Neath Port Authority

Water Framework Directive Assessment

Port of Neath Entrance Channel Maintenance Dredging



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Acronyms

Term	Definition
Cefas	Centre for Environment, Fisheries and Aquaculture Science
E. coli	Escherichia coli
EPR	Environmental Permitting Regulations
EQSD	Environmental Quality Standards Directive
EU	European Union
GES	Good Ecological Status
HMWB	Heavily Modified Waterbody
INNS	Invasive Non-Native Species
NPA	Neath Port Authority
NRW	Natural Resources Wales
NVZ	Nitrate Vulnerable Zone
PPE	Personal Protective Equipment
RAMS	Risk Assessment and Method Statement
RBMP	River Basin Management Plan
SoS	Secretary of State
SSC	Suspended Sediment Concentration
TraC	Transitional and Coastal
UK	United Kingdom
UV	Ultraviolet
UWWTD	Urban Waste Water Treatment Directive
WFD	Water Framework Directive

1 Introduction

1.1 Project Introduction

1.1.1 The Neath Port Authority (NPA) is seeking a marine licence to undertake maintenance dredging and disposal activities within the navigation channel at the entrance to the River Neath, upon which the Port of Neath is located. The Proposed Works comprise the excavation of sediment from two parts of the existing entrance channel, referred to as the Inner Dredge Area and Outer Dredge Area. NPA is seeking a marine licence for a period of five years, subject to determination from Natural Resources Wales (NRW).

1.1.2 An overview plan detailing the location of the Proposed Dredging discharge in relation to adjacent Water Framework Directive (WFD) waterbodies is presented in Figure 4.1. Further information regarding the dredge volumes and the Proposed Works methodology can be found in the Method Statement (submitted as part of this marine licence application).

1.2 Environmental Control Measures

1.2.1 The Proposed Works will be undertaken in accordance with the marine licence alongside the Method Statement (submitted as part of this marine licence application) and the contractors Risk Assessment and Method Statement (RAMS).

1.2.2 The following mitigation measures and environmental best practice will be adhered to throughout the Proposed Works to minimise impacts to the marine environment.

- The works will be undertaken using land-based mechanical plant during suitable low-water windows;
- Restricting dredging, vehicle movements and placement to the authorised boundaries only.
- Using maintained plant and undertaking checks for leaks or defects before entering the intertidal area.
- Undertaking refuelling, fuel storage and routine maintenance away from the intertidal working area and watercourse.
- Providing spill-response equipment and stopping and containing any leak or spill.
- Avoiding unnecessary disturbance of sediment and habitats outside the authorised footprint.
- Implementing the measures contained in the Marine Invasive Non-Native Species (INNS) Biosecurity Risk Assessment and Management Plan (submitted to accompany the marine licence application); and
- Removing waste from the working areas and preventing uncontrolled discharges to the estuary.

2 Policy and Legislative Context

2.1 Water Framework Directive

2.1.1 The European Union (EU) WFD (2000/60/EC) (hereafter referred to as the Directive) was established in 2000 in order to provide a single framework for the protection of surface waterbodies (including rivers, lakes, coastal waterbodies and estuaries) and groundwater. Each waterbody has an assigned ecological status which is assigned by considering the biological, hydromorphological and chemical environment of the waterbody. The Directive is implemented across England and Wales through the Water Environment Regulations (2003). These Regulations were revoked in April 2017 by the Water Environment (Water Framework Directive (England and Wales) Regulations 2017. The different ecological statuses are:

- High;
- Good;
- Moderate;
- Poor; and
- Bad.

2.1.2 NRW is currently aiming to achieve 'good status' in as many waters as possible by 2027. 'Good status' comprises of two parts – the first is 'good ecological status' (GES) (or 'good ecological potential', for waterbodies classed as heavily modified or artificial), and the second is 'good chemical status'. 'GES/potential' includes biological, hydromorphological and physicochemical quality elements and specific pollutants, whereas 'good chemical status' concerns a series of priority substances (including priority hazardous substances). The Directive also requires that relevant protected area objectives are achieved (NRW, 2025).

2.1.3 The current WFD status, the pressures affecting the water environment, the objectives for protecting and improving it, and the programme of measures needed to achieve the statutory environmental objectives of the WFD for each waterbody were set out in the 2015 River Basin Management Plans (RBMPs). There are three RBMPs which cover watercourses and coastal waterbodies in and Wales. The Proposed Works are located within the Western Wales RBMP (NRW, 2022) which has been reviewed to inform this assessment. This assessment aims to ensure that the Proposed Works comply with the requirements under the WFD which seeks to ensure there is no deterioration in quality (as presented in the Western Wales RBMP) of the protected areas and waterbodies.

2.1.4 The RBMPs are reviewed and updated every six years in Wales. The most recent review of the RBMPs was published in 2022 (NRW, 2022) for the 2021-2027 period, which sets out the current state and pressures affecting the water environment, environmental objectives for protection and improvement of waters, as well as the measures and actions needed to achieve the objectives.

2.1.5 Monitoring of the aquatic environment in relation to physical, chemical, and biological parameters started in 2006 with a view to ensuring a 'good ecological status' of all surface waterbodies. Chemical and biological environmental quality indicators are used, and a programme of measures is implemented in order to improve surface waters that do not meet the required status.

2.1.6 The Directives' objective of 'good chemical status' is defined in terms of compliance with all the quality standards, within the waterbody, as established for chemical substances at a European level. The Directive also provides a process for renewing these standards and establishing new ones by means of a prioritisation mechanism for hazardous chemicals. This will ensure at least a minimum chemical quality, particularly in relation to very toxic substances.

2.1.7 The Directives' objective of GES also requires certain chemical conditions. The chemical requirements include the achievement of environmental quality objectives for discharged priority substances. It also identifies any other substances liable to cause pollution or being discharged in significant quantities.

2.1.8 The Environmental Quality Standards Directive (EQSD) list identifies priority substances and polluting chemical which should be considered in WFD assessments for estuarine and coastal waterbodies. The Directive and EQSD seek to reduce these substances entering into the marine environment, primarily from discharges and outfalls. Priority substances include, but are not limited to benzene, nickel, and lead.

2.2 Water Framework Directive Regulation

2.2.1 The United Kingdom (UK) left the European Union (EU) on 31 January 2020 and entered a period of transition that ended on 31 December 2020. The transition period is defined in the UK EU Withdrawal Act 2018 and the UK EU (Withdrawal Agreement) Act 2020 which transposed EU law into UK domestic law. References to Directives mean the Directive as applied in UK law by the Withdrawal Acts. Following Brexit, existing EU environmental legislation continues to operate under the policy of "roll-over", however, decisions made by the EU will no longer be binding for courts in the UK.

2.2.2 The Water Environment (Water Framework Directive) (England & Wales) Regulations 2017 revoke and replace the Water Environmental (Water Framework Directive) (England & Wales) Regulations 2003, which transposed the Water Framework Directive 2000/60/EC ("the WFD"). The Regulations provide a framework for managing the water environment in England and Wales. The Directive aims for "good status" of all ground and surface water (rivers, lakes, transitional water, and coastal waters).

