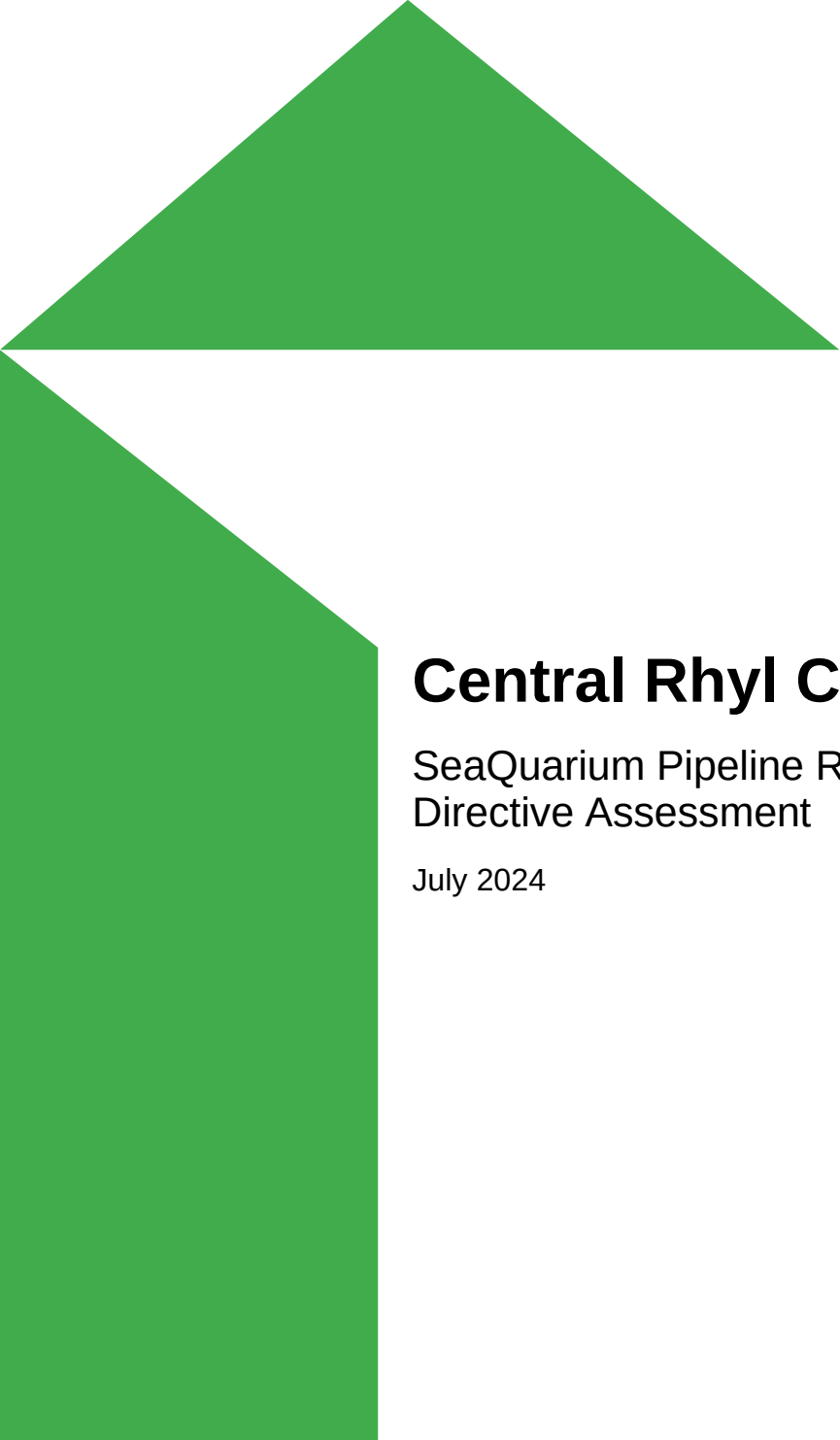




Central Rhyl Coastal Defences

SeaQuarium Pipeline Removal Water Framework
Directive Assessment

July 2024

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1 Introduction

1.1 Project background

This Water Framework Directive Regulations (WFD) Assessment has been prepared by Mott MacDonald Ltd for Balfour Beatty Civil Engineering Ltd (BB) on behalf of Denbighshire County Council (DCC) for ancillary works to remove a redundant seawater supply pipeline located within Rhyl beach. The pipeline was used to supply the Rhyl SeaQuarium with seawater and is no longer used following the closure of the facility. Denbighshire County Council, as the landowner, has made the decision to remove the redundant pipeline from the beach entirely.

