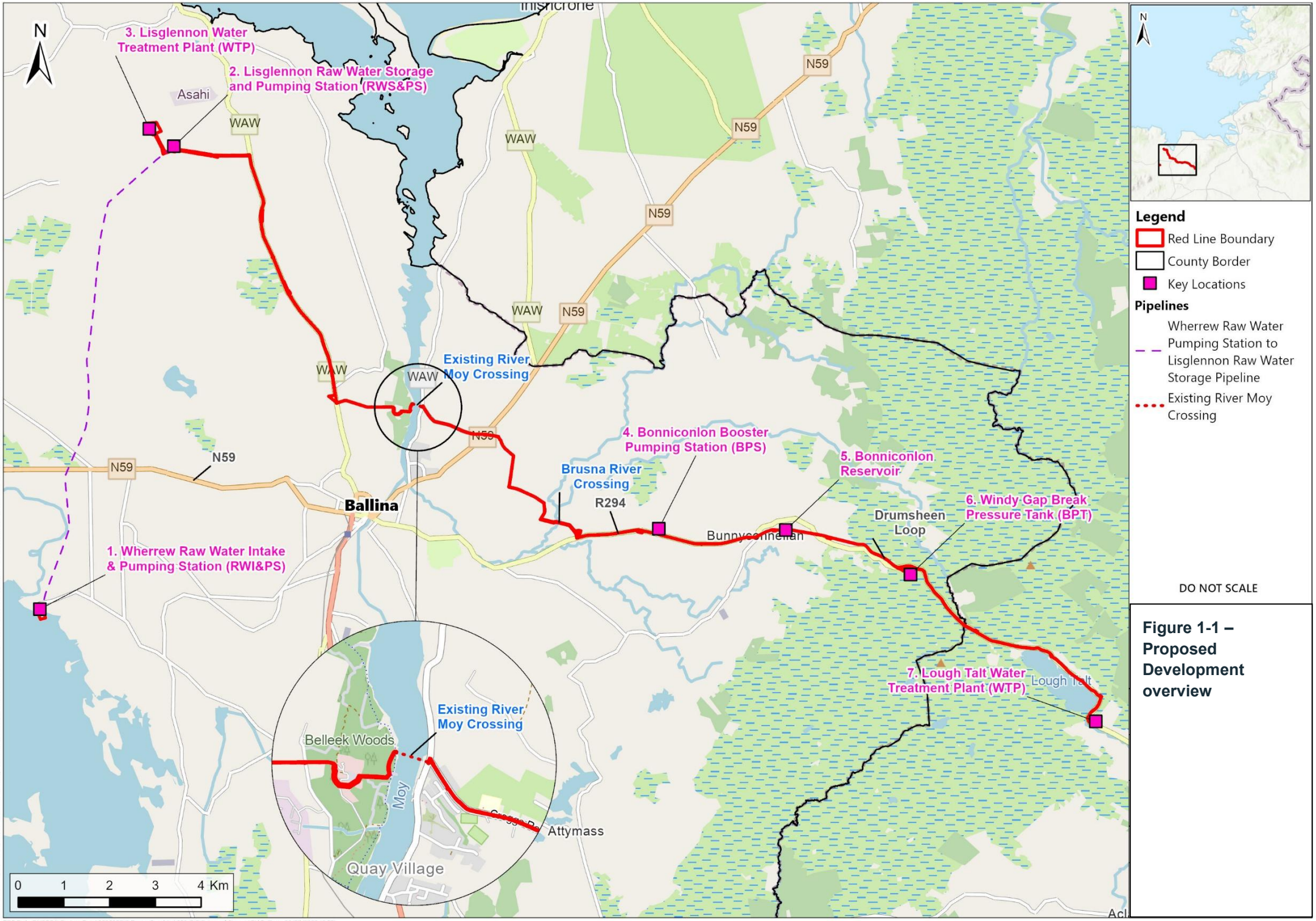


Figure 1-1 – Proposed Development overview

1.2 Purpose

The purpose of this report is to support the planning application associated with the Proposed Development. It will present an assessment of the potential impacts of the Proposed Development on the surrounding water bodies, and whether the Proposed Development can be considered compliant with the objectives set out in the Water Framework Directive, as transposed into Irish legislation by the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003). The generic environmental objectives set out below (based on Article 4.1 of the WFD) are used for the assessment of the Proposed Development:

- No changes affecting High status sites;
- No changes that will cause surface water bodies to fail to meet Good ecological status or potential in the future, or result in a deterioration of surface water ecological status or potential;
- No changes that will cause groundwater bodies to fail to meet Good status in the future, or result in a deterioration of groundwater status; and
- No changes which will permanently prevent or compromise environmental objectives being met in other water bodies.

This report will also consider whether the Proposed Development will impact on other areas protected by complementary European legislation.

2. Legislative context

2.1.1 The Water Framework Directive

Purpose

In 2000, the European Union established Directive 2000/60/EC (which has since become known as the Water Framework Directive, and hereafter referred to as 'the WFD') to provide a framework for the protection of surface and groundwaters across Europe. This is achieved through delivery of key environmental objectives, as set out in in Article 4 of the WFD.

For surface waters, this requires Member States to:

i. Implement the necessary measures to prevent deterioration of the status of all bodies of surface water.
ii. Protect, enhance and restore all bodies of surface water, subject to the application of point (iii) for artificial and heavily modified bodies of water, with the aim of achieving Good surface water status[1].
iii. Protect and enhance all artificial and heavily modified bodies of water, with the aim of achieving Good ecological potential[2] and Good surface water chemical status.
iv. Progressively reduce pollution from priority substances and cease or phase out emissions, discharges and losses of priority hazardous substances.

For groundwaters, this requires Member States to:

i. Implement the measures necessary to prevent or limit the input of pollutants into groundwater and to prevent the deterioration of the status of all bodies of groundwater.
ii. Protect, enhance and restore all bodies of groundwater with the aim of achieving Good groundwater status[3] by 2015.
iii. Reverse any significant and sustained upward trend in the concentration of any pollutant resulting from the impact of human activity in order progressively to reduce pollution of groundwater.

Water body status

Water body status is determined by a range of quality elements, which differ depending on the type of water body being considered e.g. river, coastal, or groundwater. For surface water bodies, overall ecological status/potential can range from High to Bad and is determined by the lowest scoring biological or physico-chemical quality element (as per Annex V, Section 1.4.2 of the WFD). For chemical status, breach of environmental quality standards by a single determinand will result in a water body failing to achieve Good chemical status.

For context, Good status for a surface water body is defined in Annex V (Table 1.2) of the WFD as being where "*values of the biological quality elements for the surface water body type show low levels of distortion resulting from human activity, but deviate only slightly from those normally associated with the surface water body type under undisturbed conditions"*.

[1] "Good surface water status" means the status achieved by a surface water body when both its ecological status and its chemical status are at least Good.

[2] "Good ecological potential" is the status of a heavily modified or an artificial body of water, so classified in accordance with the relevant provisions of Annex V of the WFD.

[3] "Good groundwater status" means the status achieved by a groundwater body when both its quantitative status and its chemical status are at least Good.

For groundwater bodies, overall status is determined as being either Good or Poor. Failure by one of the quality elements to achieve its WFD objective, will result in the water body being assessed as being at Poor status.

Protected areas

Protected areas (as designated by other EU legislation) are also required to be considered under the WFD, either for the protection of surface water and groundwater, or for the conservation of habitats and species directly dependent on water. These are:

- Drinking Water Protected Areas (under Directive 2006/105/EC 'Drinking Water Directive');
- Nutrient-Sensitive Areas (under Directive 91/676/EEC 'Nitrates Directive', and Directive 91/271/EEC 'Urban Waste Water Directive');
- Bathing Waters (under Directive 2206/7/EC 'Bathing Waters Directive');
- Shellfish Waters (although Directive 79/923/EEC 'Shellfish Waters Directive' has been superseded, these areas remain designated under Annex IV of the WFD as they are "*areas designated for the protection of economically significant aquatic species*"); and
- Natura 2000 Sites, i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) (under 92/43/EEC 'Habitats Directive' and 2009/147/EC 'Birds Directive' respectively).

Article 4.7

Member states must meet the objectives of the WFD, unless they meet the criteria laid out in Article 4.7 of the WFD. Article 4.7 states:

"Member states will not be in breach of this Directive when:

- *failure to achieve good groundwater status, good ecological status or, where relevant, good ecological potential or to prevent deterioration in the status of a body of surface water or groundwater is the result of new modifications to the physical characteristics of a surface water body or alterations to the level of bodies of groundwater, or*
- *failure to prevent deterioration from high status to good status of a body of surface water is the result of new sustainable human development activities and all the following conditions are met:*

  (a) all practicable steps are taken to mitigate the adverse impact on the status of the body of water;

  (b) the reasons for those modifications or alterations are specifically set out and explained in the river basin management plan required under Article 13 and the objectives are reviewed every six years;

  (c) the reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society of achieving the objectives set out in paragraph 1 are outweighed by the benefits of the new modifications or alterations to human health, to the maintenance of human safety or to sustainable development; and

  (d) the beneficial objectives served by those modifications or alterations of the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option"

2.1.2 Irish context

The WFD is given general effect in planning legislation in Ireland, as specified in Section 1(A) of the Planning and Development Act 2000, as amended, and has been transposed into Irish law through the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003), as amended and hereafter referred to as the Water Policy Regulations. This regulation gave legal effect to the WFD in Ireland, requiring the protection and improvement of

water quality across surface and groundwater bodies. It also sets out the competent authorities as being both the Environmental Protection Agency (EPA) and relevant local authorities, 'relevant' in this context meaning a local authority whose functional area lies wholly or partly within a river basin district (RBD). With regards to setting environmental objectives for each RBD, the Water Policy Regulations call for this to be undertaken by the relevant local authorities in accordance with Article 4 of the WFD. As of 2015, the whole of Ireland was considered as a single, national RBD and as such environmental objectives are set in the River Basin Management Plan (RBMP) for Ireland entitled 'Water Action Plan 2024'. These objectives for the 4,842 water bodies in Ireland are summarised in Table 2-1.