2.3 Requirement to Consider the Water Framework Directive

2.3.1 In Wales, the Directive sits under the Environment (Wales) Act 2016 and the Well-being of Future Generations (Wales) Act 2015. Consideration of the Directive is required for any plan or project that may impact WFD waterbodies. The Secretary of State (SoS), Natural Resources Wales and other public bodies have a specific duty to have regard to the relevant RBMPs in exercising their functions, including the determinations of applications under the Environment (Wales) Act 2016.

2.3.2 This assessment has been prepared to provide information on the potential for the Project to cause deterioration within estuarine and coastal waterbodies (including the ecological and chemical status of a waterbodies) or the potential to compromise improvements which might otherwise lead to a waterbody meeting its Directive objectives.

2.4 Water Framework Directive Protected Areas

2.4.1 Under the WFD, member states are required to establish a register of protected areas. Protected areas for the purposes of WFD include:

- Bathing Waters;
- Shellfish Waters;
- Nutrient-sensitive areas, including areas identified as Nitrate Vulnerable Zones (NVZs) under the Nitrates Directive or areas designated as sensitive under Urban Wastewater Treatment Directive (UWWTD);
- Relevant National Site Network sites; and
- Drinking Water Protected Areas.

3 Assessment Methodology

3.1.1 Works within or close to a coastal or estuarine waterbodies must comply with the requirements of the WFD and a compliance assessment must be carried out demonstrating that the project will not lead to deterioration in waterbody status. Alongside this, all practicable steps should be taken to prevent any future deterioration of the status of waters as a result of the project.

3.1.2 This WFD assessment focuses on those elements of the Proposed Works relevant to the offshore and coastal areas required to be assessed against the objectives for each relevant WFD waterbody. The Welsh guidance from NRW has been used for the purposes of this assessment (Complying with the WFD Regulations 2017 (NRW, 2026a)).

3.1.3 A WFD assessment can comprise up to three stages, with the need to undertake latter stages dependent on the outcomes of the preceding stages. These three stages are:

- Screening – This stage identifies the receptors that could be impacted by the Proposed Works. Any activities that do not need further assessment can be screened out at this stage. Any activities with the potential for impact to the water environment will be screened in for further assessment;
- Scoping – The receptors that are potentially at risk from the Proposed Works are identified and carried forward for further detailed assessment in stage 3. If no receptors are identified, your WFD assessment is complete; and
- Impact Assessment – Considers the potential impacts (for example, extent and severity) of your activity on the receptors identified in Stage 2, and identify ways to avoid, minimise or mitigate these impacts. Conclude whether the activity may prevent the waterbody and any protected areas from achieving their objectives, or cause deterioration in waterbody status.

3.1.4 In instances where the potential for deterioration of waterbodies is identified in the impact assessment and mitigation is not possible to limit impacts to avoid deterioration, the Proposed Works would need to be assessed against the criteria set out in Article 4.7 of the WFD (Directive 2000/60/EC). These criteria include:

- All practicable steps are taken to mitigate the adverse impact on the status of the body of water;
- 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;
- The reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society 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
- 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.

3.2 Water Framework Directive Screening

3.2.1 To undertake a WFD risk screening, project proponents should identify whether the Proposed Works are within or could impact a waterbody with high overall status or high status for morphology/hydromorphology; if so, a detailed assessment is required and NRW should be consulted. Then it is determined whether the proposed activities are listed as low risk; if not, a Stage 2 scoping assessment is completed for each relevant waterbody.

3.2.2 According to the 'Complying with the WFD Regulations 2017 Guidance (NRW, 2026a) projects can be screened out that are deemed to a low-risk activity. Low-risk activities include:

- In relation to discharges to water, any Environmental Permitting Regulations (EPR) registered exemption or standard rules permit;
- Main river activities that are exempt or excluded from NRW Flood Risk Activity Permits[1];
- Marine licensing Band 1 activities[2].

3.3 Water Framework Directive Scoping

3.3.1 The scoping stage identifies the receptors that are potentially at risk from the activities of the Proposed Works and, therefore, may need to be subject to an impact assessment. At the scoping stage, it is necessary to identify all potential risks to each receptor associated with the Proposed Works. NRW (2026a) guidance defines the receptors as:

- Hydromorphology;
- Biology: Habitats;
- Biology: Fish;
- Water Quality; and
- Protected Areas.

3.3.2 In addition INNS must be considered during the scoping stage.

3.4 Water Framework Directive Impact Assessment

3.4.1 Following the scoping stage, if it is determined that the impact assessment stage is required, (such as when a receptor cannot be scoped out), NRW (2026a) guidance sets out that an impact assessment should be undertaken for each receptor identified as being at risk from the activity. The impact assessment should consider what (if any) pressures the activity may create on the marine environment and specifically the receptors identified. The key aim of the impact assessment is to determine whether there is potential for deterioration in the status of the waterbody.

[1] https://naturalresources.wales/permits-and-permissions/flood-risk-activity-permits/environmental-permits-for-flood-risk-activities/?lang=en

[2] https://naturalresources.wales/permits-and-permissions/marine-licensing/marine-licensing-band-1-low-risk-activities/?lang=en

4 Relevant Waterbodies

4.1 Identification of Waterbodies

4.1.1 As required under the NRW (2026a) guidance, coastal and estuarine waterbodies are identified based on whether the Proposed Works may have an impact on the immediate as well as any linked waterbodies.

4.1.2 The Proposed Works has the potential to directly impact the following waterbody:

- Swansea Bay Coastal Waterbody; and
- Neath Estuary Transitional Waterbody.

4.1.3 Figure 6.1Figure 4.1 presents the location of the waterbodies in relation to the location of the Proposed Works.

4.2 Swansea Bay Coastal Waterbody

4.2.1 A summary of the Swansea Bay Coastal Waterbody is provided in Table 4.1, which is the coastal waterbody the Proposed Works will directly impact.

Table 4.1 - Summary of the Swansea Bay Coastal Waterbody (Water Watch Wales, 2024).

Swansea Bay Coastal Waterbody	
Waterbody ID	GB641008260000
River basin district name	Western Wales
Management Catchment	Tawe to Cadoxton Transitional and Coastal (TraC)
Waterbody type	Coastal
Heavily Modified	Yes
Overall Status or Potential	Moderate
Ecological Status or Potential	Moderate
Chemical Status	Moderate
Invertebrate Status or Potential	Good
Hydromorphological Conditions	Not assessed
Dissolved Oxygen	High
Dissolved Inorganic Nitrogen	Moderate
Specific Pollutants Conditions	High
Identified as 'at risk'?	Unknown

4.3 Neath Estuary Transitional Waterbody

4.3.1 A summary of the Neath Estuary Transitional Waterbody is provided in Table 4.2, which is the transitional waterbody the Proposed Works will directly impact.

Table 4.2 - Summary of the Neath Estuary Transitional Waterbody (Water Watch Wales, 2024).