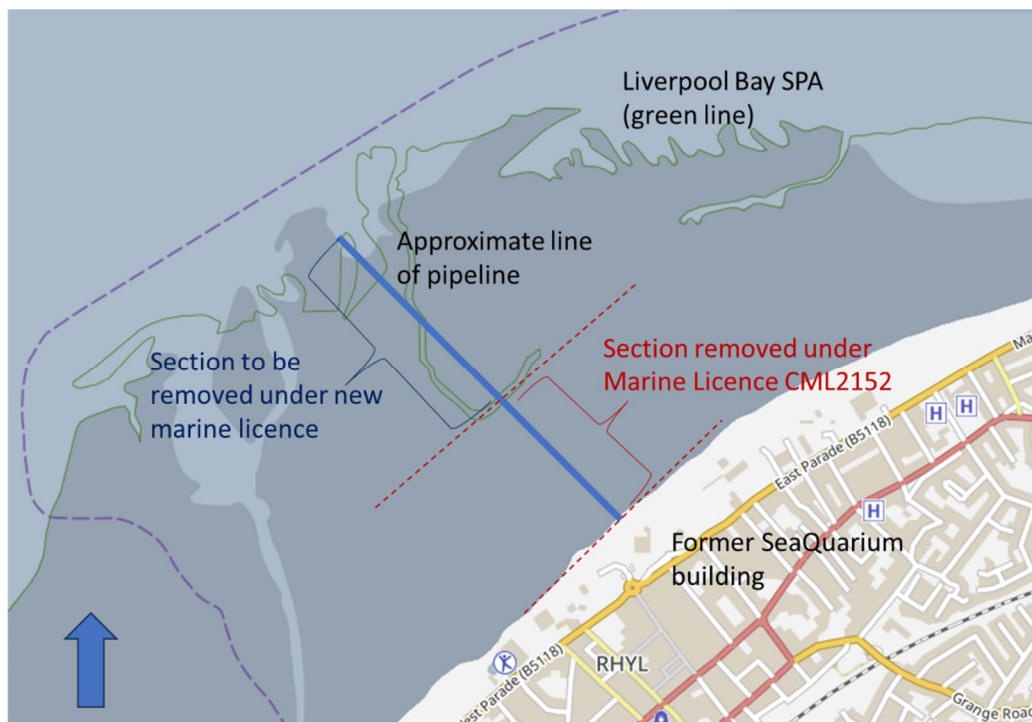
BB are currently constructing flood defences at Rhyl as part of the Central Rhyl Coastal Defences Scheme (herein referred to as “the Scheme”) for DCC. The Scheme is subject to a Band 3 Marine License (Reference: CML2152).

Part of the seawater supply pipeline (nearshore extent) is within the area of the Scheme’s red line boundary, and as confirmed by Natural Resources Wales (NRW) its removal is covered by Scheme’s Band 3 Marine Licence (CML2152). This section of the pipeline has been removed under the provisions of that licence. An application for a Band 2 Marine Licence to NRW to remove the remainder of the pipeline has been made.

1.2 Location

The seawater supply pipeline runs across the Rhyl beach from the existing promenade to the mean low water mark (approximate Ordnance Survey Grid Reference 300700,381790 to 299950,382570). **Figure 1.1** shows the location of the pipeline running down the beach.

Figure 1.1: Pipeline Location



1.3 Proposed works

The proposed works for which this assessment consist of the removal a redundant seawater supply pipeline (see Figure 1.2). Leaving the pipeline in place carries a risk of the pipe being damaged and breaking up, presenting a hazard to beach users and adding to marine litter.

Figure 1.2: Pipeline running across beach surface



Source: Mott MacDonald

1.4 Purpose of WFD Assessment

Given the nature of the proposed works, the works require a WFD Regulations Assessment to determine its effects on ecological, hydromorphological and chemical quality, and identify any potential impacts that could cause deterioration in the current status of the waterbody, or could hinder the waterbody from meeting its WFD Regulations objectives in the future.

2 Legislation and Assessment Methodology

2.1 Legislative context

The WFD is originally European legislation which aims to protect and improve the water environment within Member States. Following the United Kingdom's exit from the EU, the requirements of the WFD continue to be transposed into UK law and therefore still apply. The WFD became UK law in 2003 and is transposed in national statute by the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017. Natural Resources Wales (NRW) is the statutory body responsible for implementing the WFD in Wales.