Table 2-1 – Cycle 3 Environmental Objectives for the Ireland RBD[4]

Objective	Target
Water bodies that achieved their environmental objectives by 2021	2,610 (54%)
Water bodies expected to achieve their environmental objectives by 2027 based on the current planned Actions for Cycle 3	2,760 – 2,910 (57% - 60% of all 4,842 water bodies)
Water bodies expected to show improvements in individual Quality Elements (QE) but not to fully achieve their environmental objectives by 2027 based on the current planned Actions for Cycle 3	500 – 650 water bodies (or 30% - 39% of the 1,649 water bodies identified by the EPA as 'At Risk')
Remaining water bodies that in the 4th cycle, will either; 1. require additional targeted actions during Cycle 3 with the aim of achieving their environmental objectives by 2027, or 2. require an extension of time beyond 2027 due to the impact of 'natural conditions' on the rate of recovery, or 3. require a phased recovery over a more sustainable timeframe of one or more river basin management cycles beyond 2027 because it would be technically infeasible and/or disproportionately expensive to achieve any sooner.	1,932 - 2,082 (40 - 43% of all 4,842 water bodies)
Less Stringent Objectives 9 (related to historic mines	Nine (related to historic mines)

Following the implementation of the Water Policy Regulations, the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009), as amended, and the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) as amended, and hereafter referred to as the Groundwater Regulations, were both promulgated to further regulate WFD characterisation, monitoring, and status assessment programmes in Ireland. This covered assigning responsibilities for the monitoring of various water categories, determining quality elements, and undertaking characterisation and classification assessments. Despite this, WFD Assessments are not a statutory requirement as part of the planning process, however, they are starting to become more common as it is recognised that more rigor is required to ensure compliance with WFD legislation.

Further to this legislation, and of relevance in the context of the Proposed Development, the Water Environment (Abstraction and Associated Impoundment) Act 2022 (as amended) came into force through the Water Environment (Abstractions and Associated Impoundments) Regulations 2024. This sets out the need for new (and amended) abstractions to stay within ecology-based hydrological limits, to sustain the status of surface water bodies.

[4] Table taken from Department of Housing, Local Government and Heritage (2024). *Water Action Plan 2024*. Available at: River Basin Management Plan 2022 - 2027 (Accessed: January 2026)

3. Methodology

In the absence of formal WFD assessment guidance in Ireland, this assessment has been carried out based on the UK's Planning Inspectorate Advisory Note 18 'Water Framework Directive'[5] which sets out the stages of a WFD assessment as follows:

- Stage 1 WFD screening: to determine if parts of the Proposed Development do not require further consideration, for example activities which have been ongoing since before the current RBMP cycle so form part of the baseline.
- Stage 2 WFD scoping: to identify risks of the Proposed Development's activities to receptors based on the relevant water bodies and their water quality elements, including information on status, objectives, and the parameters for each water body.
- Stage 3 WFD impact assessment: a detailed assessment of water bodies and their quality elements that are likely to be affected by the Proposed Development.

These stages are consistent with the approach set out by the Joint Assistance to Support Project in European Regions (JASPERS) WFD Checklist Tool[6]. The UK Environment Agency's 'Clearing the Waters for All'[7] guidance is used where applicable i.e. in the presence of transitional and/or coastal water bodies.

Further details regarding the methods followed for each stage of the assessment are set out in the following sections.

3.1 Stage 1: Screening methodology

The aim of this stage of the assessment is to determine the extent to which the Proposed Development is likely to affect water bodies. This involved:

- Description of the Proposed Development and the aspects of the development considered within the scope of the WFD assessment;
- Determining the zone(s) of influence based on specific activities and/or characteristics of the Proposed Development that could affect the identified water bodies,
- Mapping of relevant WFD water bodies likely to interact with the Proposed Development. For consistency throughout this assessment a 2 km buffer from the red line boundary (RLB) has been adopted as set out by the 'Clearing the Waters for All' guidance[7];
- Screening out any specific activities and/or characteristics of the Proposed Development that will not impact on water bodies. Where activities have been screened out from further assessment, these have been clearly justified; and
- Screening out any water bodies that will not be impacted by the Proposed Development. Where water bodies have been screened out from further assessment, these have been clearly justified.

[5] Planning Inspectorate (2024). *Nationally Significant Infrastructure Projects: Advice on the Water Framework Directive*. Available at: https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-the-water-framework-directive (Accessed: December 2025)

[6] JASPERS (2018). *Water Framework Directive JASPERS Checklist tool.* Available at: water-framework-directive-jaspers-checklist-tool.pdf (Accessed December 2025)

[7] Environment Agency (2016). *Water Framework Directive assessment: estuarine and coastal waters*. Available at: Water Framework Directive assessment: estuarine and coastal waters - GOV.UK (Accessed December 2025)

3.2 Stage 2: Scoping assessment methodology

After completing Stage 1, the following activities were undertaken:

- An initial assessment to identify the risks from the Proposed Development to water bodies within the zone of influence, based on the relevant water bodies and their water quality elements; and
- Identification of those water bodies where a more detailed impact assessment is needed.

Where the Proposed Development could interact with a transitional or coastal water body, the scoping template for activities in estuarine and coastal waters produced by the UK Environment Agency was followed.

In certain circumstances, completion of Stages 1 and 2 of a WFD Assessment are sufficient to satisfy that there will be no impacts arising from the Proposed Development on WFD water bodies, and as such it would not be necessary to progress to Stage 3 of the assessment.

3.3 Stage 3: Detailed assessment methodology

Depending on the outcome of Stage 2, a more detailed impact assessment of the water bodies and activities carried forward from the WFD screening would be required. It covers:

- Identification of water bodies that are potentially affected, directly or indirectly, or at risk from a proposed development;
- Baseline characteristics of the water bodies potentially affected;
- An assessment of the risk of deterioration, where Article 4.7 may apply if a proposed development may risk deterioration in water body status or may prevent achievement of Good status;
- An assessment of impacts on any protected areas;
- An explanation of any mitigation required and how it is secured;
- An explanation of any enhancements and/or positive contributions to the RBMP objectives proposed and how they would be secured;
- Where a derogation is required, information to justify the case for derogation; and
- Identification of any areas of non-compliance.

Where a Stage 3 assessment is required and the Proposed Development could interact with a transitional or coastal water body, the Marine Pressures-Activities Database[8] would be followed.

[8] JNCC (2022). *Marine Pressures-Activities Database*. Available at: https://jncc.gov.uk/resources/97447f16-9f38-49ff-a3af-56d437fd1951 (Accessed December 2025)

4. Stage 1: Screening

4.1 Proposed Development

4.1.1 Development activities

Development activities are described in detail in the EIAR Chapter 3, Project Description. Key elements are noted here. A detailed discussion of mitigation measures associated with Development Activities in relation to hydrology and hydrogeology is included in Chapter 10, Section 10.6, and in the Preliminary Construction Environment Management Plan (PCEMP), Appendix 3-3, Volume 3 of the EIAR.

Abstraction from Lough Conn

There is an existing abstraction licence in place from Lough Conn (Reference No. R00651-02)) for public water supply at Wherrew, Co Mayo for a maximum volume of 20,100 m^3/day. In accordance with the Water Environment (Abstractions and Associated Impoundments) Act 2022, the regulation of abstractions falls under the remit of the Environmental Protection Agency (EPA). Any amendment to the abstraction licence for relevant future operational aspects of the Proposed Development will be subject to a separate consenting process.

The increase in abstraction to 40,000 m^3/day for this Proposed Development has been subject of a detailed hydrological assessment which is detailed below in Section 5.25.2.

Wherrew RWI and PS upgrades

The existing infrastructure abstracts raw water and transfers to two WTPs, Wherrew WTP and Lisglennon WTP in accordance with the existing abstraction licence (Reference No. R0651-02). The proposed upgrades to the existing Wherrew RWI&PS will facilitate the increased demand and address key operational issues, specifically the accumulation of silt at the intake channel and upgrade fish exclusion systems.

The proposed upgrades include:

- A new intake pipe (approx. 165 m long, 1,200 mm internal diameter) and intake screen on a precast concrete base (1.75 m by 1.75 m);
- The existing intake channel will be infilled with suitable material to restore the original lakeshore profile;
- Upgrade and extension to the intake structure;
- Proposed fish return system with acoustic hoods;
- Proposed pressure and flow monitoring instrumentation and associated works;
- Upgrade of the existing MCC, including provision of an HMI panel and associated Programmable Logic Controller (PLC) modification, located within the pumping station;
- Facility to connect a temporary generator, by providing a connection point and change over switch between existing electrical supply and temporary generator, and a concrete slab for temporary generator set down; and,
- Ancillary site development works, including access arrangements, hardstanding, security/fencing, surface water (stormwater) management, site lighting, landscaping.

Temporary works during construction include:

- A temporary raw water abstraction arrangement; and,

- A temporary cofferdam or equivalent temporary water-retaining structure to allow the intake structure upgrade works to be undertaken in dry conditions.

The details of the construction works associated with these upgrades are covered in detail in the accompanying EIAR (Chapter 3, Section 3.2.1.2). Briefly, the new permanent intake pipe will be approximately 165 m in length and up to 1,200 mm internal diameter. The intake pipe length is required to extend beyond the existing intake channel and localised sediment deposition zone, and to reach suitable water depth within Lough Conn, as informed by the hydrological assessment presented in Appendix 10-3 of the EIAR. Localised preparation of the lakebed will be required along the pipe alignment to provide a stable and level pipe bedding. This is anticipated to involve minor grading and levelling of a narrow strip of lakebed, approximately 1.2 m wide, using plant positioned on a barge, pontoon or similar floating platform.

The intake pipe is anticipated to be assembled onshore and launched or pulled into position using rollers, floatation devices, boats, pontoons or equivalent methods. Once floated into position, the intake pipe will be sunk onto the prepared lakebed and secured. The pipe will be protected using a suitable surround and fascine mattressing, ballasted with clean, washed stone. Stone placement will be undertaken in a controlled manner to minimise disturbance and suspended sediment generation. Along the nearshore section, stone may be placed using a long-reach excavator operating from the shoreline, where practicable. For the remaining in-lake section, stone may be transported and placed from a modular pontoon, barge or similar floating platform.

The intake screen will comprise a prefabricated unit, including a ductile iron pipe section and coarse screen mounted on a precast concrete base of approximately 1.75 m by 1.75 m. The unit will be lowered into position from a barge, pontoon or similar floating platform and connected to the intake pipe by divers or other suitable specialist methods.

Specific mitigation measures associated with this activity will cover:

- Provision of silt control measures (silt curtains, silt fences, silt traps) for the duration of grading and levelling of the lakebed and pipe laying activities (nominally seven weeks) to prevent silt blooms extending beyond the immediate construction area.
- Extending the intake beyond its current location where sediment deposition is currently extensive. Need for sediment removal will likely be reduced/removed by extending into the lake, removing the impacts associated with this activity in the future.
- Provision of fish return systems and fine screens in the proposed upgraded intake works including a pipeline return towards the lough. This arrangement will ensure fish that make it through the intake pipeline can be returned to Lough Conn, minimising the risk of fish entrapment and passage to treatment elements downstream.