Neath Estuary Transitional Waterbody	
Waterbody ID	GB541005800700
River basin district name	Western Wales
Management Catchment	Tawe to Cadoxton TraC
Waterbody type	Transitional
Heavily Modified	Yes
Overall Status or Potential	Moderate
Ecological Status or Potential	Moderate
Chemical Status	High
Invertebrate Status or Potential	High
Hydromorphological Conditions	Not High
Dissolved Oxygen	High
Dissolved Inorganic Nitrogen	Good
Specific Pollutants Conditions	High
Identified as 'at risk'?	Unknown

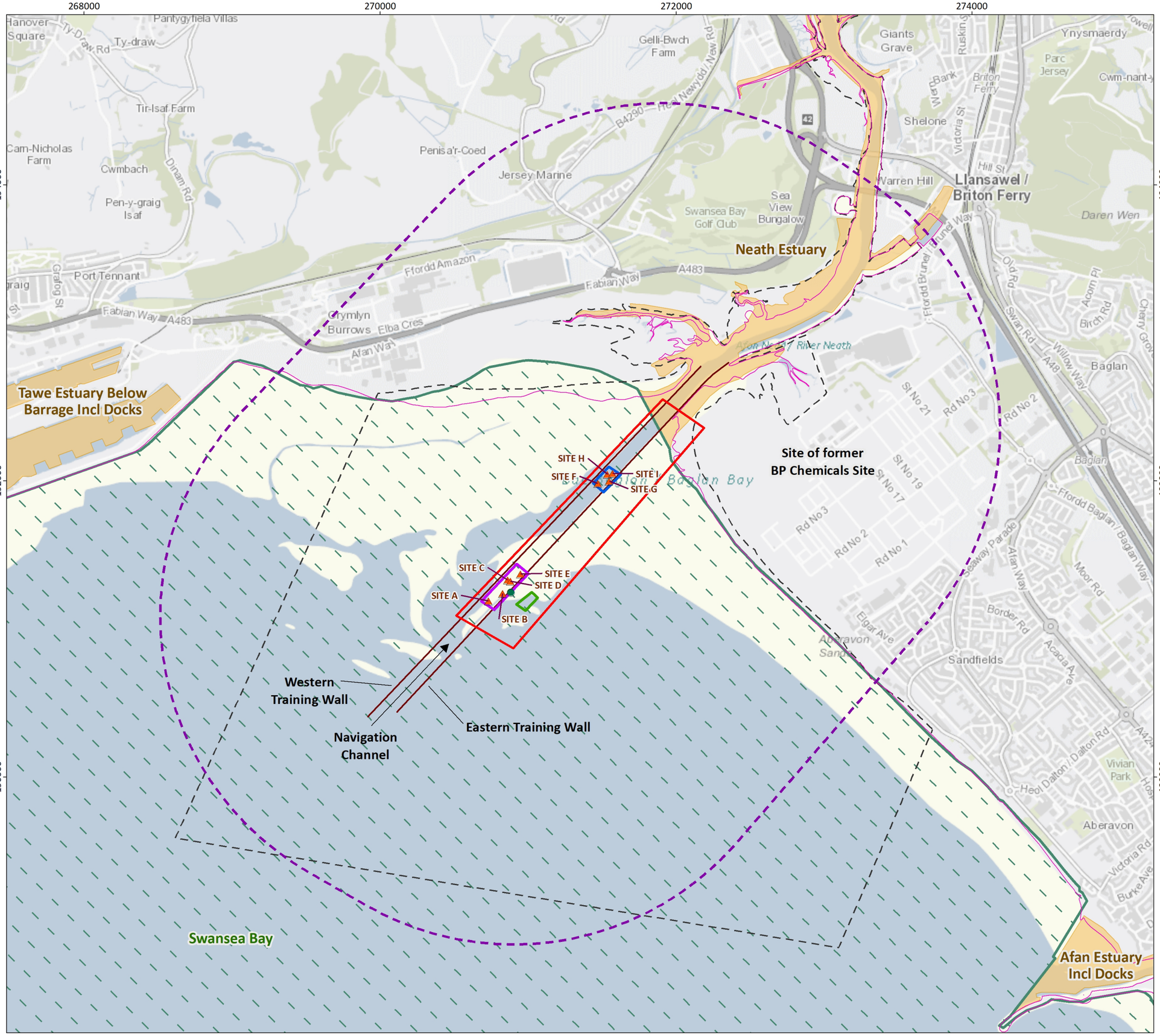


Figure Reference: P21513_PoN_Fig4.1_CoastalTransitionalWaterbodies_v2

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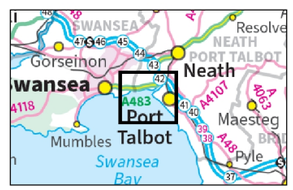
Port of Neath

WFD Assessment

WFD Coastal and Transitional Waterbodies in the vicinity of the Proposed Works

Legend

- Proposed Marine Licence Area
- 2km Buffer from Proposed Marine Licence Area
- Sample Locations
- The Inner Dredge Area
- The Outer Dredge Area
- The Outer Low Water Disposal Area
- Port of Neath Harbour Limit
- Training Walls
- Monkstone Beacon
- Mean High Water Springs
- Transitional Waterbodies
- Coastal Waterbodies



Notes

Contains OS data © Crown Copyright and database right 2020
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Coordinate System: British National Grid

0 0.5 1 km

N

Scale	Date	Drawn by	Checked by	Approved by
1:25,000 @A3	13/10/2026	BPHB	GB	MB

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Figure 4.1

5 Water Framework Directive Screening

5.1.1 The activities associated with the Proposed Works were screened against the criteria identified under the NRW guidance (NRW 2026a).

5.1.2 The activities considered for the assessment include:

- Excavation of dredged material within the Inner and Outer Dredge Areas;
- Transport of dredged material along the defined access and haul routes;
- Disposal of dredged material within the Outer Low Water Disposal Area; and

5.2 Screening for the Swansea Bay Coastal Waterbody

5.2.1 The risk screening for the Swansea Bay Coastal Waterbody is presented in Table 5.1

Table 5.1 Risk screening questions for the Swansea Bay Coastal Waterbody

Waterbody name: Swansea Bay Coastal Waterbody Waterbody ID: GB641008260000		
Question number	**Risk screening questions**	**Screening decision**
Q1.1	Is the proposal in a waterbody at high status or high status for morphology or hydromorphology?	**No** The overall waterbody status is not high and the hydromorphology status of the Swansea Bay Coastal Waterbody has not been classified.
Q1.2	Is the proposed activity listed a low risk activity? Complete new row for each activity	**No** The Proposed Works activities are not listed within the NRW guidance as "low risk activity". A WFD Scoping Assessment is therefore required for this waterbody and can be found in Section 6.2

5.3 Screening for the Neath Estuary Transitional Waterbody

5.3.1 The risk screening for the Neath Estuary Transitional Waterbody is presented in Table 5.2

Table 5.2 Risk screening questions for the Neath Estuary Transitional Waterbody

Waterbody name: Neath Estuary Transitional Waterbody Waterbody ID: GB541005800700		
Question number	**Risk screening questions**	**Screening decision**
Q1.1	Is the proposal in a waterbody at high status or high status for morphology or hydromorphology?	**No** The overall waterbody status is not high and the hydromorphology status of the Neath Estuary Transitional Waterbody has not been classified.

Waterbody name: Neath Estuary Transitional Waterbody Waterbody ID: GB541005800700		
Question number	**Risk screening questions**	**Screening decision**
Q1.2	Is the proposed activity listed a low risk activity? Complete new row for each activity	No The Proposed Works activities are not listed within the NRW guidance as "low risk activity". A WFD Scoping Assessment is therefore required for this waterbody and can be found in Section 6.3

6 Water Framework Scoping

6.1.1 The scoping template for the Proposed Works are provided in the following sections for the Swansea Bay Coastal Waterbody and Neath Estuary Transitional Waterbody separately.