The WFD requires the government to identify and set objectives for protecting and improving 'waterbodies'. Waterbodies include rivers, streams, lakes, reservoirs, estuaries, coastal waters, canals and groundwaters. The standard objective is to achieve 'good status', or 'good potential' (if the waterbody is artificial or heavily modified). Further to this, the WFD must prevent deterioration in status for all waterbodies. The original target date for all waterbodies to achieve 'good status' was 2015; however, this can be extended to either 2021 or 2027. Good 'status' or 'potential' is designated based on the assessment of ecological and chemical components in surface waters. Ecological status consists of biological quality elements, physio-chemical supporting elements and hydromorphological supporting conditions. For groundwater, status consists of quantitative and qualitative elements. The WFD environmental objectives are outlined in **Table 2-1**.

Table 2-1: WFD environmental objectives

Objectives (from Article 4 of WFD)	Reference and description
4.1(a)(i)	WFD1 - Member States shall implement the necessary measures to prevent deterioration of the status of all bodies of surface water.
4.1(a)(ii)	WFD2 - Member States shall protect, enhance and restore all bodies of surface water, subject to the application of subparagraph (iii) for artificial and heavily modified bodies of water, with the aim of achieving good surface water status by 2015.
4.1(a)(iii)	WFD3 - Member States shall protect and enhance all artificial and heavily modified bodies of water, with the aim of achieving good ecological potential (GEP) and good surface water chemical status by 2015.
4.1(a)(iv)	WFD4 - Progressively reduce pollution from priority substances and cease or phasing out emissions, discharges and losses of priority hazardous substances.
4.1(b)(i)	WFD5 - Prevent Deterioration in Status and prevent or limit input of pollutants to groundwater.

Source: Water Framework Directive 2000/60/EC¹

River Basin Management Plans (RBMPs) set out how organisations, stakeholders and communities will work together to improve the water environment. RBMPs report the baseline status of waterbodies within each River Basin District (RBD), corresponding to WFD reporting cycles. The first RBMPs were published in 2009 for RBMP Cycle 1 and were updated for RBMP Cycle 2 in 2015 and RBMP Cycle 3 in 2022. The project at Rhyl is within the Western Wales RBMP.

¹ Directive 2000/60/EC of the European Parliament and the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (2000), Accessed online: https://eur-lex.europa.eu/resource.html?uri=cellar:5c835afb-2ec6-4577-bdf8-756d3d694eeb.0004.02/DOC_1&format=PDF

Waterbodies can be classified as artificial (waterbodies created in a location where no waterbody existed before), or heavily modified (waterbodies where the natural conditions have been substantially altered for human benefit and have substantially changed in character).

Mitigation measures are identified to achieve 'Good Ecological Potential' for Artificial Waterbodies (AWB) or Heavily Modified Waterbodies (HMWB), in lieu of the ability to achieve 'Good Ecological status' seen in natural waterbodies. Mitigation measures are practicable steps that can be taken to reverse or offset adverse impacts from human activities such as impoundments for water resources, power generation or structures that provide flood defence.

2.2 Guidance

Guidance on undertaking a WFD assessment for a marine licence application is provided by NRW² which references UK guidance published by the UK government³.

2.3 Assessment methodology

This assessment follows the requirements set out in UK government guidance referred to above. A WFD assessment is a staged process:

- Screening
- Scoping
- Impact Assessment

The assessment can stop at any of these stages depending on the outcome of the assessment at each stage.

² [Natural Resources Wales / How to carry out a Water Framework Directive \(WFD\) assessment for a marine licence application](#)

³ [Water Framework Directive assessment: estuarine and coastal waters - GOV.UK \(www.gov.uk\)](#)

3 Stage 1: WFD screening assessment

Government guidance² states that “You do not need to carry out scoping if your activity is low risk. Your activity is low risk if it’s:

- a self-service marine licence activity or an accelerated marine licence activity that meets specific conditions;
- maintaining pumps at pumping stations – if you do it regularly, avoid low dissolved oxygen levels during maintenance and minimise silt movement when restarting the pumps;
- removing blockages or obstacles like litter or debris within 10m of an existing structure to maintain flow;
- replacing or removing existing pipes, cables or services crossing over a water body – but not including any new structure or supports, or new bed or bank reinforcement; or
- ‘over water’ replacement or repairs to, for example bridge, pier and jetty surfaces – if you minimise bank or bed disturbance.”

The proposed works at Rhyl for which this assessment is based involves the removal of an existing seawater supply pipeline only and therefore falls within the definition of a low risk activity. Consequently this activity is screened out of further assessment.

4 Conclusions

The works are considered a low risk activity in accordance with government guidance and consequently, no further WFD assessment is required.