Lisglennon Raw Water Storage and Pumping Station upgrade

Raw water will be pumped north from Wherrew RWI&PS via an existing trunk main for approximately 11 km to the Lisglennon Raw Water Storage and Pumping Station (RWS&PS) site. Proposed upgrades at the site comprise:

- Replacement of the existing, decommissioned pumps with two new pump sets within the pumping station;
- Replacement of the pipework and valves within the pumping station to accommodate increased future flows;
- Installation of pressure measuring instrumentation including pressure gauges and pressure transducers within the pumping station; and
- Ancillary works, including installation of new flowmeter on Pipeline A, located in the car park of the pumping station, and landscaping.

Pipeline A

From the Lisglennon RWS&PS, raw water will then be pumped 1 km to the existing Lisglennon WTP site, via Pipeline A. Upgrades to the raw water mains will be as follows:

- Upgrade existing rising main between Lisglennon RWPS to Lisglennon WTP (approximately 1 km long, 630 mm diameter), to be laid using open cut techniques. The pipeline will not cross any watercourses.
- Existing pipeline will be retained as a maintenance bypass.

Lisglennon WTP upgrades

As part of the Proposed Development, expansion of water treatment capacity will be required at the Lisglennon WTP site, inclusive of all associated process infrastructure. This will include a new storage reservoir at the site. The proposed works at Lisglennon WTP will include:

- Construction of new and upgraded coagulation, flocculation and clarification infrastructure;
- Provision of additional rapid gravity filtration capacity;
- Introduction of granular activated carbon filtration as a secondary filtration stage;
- Construction of a new treated water storage reservoir, to operate in conjunction with the retained existing treated water reservoir;
- Construction of new residuals management infrastructure, including washwater equalisation, washwater settlement, sludge balancing, sludge holding and dewatering facilities;
- Provision of new process buildings, including filter gallery buildings, soda ash dosing building, pump station and UV building, and sludge dewatering building;
- Provision of new electrical infrastructure, including an ESB medium voltage substation, control systems, telemetry and associated ducting;
- Provision of solar PV infrastructure to supplement site power demand;
- Ancillary works, including:
    - upgrades to internal access roads, hardstanding, drainage, fencing, lighting and site security;
    - decommission of the existing septic tank and its replacement with new wastewater treatment system with percolation area; and,
    - landscaping.

Changes to the treatment process includes:

- Provision of new chlorine contact tanks and associated disinfection infrastructure;
- Upgrades to pH correction, alkalinity correction, fluoridation and chemical dosing systems;
- Enhanced coagulation, flocculation and clarification capacity;
- Increasing primary filtration (Rapid Gravity Filtration (RGF)) capacity;
- Introducing second stage filtration through Granular Activated Carbon (GAC) filters;
- Increasing disinfection capacity;
- Increasing pH correction capacity of the final treated water;
- Increasing treated water storage capacity; and,
- Increasing residual management capacity.

Specific mitigation measures associated with this activity will cover:

- The existing surface water management system consists of a conventional system of gullies and drains across the road, running towards soakpits along existing roads. Additional stormwater run-off from proposed buildings, hardstanding and roads, will be conveyed by a new pipe network to petrol interceptors and flow into ponds and soakaways proposed at different locations within the site. Some of the existing soakaways will be abandoned with surface water captured and redirected to the new ponds and soakways.

Lisglennon WTP to Lough Talt WTP trunk main – Pipelines B, C, D, E

To allow for supply of water from Lisglennon WTP to Ballina and Lough Talt WTP will require an upgrade of existing water supply infrastructure, and construction of new trunk mains including new ancillary infrastructure. This activity will include:

- Pipeline B – Lisglennon WTP to Existing River Moy Crossing:
  - New circa 710 mm diameter pipeline from Lisglennon WTP to Junction R314 and Belleek Rd;
  - New circa 560 mm diameter pipeline from Junction R314 and Belleek Rd to Existing River Moy Crossing;
  - Tie in with the existing watermain to the west of the Existing River Moy crossing;
  - Transfer of a number of supply connections from the existing network to the new trunk main, including provision of flowmeters connected to the telemetry system;
  - Connection to existing Ballina Offtake;
  - Abandon existing 400 mm – 500 mm diameter trunk main between Lisglennon WTP and Ballina Town; and
  - Abandon existing 350 mm mains between the R314 and Quay Road.
- Pipeline C – Existing River Moy Crossing to Bonniconlon BPS Trunk Main:
  - Tie in with the existing watermain to the east of the Existing River Moy crossing;
  - New circa 500 mm to 560 mm diameter pipeline from River Moy Crossing to Bonniconlon BPS; and
  - New offtake to facilitate a future connection to Lough Easkey Regional Water Supply Scheme (RWSS) will be provided at the Creggs Road and N59 junction.
- Pipeline D – Bonniconlon BPS to Windy Gap BPT Trunk Main:
  - New circa 500 mm – 560 mm diameter pipeline from the new Bonniconlon BPS to Windy Gap BPT on the R294 / L51172 / L51357.
- Pipeline E – Windy Gap BPT to Lough Talt WTP Trunk Main:
  - New circa 450 mm diameter pipeline from Windy Gap BPT to the existing Lough Talt WTP on the R294.

Ancillary pipeline infrastructure, including valves, fittings, marker posts, flowmeters, washout/scour arrangements, air valves, chambers, manholes and inspection chambers, will be installed as required to facilitate the operation, monitoring, maintenance, flushing, scouring and identification of the treated water pipeline system.

Where new watercourse crossings are required, these will be predominantly trenchless crossings, although open-cut crossings are proposed (see Table 4-1). There are also instances of watercourses which will intersect the Proposed Development but are already culverted. Where this occurs, the Proposed Development will divert around or beneath the culvert, with no interaction anticipated between the Proposed Development and the culverted watercourse.

Table 4-1 – Watercourse crossings

Section	EPA Water course Name (WFD River Water Body)	On Road / Off Road	Chainage	Crossing Methodology
Pipeline B	Moyne (Moyne 010)	On	880	Open Cut
Pipeline B	Newtonwhite (Rathroeen Stream 010)	On	2600	Trenchless
Pipeline B	Broadlands and Knockafars (Rathroeen Stream 010)	On	2900	Open Cut
Pipeline B	No Name (Rathroeen Stream 010)	On	3520	Trenchless
Pipeline B	Abbeytown (Rathroeen Stream 010)	Off	3720	Trenchless
Pipeline B	No Name (Rathroeen Stream 010)	Off	3880	Trenchless
Pipeline B	Field Drain (Rathroeen Stream 010)	Off	5630	Open Cut
Pipeline B	Illinamuck (Moy 120)	On	8020	Open Cut
Pipeline C	Moy Estuary (Moy Estuary)	On	10200	Existing duct
Pipeline C	Field Drain of Quignamanger (Dooyeaghny or Cloonloughan 010)	On	11830	Trenchless
Pipeline C	Field Drain (Dooyeaghny or Cloonloughan 010)	On	12610	Open Cut
Pipeline C	Glenree / Brusna (Glenree 030)	Off	15280	Trenchless
Pipeline C	No Name (Behy (North Mayo) 010)	On	16860	OC or Trenchless
Pipeline C	Fiddaun (Behy (North Mayo) 010)	Off	17220	Trenchless
Pipeline D	Srafaungal (Behy (North Mayo) 010)	Off	17850	Trenchless
Pipeline D	Bunnyconnellan West (Behy (North Mayo) 010)	Off	20470	Trenchless
Pipeline D	Field Drain (Behy (North Mayo) 010)	On	21050	Open Cut

Section	EPA Water course Name (WFD River Water Body)	On Road / Off Road	Chainage	Crossing Methodology
Pipeline D	Srafaungal (Behy (North Mayo) 010)	Off	21700	Trenchless
Pipeline E	No Name (Glenree 010)	On	25730	Open Cut
Pipeline E	Field Drain (Glenree 010)	On	25810	Open Cut
Pipeline E	No Name (Glenree 010)	On	25970	Trenchless
Pipeline E	Glenree (Glenree 010)	Off	26280	Trenchless
Pipeline E	Field Drain (Eignagh 010)	On	27175	Open Cut
Pipeline E	Field Drain (Eignagh 010)	On	28830	Open Cut
Pipeline E	No Name (Eignagh 010)	Off	28070	Trenchless
Pipeline E	Field Drain (Eignagh 010)	On	28350	Open Cut
Pipeline E	Field Drain (Eignagh 010)	On	28730	Open Cut
Pipeline E	Field Drain (Eignagh 010)	On	28950	Open Cut
Pipeline E	Field Drain (Eignagh 010)	On	29295	Open Cut
Pipeline E	Field Drain (Eignagh 010)	Off	29470	Open Cut

Specific mitigation measures associated with this activity will include:

- Selection of trenchless crossing techniques for the majority of watercourse crossings to reduce risk of impacts associated with open-cut crossing of watercourses. Launch/reception pits will be set-back 10 m from bank tops, or 20 m in the case of the Glenree/Brusna crossing.
- Re-use of the Moy crossing, avoiding the need for a new crossing across the River Moy SAC.

Bonniconlon Booster Pumping Station (BPS)

The new BPS will be constructed to transfer the full allotment of flow to Lough Talt WTP. The BPS will receive water under gravity from the Lisglennon WTP, and pump it over the local high point, to the Windy Gap BPT, from where it gravitates to the Lough Talt WTP.

The site will consist of:

- A new 320 kW booster pumping station (approx. 150 m², approx. 8 m tall) with pumping area, control room and welfare facilities, noise proofing by means of thick walls and sound-proofing measures on doors and windows;
- ESB substation (approx. 35 m^2, 3 m tall) with dedicated fence and entrance;
- A new permanent standby generator;
- Two surge vessels (approx. 20 m^3 each); and,
- Ancillary site development works, including renewable energy, storm water management including pond, wastewater management, site lighting, fencing, flowmeter and associated works and landscaping.

At Bonniconlon BPS, surface water run-off consists of a conventional system of gullies and drains along the access road. Stormwater run-off from buildings, hardstanding and roads, will be collected by this new storm water network, conveyed by the proposed storm water pipe network to a petrol interceptor before draining into a proposed pond located at the southern boundary of the Bonniconlon BPS. There will be no discharge to the adjacent Srafaungal River.

Bonniconlon Reservoir

The site will consist of:

- A new reservoir approx. capacity of 185 m^3 and associated works;
- New dechlorination chamber;
- Relocation of ESB pole; and,
- Ancillary site development works, including alterations to access arrangements, hardstanding, surface water management, site lighting, fencing, security, landscaping works

At Bonniconlon reservoir site, the tank will be constructed using pre-cast concrete, reducing the need for concrete pours onsite. There is minimal surface runoff from the proposed works. Stormwater generated from the new tank roof will be collected into a French drain circling the base of the proposed tank's berm, which will be consist of a shallow trench with single sized free draining stones wrapped in geotextile. Stormwater will percolate into the ground.