6.1.2 As indicated in the Scoping template, WFD receptors proposed to be Scoped out will not be assessed further in this report whilst those Scoped In will progress to the Impact Assessment.

6.1.3 The scoping template assesses the relevant potential risks associated with the Proposed Works to each receptor. The structure of the template and guidance from NRW (2026a) is presented in Table 6.1 below.

Table 6.1 Water Framework Directive Scoping Table Template Structure

Elements	Applicable	Potential Impact (include direct and indirect potential impacts)	Scoping Decision
Transitional and Coastal waterbodies	Choose one of the following: ▪ Direct – risk of direct impact ▪ Indirect – risk of indirect impact ▪ N/A – no impact pathway ▪ N/A – other – include additional text to explain	Further detail on potential impacts. Where N/A is included then provide detail to explain.	Briefly describe any measure included within the proposal at this point that will ensure the potential effects are avoided. Where impacts can be avoided through measures already included in the scheme then add Scoped Out. Or where further assessment is required add Scoped In.

6.2 Swansea Bay Coastal Waterbody Scoping

Hydromorphology

6.2.1 Hydromorphological risk from the Proposed Works upon the Swansea Bay Coastal Waterbody are presented in Table 6.2

Table 6.2 Hydromorphology Risks from the Proposed Works

Scoping table for Transitional and Coastal waterbodies Waterbody name: Swansea Bay Coastal Waterbody Waterbody ID: GB641008260000			
Hydromorphology – hydromorphology constitutes both 'hydrology' and 'geomorphology' and describes the physical characteristics and processes of a waterbody. ***Could the proposal lead to changes in:***			
Morphological conditions, for example depth variation, the seabed and intertidal zone structure tidal patterns, for example, dominant currents freshwater flow wave exposure.	Indirect	Excavation of dredged material within the Inner and Outer Dredge Areas. Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped In** The excavation of dredged material within the inner and Outer Dredge Areas and disposal within the Outer Low Water Disposal Area may result in minor changes to morphological conditions of the Swansea Bay Coastal Waterbody.
Is the proposal in a Heavily Modified Waterbody (HMWB)?	Direct	Excavation of dredged material within the Inner and Outer Dredge Areas; Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped In** The Proposed Works are within a HMWB and will require further assessment.

6.2.2 Risks to water quality from the Proposed Works upon the Swansea Bay Coastal Waterbody are presented in Table 6.3

Table 6.3 Risks to Water Quality from the Proposed Works

Water quality An activity can modify the flow of water, introduce artificial materials or remove sediment and/or vegetation. These can all affect the water quality – particularly physico-chemical aspects of water quality - such as levels of dissolved oxygen, nutrients and ammonia. Include water quality in the detailed assessment if the activity could affect:			
▪ Water clarity (turbidity or suspended particulate matter concentration) ▪ Thermal conditions (including shading) ▪ Oxygen levels – dissolved oxygen conditions ▪ Nutrients - dissolved inorganic nitrogen ▪ Microbial patterns ▪ Salinity/conductivity ▪ Is in a waterbody with a phytoplankton or opportunistic macroalgae status of moderate, poor or bad ▪ Is in a waterbody with a history of harmful algae (where there is an existing designation for the area, information should be available; however, local water quality officers will be able to help).	N/A – no impact pathway	Excavation of dredged material within the Inner and Outer Dredge Areas; Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	Scoped Out The Proposed Works will be undertaken during suitable low water working windows utilising land based mechanical plant rather than undertaking vessel based dredging as highlighted in Section 1.2. As such there is not expected to be any measurable impacts to water quality as a result of the Proposed Works with temporary minor increases to Suspended Sediment Concentration (SSC) upon the interaction of high tide with disposed dredged material in the Outer Low Water Area. The Swansea Bay Coastal Waterbody does not have a history of harmful algae. The current phytoplankton status is high and macroalgae is not currently assessed.
▪ Release or use of chemicals which are on the EQSD list ▪ activity disturbs sediment with contaminants (for estuarine and coastal above Centre for Environment, Fisheries and Aquaculture Science (Cefas) Action Level 1) ▪ or, if the activity releases chemicals on the EQSD list and has a mixing zone, like a discharge pipeline or outfall, follow the Environment Agency's surface water pollution risk assessment guidance. This is part of the Environmental Permitting Regulations guidance.	Direct/ N/A – no impact pathway	Excavation of dredged material within the Inner and Outer Dredge Areas; Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	Scoped Out The Proposed Works activities do not include a mixing zone such as a discharge pipeline or outfall or the direct discharge of any chemicals listed under the EQSD list during any stage of the activities. The embedded environmental control measures included within Section 1.2 will mitigate against any potential accidental spills. The composition and grain size identified within the Proposed Marine Licence Area is predominantly sand with limited proportions of fine sediments.(<63µm) Across the analysis undertaken

Water quality An activity can modify the flow of water, introduce artificial materials or remove sediment and/or vegetation. These can all affect the water quality – particularly physico-chemical aspects of water quality - such as levels of dissolved oxygen, nutrients and ammonia. Include water quality in the detailed assessment if the activity could affect:			
			for the nine sites included within NRW Sampling Plan no exceedance of the Cefas Action Level 1 values for metals, organotins or PAHs were identified. The full NRW Sediment Sampling and Analysis of Results can be found in NRW (2026b) and SOCOTEC (2026). Potential for disturbance of contaminated sediments has therefore not been considered further within the Swansea Bay Coastal Waterbody based on the baseline characterisation.

6.2.3 The NRW (2026a) guidelines define certain habitats as higher or lower sensitivity resulting in different considerations based on the classification. The relevant habitat designations are presented within Table 6.4.

6.2.4 Risks to biological receptors from the Proposed Works upon the Swansea Bay Coastal Waterbody are presented in Table 6.5.

Table 6.4 Categorisation of Higher and Lower Sensitivity Biological Habitats for WFD Assessments

Higher sensitivity habitats[3]	Lower sensitivity habitats[4]
Chalk reef	Cobbles, gravel and shingle
Clam, cockle and oyster beds	Intertidal soft sediments like sand and mud
Intertidal seagrass	Rocky shore
Maerl	Subtidal boulder fields
Mussel beds, including blue and horse mussel	Subtidal rocky reef
Polychaete reef	Subtidal soft sediments like sand and mud
Saltmarsh	
Subtidal kelp beds	
Subtidal seagrass	

[3] Higher sensitivity habitats have a low resistance to, and recovery rate, from human pressures.
[4] Lower sensitivity habitats have a medium to high resistance to, and recovery rate from, human pressures.

Table 6.5 Risks to biology from the Proposed Works within the Swansea Bay Coastal Waterbody

Biology Identify if the activity or project could impact on the abundance or composition of the biological elements listed below: Biological elements for transitional (T) and coastal (C) waters under the directive are: Benthic invertebrates (T, C) Fish (T) Phytoplankton (T, C) Macroalgae (T, C) Angiosperms (T, C) Could the proposal lead to:			
▪ Changes to the composition and abundance of aquatic flora ▪ Changes to the composition and abundance of benthic invertebrate fauna	Direct	Excavation of dredged material within the Inner and Outer Dredge Areas; Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped In** Any benthic receptors within the Inner and Outer Dredge areas will be disturbed by the Proposed Works during the excavation of dredged material.
For TraC waterbodies - scope in if the footprint (where footprint can be direct or a plume i.e. chemical or thermal; for dredging multiply the area by 1.5x) of your activity is:			
▪ 0.5km^2 or larger ▪ 1% or more of the waterbody's area ▪ Within 500m of any higher sensitivity habitat (Table 6.4) ▪ 1% or more of any lower sensitivity habitat (see table below)	N/A – no impact pathway	Excavation of dredged material within the Inner and Outer Dredge Areas. Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped Out** As identified within the method statement the footprint of activity for dredging work total 49,889m^2 whilst the Outer Low Water Disposal Area has a total footprint of 7,863m^2. When combined this totals 57,752m^2. When including a 1.5 times multiplier for dredging as described in the NRW (2026a) guidelines the affected seabed footprint is calculated as 86,628m^2 which equates to 0.087km^2. This is below the 0.5km^2 threshold

Biology Identify if the activity or project could impact on the abundance or composition of the biological elements listed below: Biological elements for transitional (T) and coastal (C) waters under the directive are: Benthic invertebrates (T, C) Fish (T) Phytoplankton (T, C) Macroalgae (T, C) Angiosperms (T, C) Could the proposal lead to:			
			The Swansea Bay Coastal Waterbody has a surface area of 110km^2. The 0.087km^{2}footprint of the proposed activities equates to 0.08% and is therefore lower than the 1% of the waterbody threshold. None of the habitats identified within Table 6.3 were identified within the area of the Proposed Works on Data Map Wales listed as Section 7 habitats and species.
Fish fauna (Transitional waterbodies only): could the proposal lead to:			
▪ Changes to the composition, abundance and age structure of fish fauna ▪ An impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow) ▪ Entrainment or impingement of fish ▪ Refuge/predation areas ▪ Or: is the proposal in an estuary and could affect fish in the estuary; is outside the estuary but could delay or prevent fish entering it; or, could affect fish migrating through the estuary	N/A – no impact pathway	Excavation of dredged material within the Inner and Outer Dredge Areas; Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped Out** The activity is not located within a transitional waterbody and is not likely to delay or prevent fish from entering or migrating through the Swansea Bay Coastal Waterbody and does not include the generation of significant noise or suspended sediments that could cause a barrier to fish movements. The Proposed Works does not include any potential for entrainment or impingement of fish as all Proposed Works will occur at low tide.

Does your proposal have the potential to introduce or spread INNS?

6.2.5 No – Implementing the measures contained in the Marine INNS Biosecurity Risk Assessment and Management Plan (submitted to accompany the marine licence application) will negate the transfer of INNS between sites. The following risk management measures will be adhered to in order to prevent this:

- Dredged material will only be removed from the defined Inner and Outer Dredge Areas and transported directly to the consented Outer Low Water Disposal Area using the agreed access routes;
- Vehicles and equipment, including dump trucks and land-based excavators, will be clean and dry prior to deployment and will be cleaned and dried following completion of the works;
- Operators will visually check dredged material, excavator buckets, dump truck beds and working areas for obvious attached organisms, shell material or unusual biological material during the works;
- Dredged material will be transported and deposited in a controlled manner which minimises spillage. Any material spilled outside the defined access route or disposal footprint will be contained or recovered where practicable and safe; and
- Operatives will visually inspect Personal Protective Equipment (PPE) for retained sediment, shell material, attached organisms or unusual biological material before leaving the working area. Any visible material will be removed where safe and practicable before moving to another location.

6.2.6 Following the implementation of these measures the risk level is determined to be low. Further information on INNS can be found with the Marine INNS Biosecurity Plan.

WFD Protected Areas

6.2.7 You must ensure that your proposal will not prevent any Protected Area/s from achieving their objectives. Include WFD protected areas in your assessment if your activity is within the zone of influence.

6.2.8 **Yes** - The 2 km buffer for the proposed activity contains or overlaps with:

- The Swansea Bay (East) UWWTD Sensitive Shellfish Water.

6.2.9 There are no relevant offshore National Site Network sites, Bathing Waters, nitrate vulnerable zones, drinking water protected areas or additional UWWTD sensitive area located within the 2 km buffer of the Proposed Works.

6.2.10 The Swansea Bay (East) UWWTD Sensitive Shellfish Water will be taken forward to the impact assessment stage due to its proximity to the Proposed Works.