Windy Gap Break Pressure Tank

The Proposed Development will consist of:

- A new BPT with a storage capacity of approx. 80 m^3;
- A new scour extraction kiosk and a new control kiosk;

- Associated inlet pipe (Pipeline D), outlet pipe (Pipeline E), overflow pipe and scour line;
- A new Precast Cement Concrete inspection/collection chamber approx. 900 mm diameter;
- Associated works including underground flowmeter chambers, valve chambers, pipework; and,
- Ancillary site development works, including access arrangements, hardstanding, surface water management, site lighting, fencing, security and landscaping.

Specific mitigation measures associated with this activity will cover:

- Design of the works to avoid long-term hydrological or ecological impacts on the surrounding bog including:
  - The proposed BPT is located in bogland. Bog is acidic, therefore proposed mitigation measures include using specific concrete mix that is robust to construction. To manage and monitor any leaks, an impermeable envelope will be installed within the pipe surround / pipe bedding, within the trenches of all underground pipelines within the site. A geomembrane or liner wrapped approx. 80 mm diameter perforated drains will be installed within the pipe surround / pipe bedding to collect any leaks from the underground treated water pipelines. These perforated drains will collect any leaks and convey into a 900 mm diameter Precast Cement Concrete inspection/collection chamber. The operations personnel will inspect the chamber periodically for any leaks and any collected treated water will be disposed of appropriately.
  - The BPT will be a precast concrete tank and will be installed by standard methods. The BPT will have appropriate protective / resistant coatings suitable for the bog ground.
- Specific construction controls including:
  - Initial works will include site establishment, demarcation of the works area, installation of temporary working areas, protection of sensitive habitats, confirmation of existing services and drainage, and site preparation. The limits of construction activity will be clearly defined before works commence. Plant movements and material storage will be confined to designated working areas to minimise disturbance to the surrounding bog habitat.
    - Peat and underlying mineral soils will be stripped and stored separately within designated areas. Peat turves and surface vegetation will be lifted intact where practicable and retained for reinstatement. Peat will be stored in a manner that maintains moisture content and preserves its suitability for re-use in habitat reinstatement. Excavated material will be managed in accordance with the CRWMP Where localised water ingress occurs, sump pumping may be used on a limited basis. Any pumped water will be managed through appropriate silt control measures before discharge or infiltration, in accordance with the CEMP and relevant environmental controls
- The BPT will be constructed as a precast concrete structure or equivalent tank system suitable for the ground conditions and operational requirements. The tank will be designed and constructed to account for potentially acidic ground and groundwater conditions associated with the bog environment.
- An impermeable geomembrane or liner will be installed on the tank surface approx. 500 mm below the finished level to allow surface runoff percolation away from the tank The associated below-ground pipework will be provided with the specified impermeable envelope, leak collection and inspection arrangements, including wrapped perforated drains and an inspection / collection chamber, where required by the final design. These measures will allow treated water leakage, if any, to be directed to a defined inspection point for monitoring and management.
- Impermeable wraps or equivalent hydraulic control measures will be installed where required to maintain existing hydrological conditions and prevent preferential flow paths along pipe trenches.
- Bog mats, temporary ground protection and low-ground-pressure plant will be used where practicable to reduce rutting, compaction and disturbance. Plant and materials will be stored only within designated areas. Fuels, oils, cementitious materials, concrete washout, chemicals and other potentially polluting materials will be managed in accordance with the pollution prevention measures set out in the CEMP.
- Concrete washout will not be permitted on unprotected ground.
- A suitably qualified Ecological Clerk of Works will oversee sensitive works

- On completion of the construction works, temporary working areas will be removed and disturbed areas will be reinstated.
- The original peat and salvaged peat turves will be reinstated, where practicable, to match surrounding levels and support natural recolonisation by bog vegetation. Reinstated peat surfaces will be lightly consolidated and wetted where required to support vegetation recovery.
- Temporary drains or channels created during construction will be backfilled or blocked as appropriate to restore existing hydrological conditions and avoid long-term drainage effects.
- Landscaping and habitat reinstatement measures will be implemented

Lough Talt WTP

The existing Lough Talt WTP will be modified as part of the Proposed Development. As part of repurposing of Lough Talt WTP, new infrastructure, repurposing of existing infrastructure, retention of existing infrastructure, removal and decommissioning of existing redundant infrastructure and ancillary works are proposed:

- New infrastructure:
  - A new treated water reservoir of approx. 3,300 m^3 capacity and associated works; and,
  - Installation of roof mounted solar panels.
- Repurposed existing infrastructure:
  - Repurposing of existing approx. 330 m^3 Chlorine contact tank as reservoir.
- Retained existing infrastructure:
  - Control building;
  - Chemical storage container, tanks and associated works; and,
  - Disinfection (chlorination and ammonia) and orthophosphate dosing infrastructure.
- Removed existing infrastructure:
  - Disused Microstrainer building;
  - Rapid Gravity Filtration units, backwash holding tank, pumps and associated works;
  - Raw Water Feed Container, Raw Water Balance Tank and associated works;
  - Containerised UV unit and associated works; and,
  - Used Wash Water Equalisation Settlement Tank (UWWEST), Settlement tanks, Sludge holding tank and associated works.
- Decommissioning of redundant process units.
- Ancillary site development works, including alterations to access road, hardstanding, surface water management, wastewater management, site lighting, fencing and landscaping.

The existing stormwater run-off network consists of a conventional drainage network, which includes road gullies, pipe network with manholes for maintenance. The pipe network conveys the surface water to the existing attenuation pond located at the southeast corner of the site. The surface water is collected in an attenuation pond and is discharged from the site to the existing outfall near the eastern corner of the site. The existing flow control device located downstream from the attenuation pond restricts the flow of surface water to pre-development runoff rate. This results in the surface water backing up and gradually filling the attenuation pond to a pre-determined level. The existing attenuation pond is sized to cater for extreme rainfall events. It is anticipated that the Proposed Development will result in a small increase in surface water entering the system, therefore the attenuation pond will be extended (approx. 8%) to enable the same discharge rate from the site to be maintained. New pipe network and gullies will be installed within the site to collect surface runoff from new impermeable areas

4.1.2 Zone(s) of Influence

Based on the development activities outlined in the preceding section, the anticipated Zones of Influence are likely to be localised, as they represent relatively small scale works when considered at the water body scale.

Construction activities will likely be limited to a discrete, linear corridor along the new and existing trunk main between Lisglennon WTP to Lough Talt WTP, with excavation depths anticipated as being between 1-3 m bgl. Works to existing Wherrew RWI&PS, Lisglennon RWS&PS, and Lough Talt WTP infrastructure will also take place predominantly within the footprint of existing infrastructure sites. Despite this, there are a number of potentially sensitive locations along the proposed route, including where watercourse crossings are required with some of these occurring within the River Moy SAC.

Operational activities will be minimal by virtue of the nature of the Proposed Development being for the provision of drinking water, with interactions between drinking water and the wider water environment (and other environments) strictly controlled through scour management. When carrying out emergency works, a section of the pipeline will need to be isolated and emptied in a controlled manner by opening the dedicated scour valve. Maintenance activities such as scouring will be infrequent and undertaken in a manner that avoids release of chlorinated water to the environment. The incorporation of advanced telemetry and automated control will enable continuous monitoring of flows, pressures and water quality, allowing for rapid response to any potential issues and ensuring the system operates within defined parameters at all times.

Treated waters required to be discharged will be dechlorinated. All discharge methods are subject to detailed risk assessment and agreement from relevant stakeholders. All anticipated discharge locations will be assessed in advance of any discharge with regard to the sensitivity of the receiving environment and capacity to accept treated water without resulting in negative effects on sensitive receptors, such as protected sites, aquatic species and hydromorphology, as well as impacts on local stakeholders and agricultural land (see Chapter 7 Biodiversity, Chapter 8 – Agronomy and Chapter 10 – Water (Hydrology and Hydrogeology).

Agreement will be sought with relevant stakeholders (such as landowners or the local authority) in advance as appropriate. Where it is concluded that dechlorinated/treated water should not be discharged into the environment, water will be collected and tankered to an appropriate disposal location, where allowed.

Development activities screening

The activities associated with the Proposed Development set out in Section 4.1.1 have been screened to determine whether they will be taken forward for further assessment, with the findings presented in Table 4-2 – Table 4-7.

Lough Conn

Table 4-2 – Screening of activities at Lough Conn

Activity	Development phase	Screening assessment	Screening decision
Increased abstraction	Operation	A significant change in abstraction volumes may impact lake hydrology and species, therefore, this activity has been screened in for further assessment for surface water bodies only. Impacts may also extend to the downstream River Moy. A clear impact pathway to the underlying groundwater body is not anticipated to be present.	In (surface water interactions only)

Wherrew RWI

Table 4-3 – Screening of activities at Wherrew RWI

Activity	Development phase	Screening assessment	Screening decision
New abstraction infrastructure	Construction/ Operation	New abstraction infrastructure may impact on species and habitat availability within the lake, both during and after construction. Consequently, this activity has been screened in for further assessment.	In
Remedial works to existing structures	Construction	Unlikely to have an impact on any WFD water bodies due to relatively minor nature of works, with any impacts likely to be localised and limited to the duration of the construction window, therefore this activity has been screened out from further assessment.	Out

Lisglennon RWPS

Table 4-4 – Screening of activities at Lisglennon RWPS

Activity	Development phase	Screening assessment	Screening decision
Minor remedial works to existing structures	Construction	Unlikely to have an impact on any WFD water bodies due to lack of a clear impact pathway and relatively minor nature of works, with any impacts likely to be localised and limited to the duration of the construction window. Consequently, this activity has been screened out from further assessment.	Out

Pipeline A

Table 4-6 – Screening of activities at Lisglennon RWPS

Activity	Development phase	Screening assessment	Screening decision
Upgrade existing main between Lisglennon RWPS and Lisglennon WTP	Construction	Construction impacts will likely be confined to the route of the replaced main. Given the size of the main (630mm diameter) excavations will likely be relatively small in the context of the underlying groundwater bodies, with depths likely to be shallow at 1-2mbgl. No watercourses will be crossed, therefore there will be no clear impact pathway to the Moyne_010 river water body. The Moyne_010 water body is also culverted at its closest point to this activity, further inhibiting the formation of an impact pathway to this receptor. Consequently, this activity has been screened out from further assessment.	Out

Activity	Development phase	Screening assessment	Screening decision
	Operation	Post-construction (operational) conditions will be the same as baseline conditions, as the Proposed Development will be replacing like with like. Consequently, this activity has been screened out from further assessment.	Out