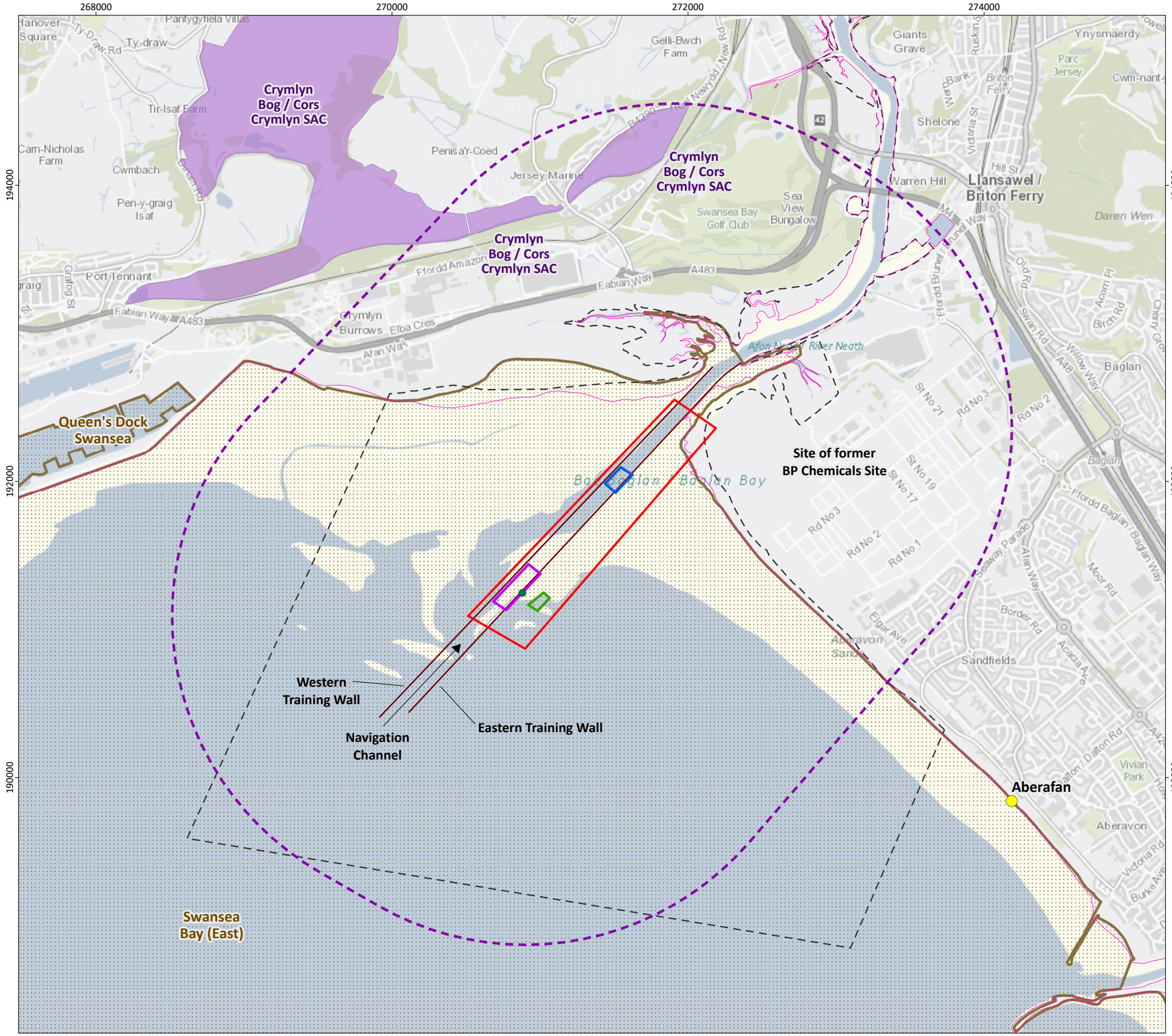


Figure Reference: P21513_PoN_Fig2_WFD_ProtectedAreas_v2

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Neath Port Authority

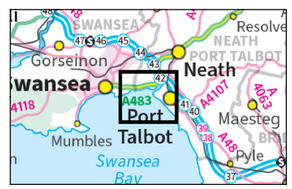
Port of Neath

WFD Assessment

WFD Protected Areas in Relation to the Proposed Works

Legend

- Proposed Marine Licence Area
- 2km Buffer from Proposed Marine Licence Area
- The Inner Dredge Area
- The Outer Dredge Area
- The Outer Low Water Disposal Area
- Port of Neath Harbour Limit
- Training Walls
- Monkstone Beacon
- Mean High Water Springs
- Bathing Water Location
- Shellfish Water Protected Areas
- Special Areas of Conservation (SAC)



Notes

Contains OS data © Crown Copyright and database right 2020
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Coordinate System: British National Grid

0 0.5 1 km

N

Scale	Date	Drawn by	Checked by	Approved by
1:25,000 @A3	04/09/2026	BPHB	GB	MB

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Figure 6.1

6.3 Neath Estuary Transitional Waterbody Scoping

6.3.1 Risks to hydromorphology from the Proposed Works upon the Neath Estuary Transitional Waterbody are presented in Table 6.6.

Table 6.6 Hydromorphology Risks from the Proposed Works within the Neath Estuary Transitional Waterbody.

Scoping table for Transitional and Coastal waterbodies Waterbody name: Neath Estuary Transitional Waterbody Waterbody ID: GB541005800700			
Hydromorphology – hydromorphology constitutes both 'hydrology' and 'geomorphology' and describes the physical characteristics and processes of a waterbody. ***Could the proposal lead to changes in:***			
Morphological conditions, for example depth variation, the seabed and intertidal zone structure tidal patterns, for example, dominant currents freshwater flow wave exposure	Indirect	Excavation of dredged material within the Inner and Outer Dredge Areas; Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped In** The excavation of dredged material within the Inner and Outer Dredge Areas and disposal within the Outer Low Water Disposal Area will occur outside the boundary of the Neath Estuary Transitional Waterbody. Any changes to morphological conditions such as depth or tidal patterns from the Proposed Works will predominantly occur within the Swansea Bay Coastal Waterbody. The Neath Estuary Transitional Waterbody is within the same wider sediment transport system as the Proposed Works and therefore may be indirectly impacted by these impacts.
Is the proposal in a HMWB?	Indirect	Excavation of dredged material within the Inner and Outer Dredge Areas; Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped In** The Proposed Works may impact the Neath Estuary Transitional Waterbody which is designated as a HMWB and will require further assessment.

6.3.1 Risks to water quality from the Proposed Works upon the Neath Estuary Transitional Waterbody are presented in Table 6.7.

Table 6.7 Risks to Water Quality from the Proposed Works within the Neath Estuary Transitional Waterbody

Water quality An activity can modify the flow of water, introduce artificial materials or remove sediment and/or vegetation. These can all affect the water quality – particularly physico-chemical aspects of water quality - such as levels of dissolved oxygen, nutrients and ammonia. Include water quality in the detailed assessment if the activity could affect:			
Elements	Applicable to:	Potential Impact (include direct and indirect potential impacts)	Avoidance measures included in the proposal
▪ Water clarity (turbidity or suspended particulate matter concentration) ▪ Thermal conditions (including shading) ▪ Oxygen levels – dissolved oxygen conditions ▪ Nutrients - dissolved inorganic nitrogen ▪ Microbial patterns ▪ Salinity/conductivity ▪ Is in a waterbody with a phytoplankton or opportunistic macroalgae status of moderate, poor or bad ▪ Is in a waterbody with a history of harmful algae (where there is an existing designation for the area, information should be available; however, local water quality officers will be able to help).	N/A – no impact pathway	Excavation of dredged material within the Inner and Outer Dredge Areas; Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped Out** The Proposed Works will be undertaken during suitable low water working windows utilising land based mechanical plant rather than undertaking vessel-based dredging as highlighted in Section 1.2. As such there is not expected to be any measurable impacts to water quality as a result of the Proposed Works. Critically no dredging or disposal will occur within the Neath Estuary Transitional Waterbody with the only direct impact restricted to temporary plant mobilisation. The Neath Estuary Transitional Waterbody does not have a history of harmful algae. The current macroalgae status is high and phytoplankton is not assessed.
▪ Chemicals are on the EQSD list ▪ activity disturbs sediment with contaminants (for estuarine and coastal above Cefas Action Level 1) ▪ or, if the activity releases chemicals on the EQSD list and has a mixing zone, like a discharge	Direct/ N/A – no impact pathway	Excavation of dredged material within the Inner and Outer Dredge Areas.	**Scoped Out** The Proposed Works do not include a mixing zone such as a discharge pipeline or outfall or the direct discharge of any chemicals listed under the EQSD list during any stage of the activities. The embedded environmental control measures

Water quality An activity can modify the flow of water, introduce artificial materials or remove sediment and/or vegetation. These can all affect the water quality – particularly physico-chemical aspects of water quality - such as levels of dissolved oxygen, nutrients and ammonia. Include water quality in the detailed assessment if the activity could affect:			
pipeline or outfall, follow the Environment Agency's surface water pollution risk assessment guidance. This is part of the Environmental Permitting Regulations guidance.			included within Section 1.2 will mitigate against any potential accidental spills. The composition and grain size identified within the Proposed Marine Licence Area is predominantly sand with limited proportions of fine sediments.(<63µm). All dredge activities will occur downstream of the Neath Estuary Transitional Waterbody with no sediment disturbance occurring within the waterbody with Site F – Site I (Figure 4.1) in closest proximity to the Neath Estuary Transitional Waterbody. Across the analysis undertaken for these four sites included within NRW Sampling Plan no exceedance of the Cefas Action Level 1 values for metals, organotins or PAHs were identified. The full NRW Sediment Sampling and Analysis of Results can be found in NRW (2026b) and SOCOTEC (2026). Potential for disturbance of contaminated sediments has therefore not been considered further within the Neath Estuary Transitional Waterbody based on the baseline characterisation.

6.3.2 The NRW (2026a) guidelines define certain habitats as higher or lower sensitivity resulting in different considerations based on the classification. The relevant habitat designations are presented within Table 6.4.

6.3.3 Risks to biological receptors from the Proposed Works upon the Neath Estuary Transitional Waterbody are presented in Table 6.8.