Lisglennon WTP

Table 4-5 – Screening of activities at Lisglennon WTP

Activity	Development phase	Screening assessment	Screening decision
Process upgrades to accommodate increased treatment capacity, including new buildings	Construction/ Operation	Unlikely to have an impact on any WFD water bodies due to relatively minor nature of works, with any impacts localised and limited to the duration of the construction window. In addition, lack of clear impact pathways has allowed for this activity to be screened out from further assessment. As the upgrades will be made on an existing development site, it is unlikely that there will be any new operational impacts associated with this activity.	Out
Replacement of existing sludge treatment facility with new sludge facility	Construction/ Operation	Unlikely to have an impact on any WFD water bodies due to relatively minor nature of works, with any impacts localised and limited to the duration of the construction window. In addition, lack of clear impact pathways has allowed for this activity to be screened out from further assessment. During operation, sludge will be transferred by road offsite (up to twice per week), with no discharge to surface waters or groundwater required. Dosing facilities will also be bunded. As a result, no clear impact pathways will be present to WFD water bodies, resulting in no operational impacts arising from this activity.	Out
Stormwater management	Operation	There will be a clear impact pathway between surface water runoff and groundwaters due to the preferred stormwater management philosophy i.e. use of infiltration.	In (groundwater interactions only)
Excavations for below ground structures	Construction/ Operation	Excavations for new structures may result in impacts to groundwater levels and quality, therefore, have been screened in for further assessment. Post-construction impacts will also need to be assessed, as the new structure(s) may impact groundwater pathways.	In (groundwater interactions only)

Lisglennon WTP to Lough Talt WTP trunk main – Pipelines B, C, D, E

Table 4-6 – Screening of activities from Lisglennon WTP to Lough Talt WTP

Activity	Development phase	Screening assessment	Screening decision
Replace existing mains – Pipeline B (Lisglennon to Ballina)	Construction	Construction impacts will be limited to the route of the replaced main. Given the size of the main (710mm diameter) excavations will likely be relatively small scale in the context of the underlying groundwater bodies, with depths likely to be shallow at 1-3mbgl. Several watercourses will be crossed, including the Rathroeen Stream (a designated WFD surface water body), therefore there will be a clear impact pathway to this receptor. Consequently, this activity has been screened in for further assessment.	In
	Operation	Post-construction (operational) conditions will be the same as baseline conditions, as the Proposed Development will be reinstate affected features. Consequently, this activity has been screened out from further assessment.	Out
Replace existing mains (Moy Crossing)	Construction	Whilst the Moy Estuary is a designated SAC and sensitive environmental area, 'Clearing the Waters for All' guidance explicitly states that replacing pipes and 'over water' replacements are considered low risk activities, as long as bed and bank disturbance is minimised. The current design calls for re-purposing of the existing crossing i.e. the Proposed Development will utilise existing pipework, and it is therefore unlikely that there will be impacts of sufficient nature to compromise the quality elements of the Moy Estuary transitional water body.	Out
New mains – Pipeline C, D, E (Lisglennon to Lough Talt)	Construction/ Operation	Construction impacts will be limited to the route of the new main, which includes multiple watercourse crossings, therefore there will be clear impact pathways present to WFD receptors. Given the size of the main (630-450 mm diameter) excavations will likely be relatively small scale in the context of the underlying groundwater bodies, with depths likely to be shallow at 1-3 m bgl. Operationally, scour valves will need to be utilised on an ad-hoc basis to facilitate maintenance/repair of the main. This could require discharge of water to nearby receptors in a controlled manner. Consequently, this activity has been screened in for further assessment.	In
Bonniconlon BPS	Construction	The proximity of the site to a designated WFD watercourse (approximately 10 m) presents a very short impact pathway. Consequently, this activity has been screened in for further assessment.	In

Activity	Development phase	Screening assessment	Screening decision
	Operation	The structure will not require a notable below ground footprint, therefore groundwater impacts are likely to be negligible. Operational activities will be associated with the new main, with no external interactions with the water environment anticipated. Consequently, this activity has been screened out for further assessment.	Out
Windy Gap BPT	Construction/ Operation	The required overall volume of the BPT is 80m^3, with the structure situated partially below ground. Maximum depth below ground will be 1.8m, resulting in excavations which will be negligible within the context of the wider water body. Any impacts on groundwater will therefore likely be highly localised and unlikely to result in impacts when considered at a water body scale. The closest watercourse is approximately 400m west of the Proposed Development. There will not be a clear impact pathway from the works to the watercourse which may result in noticeable impacts when considered at a waterbody scale. Consequently, this activity has been screened out of further assessment.	Out

Lough Talt WTP

Table 4-7 – Screening of activities at Lough Talt WTP

Activity	Development phase	Screening assessment	Screening decision
New storage tank	Construction	The required capacity of the new storage tank will be approximately 3,290 m^3, with much of the structure being located above ground. However, presence of bog habitats in proximity to the site may result in impacts to the adjacent SAC.	In
	Operation	Given the small below ground footprint of the structure, there will be unlikely to be any notable impacts on groundwater flows when considered at a water body scale. Consequently, this activity has been screened out from further assessment.	Out
Removal of existing infrastructure	Construction	Unlikely to impact on WFD water bodies due to the relatively minor nature of works, with any impacts localised and limited to the duration of the construction window. However, the Eignagh (a WFD surface water body of High status) is present within 100 m of the site. It is not clear whether there will be impact pathways present between the site and this receptor, therefore this activity has been screened in for further assessment.	In
Stormwater management	Operation	Stormwater management systems at the site will be retained and unchanged. Therefore, as there will be no change from	Out

Activity	Development phase	Screening assessment	Screening decision
		current conditions and this activity has been screened out from further assessment.	
Cessation of abstraction from Lough Talt	Operation	Cessation of abstraction will see the establishment of a near-natural hydrological regime. Whilst this may see some short-term change in near-shore habitats as these adjust to generally higher lake levels, it is unlikely that these will result in a change in quality element status. Longer term, cessation of abstraction will likely improve resilience of the lake and associated habitats to climate change by maximising water availability from the catchment. Re-naturalising the hydrological regime of the lake will also support wider environmental drivers to improve fen habitats around Lough Talt by maintaining suitable moisture conditions during prolonged dry periods. This in turn will help compensate for the historical loss of species for which the Lough Hoe Bog SAC is designated (specifically *V. geyeri*). Chapter 7 (Biodiversity) of the EIAR covers these drivers in greater detail. A clear impact pathway to the underlying groundwater body is not anticipated to be present.	Out

4.2 Water body screening

32 water bodies lie within 2 km of the Proposed Development, as listed in Table 4-8 and shown in Figure 4-1 and Figure 4-2.

Table 4-8 – WFD water bodies within 2 km of the Proposed Development. Note: Lough Cullin is outside the 2 km buffer, however, is in hydrological continuance with Lough Conn so potential for impact propagation.

Water body type	Water body name	Water body ID
Surface water (river)	Ballymanagh_010	IE_WE_34B400840
	Behy (North Mayo)_010	IE_WE_34B080400
	Brusna (North Mayo)_020	IE_WE_34B070600
	Cloonaghmore_050	IE_WE_34C030270
	Deel (Crossmolina)_060	IE_WE_34D010400
	Dooyeaghny_or_Cloonloughan_010	IE_WE_34D310990
	Eignagh_010	IE_WE_34E010100
	Eignagh_020	IE_WE_34E010200
	Glenree_010	IE_WE_34G010020
	Glenree_020	IE_WE_34G010060
	Glenree_030	IE_WE_34G010200
	Gowlan (Sligo)_010	IE_WE_35G030100
	Lenyvee_010	IE_WE_34L06030
	Moy_040	IE_WE_34M020300
	Moy_100	IE_WE_34M020800
	Moy_120	IE_WE_34M021100
	Moyne_010	IE_WE_34M190890
	Owenaher_020	IE_WE_34O010100
	Rathroeen Stream_010	IE_WE_34R010200
	Slieveclaur_010	IE_WE_34S060400
	Tullyegan_010	IE_WE_34T830920
Surface water body (lake)	Conn	IE_WE_34_406b
	Cullin	IE_WE_34_406a
	Talt	IE_WE_34_405
Transitional water body	Moy Estuary	IE_WE_420_0300
Groundwater	Bellacorick-Killala	IE_WE_G_0041
	Ballina	IE_WE_G_0035
	Ballina Gravels Group 1	IE_WE_G_0113
	Ballina Gravels Group 2	IE_WE_G_0116
	Collooney	IE_WE_G_0048
	Foxford	IE_WE_G_0034
	Killala South	IE_WE_G_0047

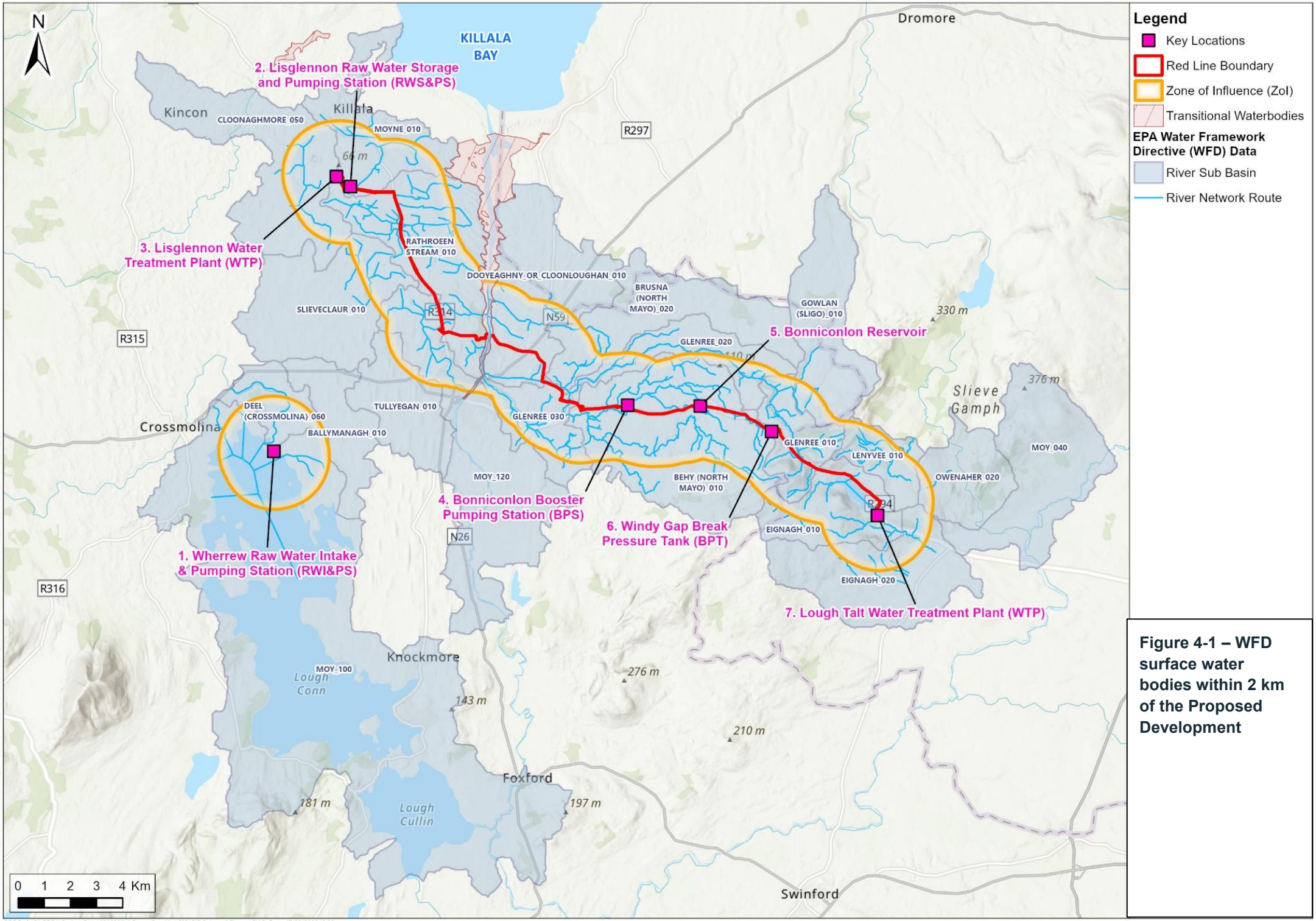


Figure 4-1 – WFD surface water bodies within 2 km of the Proposed Development

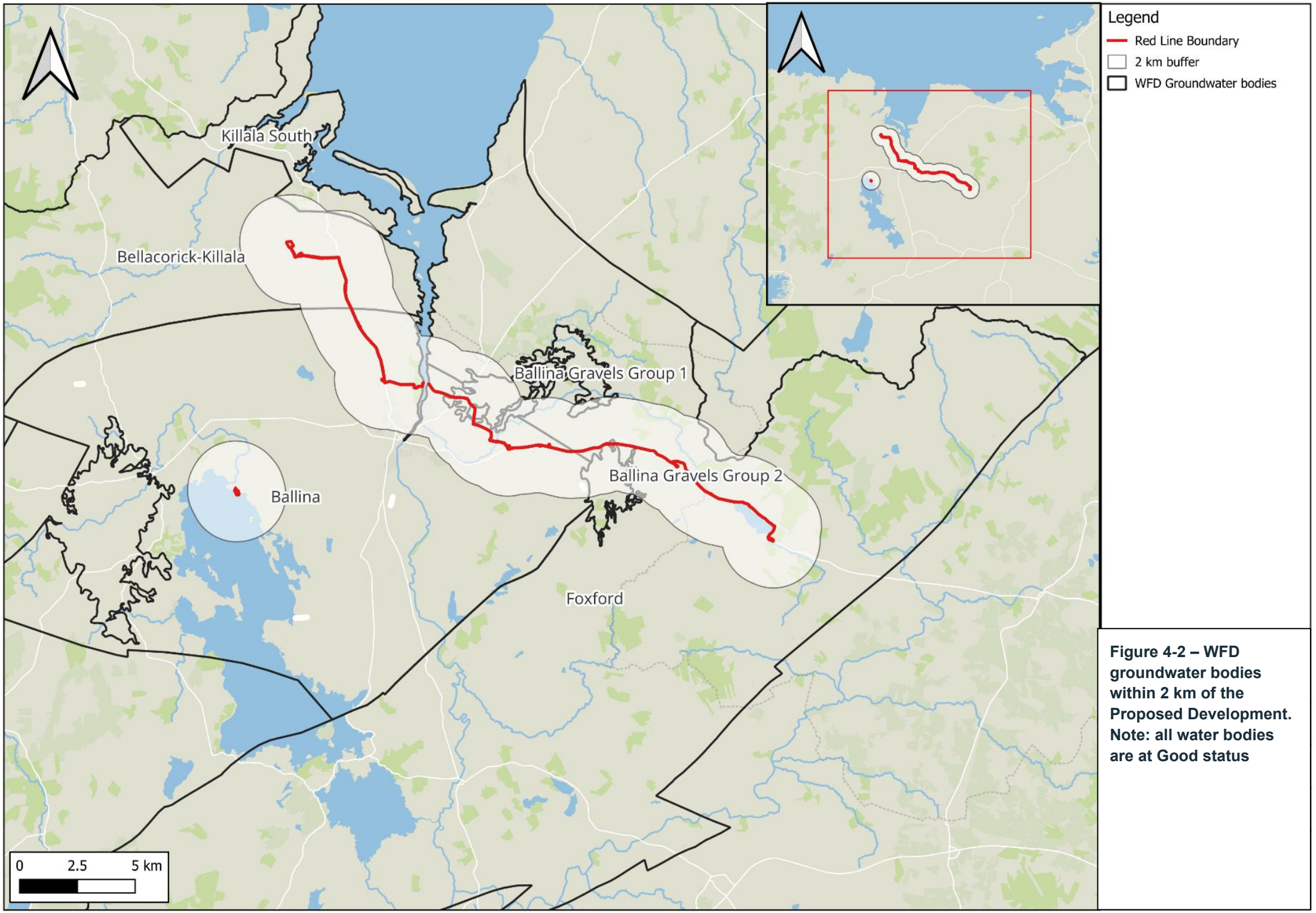


Figure 4-2 – WFD groundwater bodies within 2 km of the Proposed Development. Note: all water bodies are at Good status

Of the 32 water bodies identified as part of the screening process 18 have been screened out, with the justification for doing so presented in Table 4-9.

Table 4-9 – Justification for water bodies screened out

Water body name	Proximity to Proposed Development	Development activity	Justification for screening out
		Surface water bodies (rivers)	
Ballymanagh_010	2.1 km (river water body) and 1.7 km (sub- basin watershed) upstream	Wherrew RWI and RWPS	No clear impact pathway as works located downstream in the Moy_100 sub-basin / within Lough Conn surface water body.
Brusna (North Mayo)_020	Within sub-basin, 250 m upstream of confluence with Glennree_030 sub-basin.	250 m of new trunk main	Localised impact footprint of the activity. Also, proximity to the downstream point of the water body will be unlikely to result in change in water body status.
Cloonaghmore_050	Within sub-basin	Landscaping at Lisglennon WTP	Nature of the works will be unlikely to result in a measurable impact on this water body.
Deel (Crossmolina)_060	200 m (river water body) and 120 m (sub-basin watershed) upstream	Wherrew RWI and RWPS	No clear impact pathway as works located downstream in the Moy_100 sub-basin / within Lough Conn surface water body.
Eignagh_020	1 km (river water body) and 900 m (sub- basin watershed) upstream	New trunk main Lough Talt WTP	No clear impact pathway as works located downstream in the Eighnagh_010 sub-basin.
Lenyvee_010	650 m (river water body) and 525 m (sub- basin watershed) away in adjacent sub-basin	New trunk main	No clear impact pathway/hydrological connectivity with activities being undertaken in the adjacent Eignagh_010 sub-basin.

Water body name	Proximity to Proposed Development	Development activity	Justification for screening out
Glenree_020	330 m (river water body) and 130 m (sub- basin watershed) away in adjacent sub-basin	New trunk main	No clear impact pathway/hydrological connectivity with activities being undertaken in the adjacent Behy (North Mayo)_010 and Glenree_030 sub-basins.
Gowlan (Sligo)_010	1.1 km away in adjacent sub-basin	New trunk main	No clear impact pathway/hydrological connectivity with activities being undertaken in the adjacent Glenree_010 sub-basin.
Moy_040	1.9 km away in adjacent sub-basin	New trunk main Lough Talt WTP	No clear impact pathway/hydrological connectivity with activities being undertaken.
Owenaher_020	1.7 km (river water body) and 1.4 km (sub- basin watershed)		
Slieveclaur_010	500 m (river water body) and 50 m (sub- basin watershed) away in adjacent sub-basin	Replace existing trunk main	No clear impact pathway/hydrological connectivity with activities being undertaken in the adjacent Rathroeen Stream_010 sub-basin.
Tullyegan_010	2 km (river water body) and 1.5 km (sub- basin watershed) away in adjacent sub-basin	Replace existing trunk main	No clear impact pathway/hydrological connectivity with activities being undertaken in the adjacent Moy_120 sub-basin.

Water body name	Proximity to Proposed Development	Development activity	Justification for screening out
Transitional water bodies			
Moy Estuary	Within sub-basin	Replace existing trunk main	As per 'Clearing the Waters for All' guidance, replacement of pipes would constitute a 'low risk' activity and this activity has been screened out (see Section 0). The Moy Estuary is hydraulically connected to three water bodies where activities are occurring as a result of the Proposed Scheme (Dooyeaghny_or_Cloonloughan_010, Moyne_010, and Rathroeen Stream_010). However, it is likely that impacts associated with these activities (replacement of existing trunk mains) will be localised and restricted to the construction period, with no change from baseline conditions once construction has been completed. Therefore, it is unlikely that there will be any change in water body or quality element status of the Moy Estuary as a result of the Proposed Development. This will also apply to the Killala Bay/Moy Estuary SAC.
Groundwater bodies			
Ballina Gravels Group 1	Within water body	Replace existing trunk main	The length of trunk main being replaced is approximately 500 m, as a result it is unlikely that construction related impacts (for example dewatering) will occur for a sufficient duration as to result in a deterioration of water body or quality element status. Excavation depths are likely to be shallow at approximately 2 m bgl and are therefore unlikely to impact on groundwater availability for abstraction, given the water body is designated as a Drinking Water Protection Area. Operationally, there will be a negligible change in baseline conditions as the Proposed Development requires a near like for like replacement of an existing trunk main.

Water body name	Proximity to Proposed Development	Development activity	Justification for screening out
Ballina Gravels Group 2	Within water body	New trunk main	The length of trunk main being laid is approximately 300m and will be laid predominantly within the carriageway of the L51172. As a result, it is unlikely that construction related impacts (for example dewatering) will occur for a sufficient duration as to result in a deterioration of water body or quality element status. Excavation depths are likely to be shallow at approximately 2 m bgl and therefore unlikely to impact on groundwater availability for abstraction, given the water body is designated as a Drinking Water Protection Area Laying the main in the highway will likely result in negligible operational impacts, as it is likely that surface-groundwater interactions and groundwater flows are already being impacted by the presence of the highway.
Collooney	1.3 km	New trunk main	No clear impact pathway/hydrological connectivity with activities being undertaken.
Killala South	1.7k m	Lisglennon WTP	

4.3 Screening assessment outcomes

Following the screening of development activities and water bodies set out in Sections 0 and 4.2, the following have been screened out.