Table 6.8 Risks to biology from the Proposed Works within the Neath Estuary Transitional Waterbody

Biology Identify if the activity or project could impact on the abundance or composition of the biological elements listed below: Biological elements for transitional (T) and coastal (C) waters under the directive are: Benthic invertebrates (T, C) Fish (T) Phytoplankton (T, C) Macroalgae (T, C) Angiosperms (T, C) Could the proposal lead to:			
▪ Changes to the composition and abundance of aquatic flora ▪ Changes to the composition and abundance of benthic invertebrate fauna	Indirect	Excavation of dredged material within the Inner and Outer Dredge Areas; Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped In** No dredging or disposal will occur within the Neath Estuary Transitional Waterbody with the only direct impact restricted to temporary plant mobilisation within the waterbody. Aquatic fauna are not expected to be affected due to the dynamic nature of the intertidal region with any aquatic fauna likely found in regions with larger or permanent water depth.
For TraC waterbodies - scope in if the footprint (where footprint can be direct or a plume i.e. chemical or thermal; for dredging multiply the area by 1.5x) of your activity is:			
▪ 0.5km^2 or larger ▪ 1% or more of the waterbody's area ▪ Within 500m of any higher sensitivity habitat (Table 6.4) ▪ 1% or more of any lower sensitivity habitat (see table below)	N/A – no impact pathway	Excavation of dredged material within the Inner and Outer Dredge Areas. Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped Out** There is no direct footprint located within the Neath Estuary Transitional Waterbody with all excavation and disposal activities occurring no plume expected as a result of the Proposed Works. As identified within the method statement the footprint of activity for dredging work total 49,889m^2 whilst the Outer Low Water Disposal Area has a total footprint of 7,863m^2. When combined this totals 57,752m^2. When including a 1.5 times multiplier for dredging as described in the NRW (2026a) guidelines the affected seabed footprint is

Biology Identify if the activity or project could impact on the abundance or composition of the biological elements listed below: Biological elements for transitional (T) and coastal (C) waters under the directive are: Benthic invertebrates (T, C) Fish (T) Phytoplankton (T, C) Macroalgae (T, C) Angiosperms (T, C) Could the proposal lead to:			
			calculated as 86,628m^2 which equates to 0.087km^2 This is below the 0.5km^2 threshold noting the entire footprint of Proposed Works will be outside the Neath Estuary Transitional Waterbody. None of the habitats identified within Table 6.4 were identified within the area of the Proposed Works on Data Map Wales listed as Section 7 habitats and species.
Fish fauna (Transitional waterbodies only): could the proposal lead to:			
▪ Changes to the composition, abundance and age structure of fish fauna ▪ An impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow) ▪ Entrainment or impingement of fish ▪ Refuge/predation areas ▪ Or: is the proposal in an estuary and could affect fish in the estuary; is outside the estuary but could delay or prevent fish entering it; or, could affect fish migrating through the estuary	N/A – no impact pathway	Excavation of dredged material within the Inner and Outer Dredge Areas; Transport of dredged material along the defined access and haul routes; Disposal of dredged material within the Outer Low Water Disposal Area.	**Scoped Out** The proposed activities are not located within the Neath Estuary Transitional Waterbody itself and are not likely to delay or prevent fish from entering or migrating into the Neath Estuary Transitional Waterbody and does not include the generation of significant noise or suspended sediments that could cause a barrier to fish movements. The Proposed Works does not include any potential for entrainment or impingement of fish as all Proposed Works will occur at low tide.

Does your proposal have the potential to introduce or spread INNS?

6.3.4 No – Implementing the measures contained in the Marine INNS Biosecurity Risk Assessment and Management Plan (submitted to accompany the marine licence application) will negate the transfer of INNS between sites. The following risk management measures will be adhered to in order to prevent this:

- Dredged material will only be removed from the defined Inner and Outer Dredge Areas and transported directly to the consented Outer Low Water Disposal Area using the agreed access routes;
- Vehicles and equipment, including dump trucks and land-based excavators, will be clean and dry prior to deployment and will be cleaned and dried following completion of the works;
- Operators will visually check dredged material, excavator buckets, dump truck beds and working areas for obvious attached organisms, shell material or unusual biological material during the works;
- Dredged material will be transported and deposited in a controlled manner which minimises spillage. Any material spilled outside the defined access route or disposal footprint will be contained or recovered where practicable and safe; and
- Operatives will visually inspect PPE for retained sediment, shell material, attached organisms or unusual biological material before leaving the working area. Any visible material will be removed where safe and practicable before moving to another location.

6.3.5 Following the implementation of these measures the risk level is determined to be low. Further information on INNS can be found with the Marine INNS Biosecurity Plan.

WFD Protected Areas

6.3.6 You must ensure that your proposal will not prevent any Protected Area/s from achieving their objectives. Include WFD protected areas in your assessment if your activity is within the zone of influence.

6.3.7 **Yes** - The 2 km buffer for the proposed activity contains or overlaps with:

- The Swansea Bay (East) UWWTD Sensitive Shellfish Water.

6.3.8 There are no relevant National Site Network sites, Bathing Waters, nitrate vulnerable zones, drinking water protected areas or additional UWWTD sensitive area located within the 2 km buffer of the Proposed Works.

6.3.9 The Swansea Bay (East) UWWTD Sensitive Shellfish Water will be taken forward to the impact assessment stage due to its proximity to the Proposed Works.

Stage 2, Step 1: Scoping of the proposal 'alone'

6.3.10 Q2.1 Is there a risk that a component of the proposal may cause deterioration of any element that makes up waterbody status?

6.3.11 Yes – Impacts to both Swansea Bay Coastal Waterbody and Neath Estuary Transitional Waterbody were identified throughout the scoping process. Impacts to hydromorphology and biology were identified and are therefore scoped in for further assessment.

Stage 2, Step 2: Summary of scoping decision of the project 'alone'

6.3.12 Q2.2 Is there a risk that a component of the proposal may prevent the waterbody or Protected Area from achieving its objectives in the future?

6.3.13 Yes – The Proposed Works are located within the Swansea Bay (East) UWWTD Sensitive Shellfish Water and this waterbody is therefore scoped in for further assessment

Stage 2, Step 3: Assessing potential in combination and/or cumulative impacts

6.3.14 Q2.3 Can the risk of deterioration or prevention of achieving waterbody objectives from in combination and or cumulative effects be ruled out?

6.3.15 Yes - The proposed maintenance dredging activity is spatially limited, temporary in duration, and would not result in a permanent alteration of the waterbody or generation of major sediment plumes due to the proposed land based methodology.

6.3.16 A review of existing plans, projects and activities within the water body has not identified any projects that would act on the same waterbodies in a manner that could combine with the Proposed Works to cause deterioration in status or prevent the achievement of water body objectives.

6.3.17 Avoidance measures included in the Proposed Works are presented in Section 1.2.

7 Water Framework Directive Impact Assessment

7.1 Hydromorphology

7.1.1 As identified in Table 6.2 and Table 6.6 the Proposed Works may result in impacts to the hydromorphology of both the Swansea Bay Coastal Waterbody and Neath Estuary Transitional Waterbody. Potential pathways of effects to the morphological condition coupled with both waterbodies being designated as Heavily Modified Waterbodies resulted in both waterbodies being scoped in for further assessment.