Development activities

- Abstraction from Lough Conn - impacts on groundwater screened out (screened in for surface water);
- Decommissioning of abstraction infrastructure and remedial work to existing structures at Wherrew RWI;
- All activities at Lisglennon RWPS;
- Process upgrades at Lisglennon WTP;
- Stormwater management and below ground structures at Lisglennon WTP - impacts on surface water screened out;
- Replacement of existing trunk main (operational impacts screened out), Moy crossing, Bonniconlon BPS and reservoir (operational impacts screened out) and Windy Gap BPT; and
- New treated water storage (operational impacts screened out), stormwater management, and cessation of abstraction at Lough Talt WTP.

Water bodies

- Surface water bodies (river):
  - Ballymanagh_010
  - Brusna (North Mayo)_020
  - Cloonaghmore_050
  - Deel (Crossmolina)_060
  - Eignagh_020
  - Glenree_020
  - Gowlan (Sligo)_010
  - Lenyvee_010
  - Moy_040
  - Owenaher_020
  - Slieveclaur_010
  - Tullyegan_010
- Transitional water bodies:
  - Moy Estuary
- Groundwater bodies:
  - Ballina Gravels Group 1
  - Ballina Gravels Group 2
  - Collooney
  - Killalia South

All other matters relating to the Proposed Development as set out in Sections 0 and 4.2 will be assessed further during Stage 2 of this assessment.

5. Stage 2: Scoping assessment

5.1 Baseline

Baseline status data for all the screened in water bodies are presented in Table 5-1. Regarding artificial/heavily modified water bodies (A/HMWBs), all the surface water bodies (river) identified in Table 5-1 are currently showing as 'unknown' designations based on the latest EPA data sets, therefore it has been assumed these are water bodies are not designated A/HMWBs. All the lake and transitional water bodies have been formally designated as not A/HMWBs.

Table 5-1 – WFD water body baselines based on Cycle 4 (2019-2024) data.

Water body type	Water body name	Water body ID	Size (km^2)	Current ecological status	Quality element not achieving Good status	Status Risk	Significant Issues	Significant Pressures	Protected Areas**
Surface water (river)	Behy (North Mayo)_010	IE_WE_34B080400	35.35	Moderate	Fish	Review	None recorded	None recorded	Lough Hoe Bog SAC
	Dooyeaghny_or_Cloonloughan_010	IE_WE_34D310990	23.61	Good	N/A	Review	None recorded	None recorded	River Moy SAC
	Eignagh_010	IE_WE_34E010100	12.65	High	N/A	Not at risk	None recorded	None recorded	Lough Hoe Bog SAC River Moy SAC
	Glenree_010	IE_WE_34G010020	8.55	High	N/A	Not at risk	None recorded	None recorded	Lough Hoe Bog SAC Ox Mountains Bogs SAC
	Glenree_030	IE_WE_34G010200	9.22	Good	N/A	Not at risk	None recorded	None recorded	River Moy SAC
	Moy_100	IE_WE_34M020800	133.27	Moderate	Invertebrates	At risk	Nutrients	Agriculture	River Moy SAC Salmonid watercourse
	Moy_120	IE_WE_34M021100	33.23	Moderate	Invertebrates	At risk	Sediment, Morphological, Chemical, and Nutrients	Hydromorphology and Urban Run-Off	River Moy SAC Salmonid watercourse
	Moyne_010	IE_WE_34M190890	15.23	Moderate	Not recorded	Review	None recorded	None recorded	Killala Bay/Moy Estuary SAC
	Rathroeen Stream_010	IE_WE_34R010200	22.59	Good	N/A	Review	None recorded	None recorded	Killala Bay/Moy Estuary SAC
Surface water (lake)	Cullin	IE_WE_34_406a	10.23	Moderate	Macrophytes, Hydromorphological conditions, and Nutrient conditions	At risk	Nutrients and Unknown Impact	Agriculture and Invasive species	Lough Conn and Lough Cullin SPA River Moy SAC
	Conn	IE_WE_34_406b	47.04	Good	N/A	Review	None recorded	None recorded	Lough Conn and Lough Cullin SPA River Moy SAC
	Talt	IE_WE_34_405	0.97	Good	N/A	At risk	Hydrological	Abstraction	Lough Hoe Bog SAC
Groundwater	Ballina	IE_WE_G_0035	278.88	Good	N/A	Not at risk	None recorded	None recorded	Lough Conn and Lough Cullin SPA River Moy SAC
	Bellacorick-Killala	IE_WE_G_0041	195.08	Good	N/A	Not at risk	None recorded	None recorded	Bellacorick Bog Complex SAC
	Foxford	IE_WE_G_0034	579.12	Good	N/A	Not at risk	None recorded	None recorded	Lough Hoe Bog SAC Lough Nabrickkeagh Bog SAC Ox Mountains Bogs SAC

*** All lake and groundwater bodies are designated as Drinking Water Protected Areas*

5.2 Surface water scoping assessment

All screened in development activities have been assessed for potential impacts on surface water bodies screened in for assessment, and consider interactions at a quality element scale, with the findings presented in Table 5-2 to Table 5-5. Assessments assume that the mitigation measures identified in Section 4.1.1 and the CEMP will be adhered to.

Lough Conn – Increased Abstraction

An assessment was undertaken, to determine the impact of increasing abstraction from Lough Conn[9] the findings of which form the basis on which assessment of this activity has been made. The modelled data suggested that there is unlikely to be any change in shoreline habitat quality and interaction with wetland habitats that support the protected bird communities. There is also unlikely to be any water quality changes as a result of the change in abstraction regime. The compliance assessment also indicates that river flows in the River Moy will remain compliant with the target for achieving Good status under all flow conditions.

Based on the available data it was also concluded that lake levels and river flows will remain compliant with WFD standards for achieving Good to High status. As such, there is unlikely to be any change in geomorphological process or a loss of habitat as a result of the change in abstraction regime.

As changes in river flow will not be discernible, there is unlikely to be any fragmentation of habitats or barriers to migration, especially during autumn and winter flows (when Atlantic salmon and lamprey species – which are the Qualifying Interests of the River Moy SAC – are undertaking spawning migration). The scoping assessment is presented in Table 5-2.

Table 5-2 – Scoping assessment of increased abstraction at Lough Conn

Activity	Quality elements	Scoping assessment	Water bodies
Increased abstraction (Operation)	Biological	Based on the available data it is concluded that lake levels and river flows will remain compliant with WFD standards for achieving Good to High status. As such, there is unlikely to be any change in geomorphological process or a loss of habitat as a result of the change in abstraction regime. As changes in river flow will not be discernible, there is unlikely to be any fragmentation of habitats or barriers to migration, especially during autumn and winter flows (when Atlantic salmon and lamprey species are undertaking spawning migration).	Moy_100 Lough Conn Lough Cullin
	Physico-chemical	Based on the available data it is concluded that lake levels and river flows will remain compliant with WFD standards for achieving Good to High status. As such, there is unlikely to be any water quality changes as a result of the change in abstraction regime.	
	Hydro-morphological	The modelled data suggests that with an increase in abstraction to 40,000 m^3/day, any change in lake levels will be imperceptible, there is unlikely to be any change in	

[9] AtkinsRéalis (2025). *Lough Conn abstraction assessment V5*

Activity	Quality elements	Scoping assessment	Water bodies
		shoreline habitat quality and interaction with wetland habitats that support the protected bird communities. The compliance assessment also indicates that river flows will remain compliant with the target for achieving Good status under all flow conditions.	
	Chemical	No impact.	
	Conclusion	**No further assessment required.**	

Wherrew RWI

Scoping assessment of activities at Wherrew RWI is presented in Table 5-3. Abstraction impacts are assessed in Table 5-2.

Table 5-3 – Scoping assessment of activities at Wherrew RWI

Activity	Quality elements	Scoping assessment	Water bodies
New abstraction infrastructure (Construction)	Biological	Construction activities would cause disturbance of fine sediment, potentially impacting aquatic flora and fauna. However, given the short duration of works (nominally seven weeks) and mitigation proposed, any impacts will be temporary and unlikely to result in a change in quality element status.	Lough Conn Lough Cullin
	Physico-chemical	Potential for changes in water quality (particularly transparency) during preparation of lakebed and pipe laying works, however, these will be temporary and localised, and therefore unlikely to result in a change in quality element status.	
	Hydro-morphological	Construction activities would cause disturbance of bed sediments; however, re-settlement will not result in a fundamental change to the existing bed substrate. Therefore, there will be no change in quality element status.	
	Chemical	There will be no need to introduce chemicals to the lough during construction with the inlet structure made of pre-cast concrete, and therefore unlikely to cause a change in quality element status.	
	Conclusion	**No further assessment required.**	
New abstraction infrastructure (Operation)	Biological	Change in bed habitat (approx. 200m^2) which will be negligible when considered in the context of the combined lake areas (approx. 60km^2). Improved screening and provision of fish returns may result in small increases in local aquatic fauna populations, whilst avoiding need for sediment removal (a change from current operational regimes) will avoid/reduce disturbance of aquatic flora and fauna. Both aspects could potentially have a minor positive impact on these quality elements.	Lough Conn Lough Cullin
	Physico-chemical	Materials used for the pipeline will be inert, therefore, there will be no change on quality element status.	
	Hydro-morphological	Change in bed substrate (approx. 200m^2) which will be negligible when considered in the context of the combined lake areas (approx. 60km^2). Avoided need for sediment removal, allowing for establishment of a stable bed morphology post-construction and potentially having a minor positive impact on this quality element.	
	Chemical	Materials used for the pipeline will be inert, therefore, there will be no change on quality element status.	

	Conclusion	**No further assessment required.**

Lisglennon WTP to Lough Talt WTP trunk main – Pipeline B, C, D, E

Scoping assessment for activities associated with Lisglennon WTP to Lough Talt WTP trunk main is presented in Table 5-4.

Table 5-4 – Scoping assessment for activities associated with Lisglennon WTP to Lough Talt WTP trunk main

Activity	Quality elements	Scoping assessment	Water bodies
Replace existing mains – Pipeline B (Lisglennon to Ballina) (Construction)	Biological	There will be eight watercourse crossings along this route (west of the Moy Estuary). With the adherence to proposed construction mitigation measures, there will be no clear impact pathway to either water body. Consequently, no change in quality element status is anticipated.	Moy_120 Moyne_010 Rathroeen Stream_010
	Physico-chemical		
	Hydro-morphological		
	Chemical		
	Conclusion	**No further assessment**	
New mains – Pipeline C, D, E (Ballina to Lough Talt) (Construction)	Biological	There will be 22 watercourse crossings along this route (east of the Moy Estuary). Trenchless crossings, with adherence to proposed construction mitigation measures, will present no clear impact pathway to the water bodies where these crossings will take place. The open cut crossings (located within the Eignagh_010 water body) will be undertaken during the summer months when the watercourses are dry (as observed during surveying, see Chapter 7, Section 7.3.7.1), which, along with adherence to proposed construction mitigation measures, will mitigate for impacts on all quality elements. Consequently, there will be a negligible impact on all quality elements, with no change in quality element status anticipated.	Behy (North Mayo)_010 Dooyeaghny_or_Cloonloughan_010 Eignagh_010 Glenree_010 Glenree_030 Rathroeen Stream_010 Lough Talt
	Physico-chemical		
	Hydro-morphological		
	Chemical		
	Conclusion	**No further assessment**	
	Biological		

		The only operational impact will be during scour valve releases which will be very short duration, with water dechlorinated at source. Consequently, no change to quality element status is anticipated.	
New mains – Pipeline B, C, D, E (Lisglennon to Lough Talt) (Operation)	Physico-chemical		Behy (North Mayo)_010 Dooyeaghny_or_Cloonloughan_010 Eignagh_010 Glenree_010 Glenree_030 Rathroeen Stream_010
	Hydro-morphological	Uncontrolled scour valve releases could trigger erosion occurring on a receiving watercourse. However, the frequency and duration of the releases will be infrequent, and controlled. All discharge methods are subject to detailed risk assessment (see Chapter 3, Section 3.9), and therefore unlikely to result in a change in quality element status when the impact is considered at a water body scale.	
	Chemical	No impact.	
	Conclusion	**No further assessment**	
Bonniconlon BPS (Construction)	Biological	Fine sediment generated during construction may find its way into the neighbouring watercourse (Srafaungal River), impacting local aquatic flora and fauna. However, implementation of sediment control measures, as well as the presence of the highway adjacent to the site acting as a break in impact pathways, will likely result in there being negligible impact on this quality element with no change in quality element status anticipated.	Behy (North Mayo)_010
	Physico-chemical	Main impact will likely arise from use of materials which if washed into adjacent watercourse may alter pH e.g. cement or uncured concrete. However, adherence to mitigation measures will result in no impact to quality element status.	

	Hydro-morphological	Fine sediment generated during construction may find its way into the neighbouring watercourse (Srafaungal River), impacting local hydromorphological processes and features. However, implementation of sediment control measures, as well as the presence of the highway adjacent to the site acting as a break in impact pathways, will likely result in there being negligible impact on quality element with no change in quality element status anticipated.	
	Chemical	Main impact would likely arise from use of chemicals which if washed into adjacent watercourse may impact water quality. However, adherence to mitigation measures will result in no impact to quality element status.	
	Conclusion	**No further assessment**	
Bonniconlon reservoir (Construction)	Biological	The closest watercourse (Bunnyconnellan West) is approximately 160 m west of the site, with a highway present between the watercourse and site which will likely act as a break in impact pathway. When considered with the implementation of construction mitigation measures, it is unlikely that there will be any change in quality element status as a result of this activity.	Behy (North Mayo)_010
	Physico-chemical		
	Hydro-morphological		
	Chemical		
	Conclusion	**No further assessment**	

Lough Talt WTP

Scoping assessment of activities at Lough Talt WTP is presented in Table 5-5.

Table 5-5 – Scoping assessment of activities at Lough Talt WTP

Activity	Quality elements	Scoping assessment	Water bodies
New storage tanks (Construction)	Biological	Construction of storage tanks may result in mobilisation of fine sediment and/or discharging of chemicals to adjacent watercourses, with the potential to impact all quality elements in receiving water bodies. However, with the implementation of identified mitigation measures, these impacts will be controlled and contained onsite. Therefore, it is unlikely that there will be any impact on quality elements as a result of this activity.	Eignagh_010 Lough Talt
	Physico-chemical		
	Hydro-morphological		
	Chemical		
	Conclusion	**No further assessment required.**	
Removal of existing infrastructure (Construction)	Biological	Removal of existing infrastructure may result in mobilisation of fine sediment and chemicals, with the potential to impact all quality elements in receiving water bodies. However, with the implementation of identified mitigation measures, these will be controlled and contained onsite. Therefore, it is unlikely that there will be any impact on quality elements as a result of this activity.	Eignagh_010 Lough Talt
	Physico-chemical		
	Hydro-morphological		
	Chemical		
	Conclusion	**No further assessment required.**	

5.3 Groundwater scoping assessment

All screened-in development activities have been assessed for potential impacts on screened in groundwater bodies, and consider interactions at a quality element scale, with the findings presented in Table 5-6 to Table 5-9. Assessments assume that the mitigation measures identified in Section 5.1 and the PCEMP will be adhered to.

Wherrew RWI

Table 5-6 – Scoping assessment of activities at Wherrew RWI

Activity	Quality elements	Scoping assessment	Water bodies
New abstraction infrastructure (Construction)	Quantitative	There is potential for an impact pathway to open to the groundwater body from activities during construction (Grading and levelling of lakebed for pipeline laying and use of sheet piling). However, the nature of activities being undertaken will be unlikely to result in any impacts occurring which would be transmitted into the groundwater body. As a result, and given the overall water body size, any impact will be negligible on these quality elements with no change in quality element status anticipated.	Ballina
	Chemical		
	Conclusion	**No further assessment required.**	
New abstraction infrastructure (Operation)	Quantitative	No impact anticipated.	Ballina
	Chemical		
	Conclusion	**No further assessment required.**	

Lisglennon WTP

Table 5-7 – Scoping assessment of activities at Lisglennon WTP

Activity	Quality elements	Scoping assessment	Water bodies
Stormwater management (Operational)	Quantitative	Stormwater from the site will discharge directly to ground, without the provision of upstream treatment. This could allow for chemical pollutants to enter the groundwater body. However, given the size of the site in relation to the water body, any impact will be negligible on these quality elements with no change in quality element status anticipated.	Bellacorick-Killala
	Chemical		
	Conclusion	**No further assessment required.**	
Excavations for below ground structures (Construction / Operational)	Quantitative	Material will need to be excavated to accommodate new structures, with excavation depths typically 1-2mbgl to a maximum depth of 4mbgl. Ground Investigations recorded groundwater at around 2mbgl, so there is potential for interaction with shallow groundwaters. However, given the shallow excavation depths, mitigation measures, and area of excavation in comparison to the size of the water body, it is unlikely	Bellacorick-Killala
	Chemical		

Activity	Quality elements	Scoping assessment	Water bodies
		that this activity will result in a change in quality element status.	
	Conclusion	**No further assessment required.**	

Lisglennon WTP to Lough Talt WTP trunk main – Pipeline B, C, D, E

Table 5-8 – Scoping assessment for activities associated with Lisglennon WTP to Lough Talt WTP trunk main

Activity	Quality elements	Scoping assessment	Water bodies
Replace existing mains – Pipeline B (Lisglennon to Ballina) (Construction)	Quantitative	The excavations required for replacing the existing mains could allow for the creation of impact pathways to groundwater bodies. However, given the depths anticipated (1-3 m bgl) it is unlikely that any impacts encountered would propagate to sufficient depth, or in sufficient quantities, that they would result in a change quality element status.	Ballina Foxford
	Chemical		
	Conclusion	**No further assessment**	
New mains – Pipeline C, D, E (Ballina to Lough Talt) (Construction)	Quantitative	The excavations required for installing the new mains could allow for the creation of impact pathways to groundwater bodies. However, given the depths anticipated (1-3 m bgl) it is unlikely that any impacts encountered would propagate to sufficient depth, or in sufficient quantities, that they would result in a change quality element status.	Ballina Foxford
	Chemical		
	Conclusion	**No further assessment**	
Bonniconlon BPS (Construction)	Quantitative	The excavations required for construction of the BPS could allow for the creation of impact pathways to groundwater bodies. However, given the footprint (20 m x 20 m) and depth (at most 3 m bgl) of the structure it is unlikely that any impacts encountered would propagate to sufficient depth, or in sufficient quantities, that they would result in a change quality element status.	Foxford
	Chemical		
	Conclusion	**No further assessment**	
Bonniconlon reservoir (Construction)	Quantitative	The excavations required for construction of the reservoir could allow for the creation of impact pathways to groundwater bodies. However, given the size of the structure it is unlikely that any impacts encountered will propagate to sufficient depth, or in sufficient quantities, that they would result in a change quality element status.	Foxford
	Chemical		
	Conclusion	**No further assessment**	

Lough Talt WTP

Table 5-9 – Scoping assessment for activities at Lough Talt WTP

Activity	Quality elements	Scoping assessment	Water bodies
New storage tank (Construction)	Quantitative	The excavations required for construction of the reservoir could allow for the creation of impact pathways to groundwater bodies. However, given the size of the structure it is unlikely that any impacts encountered would propagate to sufficient depth, or in sufficient quantities, that they would result in a change quality element status. In addition, presence of bog habitat would also be impacted by this activity. However, specific mitigation has been identified regarding the bog habitat, and as such it is not anticipated to be impacted to the extent that it would be detrimental to the adjacent Lough Hough Bog SAC.	Foxford
	Chemical		
	Conclusion	**No further assessment**	
Removal of existing infrastructure (Construction)	Quantitative	No clear impact pathway anticipated.	Foxford
	Chemical		
	Conclusion	**No further assessment**	

5.4 Scoping assessment outcomes

Following the completion of the scoping assessments, it has been determined that no further detailed assessment will be required. This is on the basis that, whilst the spatial scale of the Proposed Development is large, interactions between the Proposed Development and WFD water bodies are largely minor in nature, with potential impacts likely to be negligible when considering mitigation measures, durations, and scale of interactions.

To summarise the Proposed Developments impacts against WFD Environmental Objectives it has been found that:

- Measures identified to address significant pressures will not be compromised.
- There will be no deterioration of water body or quality element status.
- The Proposed Development will not compromise the achievement of Good or High ecological status.
- There will be no impacts on the objectives of associated protected areas.

6. Conclusion

This WFD Assessment has followed methodology which requires a three-stage approach be followed to determine compliance with WFD legislation. Following completion of Stages 1 and 2, it was deemed that Stage 3 (detailed assessment) will not need to be undertaken. The Proposed Development is considered to be compliant with WFD legislation on the basis that:

- The Proposed Development will not cause deterioration of water body or quality element status, including those determined to be High status water bodies.
- The Proposed Development will not prevent water bodies from the achieving Good or High ecological status in the future.
- Measures identified to address significant pressures will not be compromised by the Proposed Development.
- There will be no impacts on the objectives of associated protected areas.
- Any anticipated impacts of Proposed Development activities are sufficiently limited in scale and can be mitigated against to prevent change in quality elements at the WFD water body scale.

With regard to the increased abstraction at Lough Conn, in view of the potential impacts on lake levels and river flows, the change in abstraction regime will not result in a deterioration in existing status of any of the WFD water bodies in the abstraction scenario considered and will also not prevent the water bodies from attaining Good status where not currently achieved.

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