7.1.2 As per the method statement (submitted to accompany the marine licence application) the maximum removal depth within both the Inner Dredge Area and Outer Dredge Area is limited to 1.5m. Excavation and disposal works will only occur directly within the Swansea Bay Coastal Waterbody however as a hydrologically linked waterbody the Neath Estuary Transitional Waterbody may be impacted by the excavation works.

7.1.3 The intertidal area within Swansea Bay is highly dynamic due to its large tidal range and strong currents, which supports active sediment transport processes. The removal of sediment from the Inner Dredge Area and Outer Dredge Area within the navigation channel will slightly alter the morphology in order to provide navigable access to the Port of Neath. Slight increases to current speed may occur due to the removal of accumulated sediment since the most recent dredging event in 2018 however this is not anticipated to alter the existing status of the qualifying elements of the Swansea Bay Coastal Waterbody or Neath Estuary Transitional Waterbodies.

7.1.4 The maintenance dredging will be undertaken within an existing highly modified navigation system which is considered to be part of the established hydromorphological regime as opposed to introducing additional hydromorphological pressures into the environment. The Proposed Works constitute maintenance dredging and do not include capital deepening or widening of the navigation channel, alteration of the existing training walls or placement of material arising from outside the authorised dredging areas.

7.1.5 The disposal of dredged material within the Outer Low Water Disposal Area will occur on a gradual basis throughout the duration of the Proposed Works due to the land-based methodology. The disposal area will likely experience re-distribution of the placed sediments over the next few tidal cycles. Swansea Bay experiences a very large tidal range and strong tidal currents, which tend to rapidly disperse deposited sediments. Modelling evidence from Cefas (2020) for the Swansea Bay (Outer) disposal site suggests that the majority of disposed material is likely to settle to the seabed relatively quickly and then continue to travel further offshore in a Southerly direction. The results indicate that this transport occurs in an elliptical fashion. The modelling relates to offshore disposal where material is released directly into the water column, however the Proposed Works would involve gradual, land-based placement on the exposed beach at low tide, which limits the volume of material entering the water column at any one time. The small scale and incremental disposal of dredged material during low tide from the Proposed Works are therefore considered unlikely to have a measurable impact upon the hydromorphology of the Swansea Bay Coastal Waterbody and Neath Transitional Waterbody.

7.1.6 The removal of accumulated sediment from the navigation channel and subsequent disposal within the Outer Low Water Disposal Area is not expected to materially alter the morphological processes of the Swansea Bay Coastal Waterbody or significantly impact the existing sediment pathways and their influence upon the Neath Estuary Transitional Waterbody. The risk of deterioration in hydromorphological quality elements, or prevention of the achievement of WFD objectives, is therefore considered negligible. The Proposed Works are therefore considered to be compliant with the WFD requirements.

7.2 Biology

7.2.1 As identified within Table 6.5 and Table 6.8 the Proposed Works may result in impacts to the biology of both the Swansea Bay Coastal Waterbody and Neath Estuary Transitional Waterbody. Potential pathways of effects to cause changes to the composition and abundance of benthic invertebrate fauna resulted in both waterbodies being scoped in for further assessment.

7.2.2 The Proposed Works may result in habitat loss/disturbance of up to 0.087 km² within the Swansea Bay Coastal Waterbody. The footprint of the Proposed Works has the potential to interact with existing benthic fauna during excavation within both the Inner Dredge Area and Outer Dredge Area alongside potential smothering effects on benthic invertebrate fauna within the Outer Low Water Disposal Area during disposal of the dredged material. Impact to benthic invertebrates within the Neath Estuary Transitional Waterbody may also occur due to the mobilisation of land-based mechanical plant.

7.2.3 Benthic habitats are likely to be affected. Any loss or displacement of benthic invertebrates would be confined to the localised region of the Inner and Outer Dredge Areas as well as those within Outer Low Water Disposal Area, short term in duration and highly reversible given the benthic habitats that characterise the Swansea Bay region are typically widespread throughout the area. Habitat disturbance during the proposed activities would have an impact on a very limited footprint compared to their overall extent. Furthermore, all benthic habitats are predicted to recover to the baseline condition rapidly given the regular sediment movement and recolonisation likelihood given the waterbody's inherent dynamic nature.

7.2.4 There is not predicted to be a deterioration in the ecological status of the biological elements within either the Swansea Bay Coastal Waterbody or the Neath Estuary Transitional Waterbody. The Proposed Works are therefore considered to be compliant with the WFD requirements and there would not be a significant deterioration in the status of either Swansea Bay Coastal Waterbody or the Neath Estuary Transitional.

7.3 Protected Areas

7.3.1 As identified in Paragraph 6.2.7 to 6.2.10 for Swansea Bay Coastal Waterbody and Paragraphs 6.3.6 to 6.3.9 for the Neath Estuary Transitional Waterbody the Swansea Bay (East) UWWTD Sensitive Shellfish Water overlaps with the Proposed Works area and consequently falls within the 2km threshold for assessment.

7.3.2 Shellfish Waters are areas requiring protection or improvement to support shellfish life and growth. The additional objective for shellfish waters is to maintain a microbial standard of 300 or fewer Escherichia coli (E. coli) per 100ml of shellfish flesh (NRW, 2026a). The NRW (2026a) guidance identifies that impacts to Shellfish Waters can originate from direct inputs of bacteria from point/diffuse sources or resuspension of sediments and subsequent impacts from a reduction in Ultraviolet (UV) radiation due to increased SSCs or effects to feeding habitats.

7.3.3 The classification of the Swansea Bay (East) shellfish water as a UWWTD sensitive waterbody is related to the pollution of freshwater, estuarine and coastal waters by domestic sewage and industrial wastewater. The Proposed Works will not influence the treatment or discharge of urban waste water within the Swansea Bay coastal waterbody or the Neath Estuary transitional waterbody due to the land based methodologies proposed to be undertaken.

7.3.4 The Proposed Works will be undertaken via entirely land based mechanical plant limited pathways of effect to introduce sediment plumes. Slight localised increases of SSC may occur during the flooding of the tide in the vicinity of the Outer Low Water Disposal Area where disposal of dredged material is proposed. It is considered unlikely that this will result in a measurable increase to SSC due to the small scale of the Proposed Works in combination with the existing dynamic environment of Swansea Bay.

7.3.5 Due to the limited potential for water quality impacts as a result of the Proposed Works, it is not expected to adversely affect the objectives of the Shellfish Water. Consequently, there is no potential for deterioration from indirect impacts to the Swansea Bay (East) UWWTD Sensitive Shellfish Water and the Proposed Works are therefore considered to be compliant with the WFD requirements.

8 Conclusion

8.1.1 This WFD assessment has considered the potential effects of the Proposed Works to ensure that the associated activities will not result in (or contribute to) a deterioration in the status of designated waterbodies or jeopardise the attainment of 'Good' status in the future.

8.1.2 The conclusions of the different elements of the WFD assessment are summarised in Table 8.1

Table 8.1 WFD assessment conclusions regarding the Proposed Works

Receptor	WFD Assessment
Hydromorphology	No deterioration in the status of WFD waterbodies is predicted.
Biology	No deterioration in the status of WFD waterbodies is predicted.
Water Quality	No deterioration in the status of WFD waterbodies is predicted.
Protected Areas	No deterioration in the status of WFD waterbodies is predicted.
INNS	No deterioration in the status of WFD waterbodies is predicted.

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