SWANSEA BAY UNIVERSITY CAMPUS

Coastal Protection Works for the Law School

Client:
St Modwen Developments Ltd

Local Council
Neath Port Talbot County Borough Council

Consulting Engineering by
CEDM Ltd
Shoreline Management Wales

January 2019

Water Framework Directive assessment: scoping template for activities in estuarine and coastal waters

Use this template to record the findings of the scoping stage of your Water Framework Directive (WFD) assessment for an activity in an estuary or coastal water.

If your activity will:

- take place in or affect more than one water body, complete a template for each water body
- include several different activities or stages as part of a larger project, complete a template for each activity as part of your overall WFD assessment

The WFD assessment guidance for estuarine and coastal waters will help you complete the table.

Your activity	Description, notes or more information
Applicant name	St Modwen Developments Ltd
Application reference number (where applicable)	
Name of activity	Upgrade linear coastal protection to protect proposed Law School development.
Brief description of activity	The overall works comprise the relaying and upgrading of 65m of rock revetment immediately adjacent to similar works carried out in 2017/18. The existing rock extending 80m further east will be tidied up and made safe with the placing of ϕlumbôstones to fillvoids and stabilise. An existing outfall is set too far back into the existing defence and new wing walls, head wall and apron will be constructed to match the toe of the defences. Only a small element of the works fall below the level of MHWST. Located along the toe and amounting to approx. 20% of the project.
Location of activity (central point XY coordinates or national grid reference)	*Nat. grid. Approx. Centre of Works = 270010E/ 192590N*
Footprint of activity (ha)	The area of permanent works below MHWST level is 0.045ha. The total area of the permanent works is approximately 0.18ha with most of this being on top of the footprint of the existing defences. The total potential area allocated for access and exclusion to comply with Health and Safety requirements is 0.75ha.
Timings of activity (including start and finish dates)	Between May 2019 to May 2019 and likely to take approximately 20 weeks.
Extent of activity (for example size, scale frequency, expected volumes of output or discharge)	Sand will be excavated along the toe of the existing ad hoc rock revetment to allow the installation of a new upgraded to and scout apron. The excavated sand will be placed adjacent and seaward of the new toe during construction and then placed back over the completed toe on completion. Works will progress in stages. ALL WORKS SHALL BE CARRIED OUT IN THE DRY. Only a limited area of works will be below the level of MHWST and construction will only be undertaken when the tide is out. There will be periods when the tide will not reach the works. Excavations will be opened and backfilled in one operation/ shift.
Use or release of chemicals (state which ones)	None

Water body[1]	**Description, notes or more information**
WFD water body name	*Swansea Bay*
Water body ID	*GB641008260000*
River basin district name	
Water body type (estuarine or coastal)	*Estuarine*
Water body total area (ha)	*110million m2*
Overall water body status (2015)	
Ecological status	
Chemical status	
Target water body status and deadline	
Hydromorphology status of water body	
Heavily modified water body and for what use	
Higher sensitivity habitats present	
Lower sensitivity habitats present	*'Intertidal Soft Sediment – Sand Mud & Mixed' ONLY SAND APPLIES*
Phytoplankton status	
History of harmful algae	
WFD protected areas within 2km	

[1] *Water body information can be found in the Environment Agency's catchment data explorer and the water body summary table. Magic maps provide additional information on habitats and protected areas. Links to these information sources can be found in the WFD assessment guidance for estuarine and coastal waters.*

Specific risk information

Consider the potential risks of your activity to each of these receptors: hydromorphology, biology (habitats and fish), water quality and protected areas. Also consider invasive non-native species (INNS).

Section 1: Hydromorphology

Consider if hydromorphology is at risk from your activity.

Use the water body summary table to find out the hydromorphology status of the water body, if it is classed as heavily modified and for what use.

Consider if your activity:	Yes	No	Hydromorphology risk issue(s)
Could impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status	Requires impact assessment	Impact assessment not required	*NO*
Could significantly impact the hydromorphology of any water body	Requires impact assessment	Impact assessment not required	NO
Is in a water body that is heavily modified for the same use as your activity	Requires impact assessment	Impact assessment not required	*NO*

Record the findings for hydromorphology and go to section 2: biology.

Section 2: Biology

Habitats

Consider if habitats are at risk from your activity. Use the water body summary table and Magic maps, or other sources of information if available, to find the location and size of these habitats.

Higher sensitivity habitats [2]	Lower sensitivity habitats [3]
chalk reef	cobbles, gravel and shingle
clam, cockle and oyster beds	intertidal soft sediments like sand and mud - **THIS ONE BUT SAND ONLY**
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	

[2] *Higher sensitivity habitats have a low resistance to, and recovery rate, from human pressures.*

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

Consider if the footprint[4] of your activity is:	Yes	No	Biology habitats risk issue(s)
0.5km^2 or larger	Yes to one or more – requires impact assessment	No to all – impact assessment not required	**NO**
1% or more of the water body's area			*NO*
Within 500m of any higher sensitivity habitat			*NO*
1% or more of any lower sensitivity habitat			*NO*

[4] *Note that a footprint may also be a temperature or sediment plume. For dredging activity, a footprint is 1.5 times the dredge area.*

Fish

Consider if fish are at risk from your activity, but only if your activity is in an estuary or could affect fish in or entering an estuary.

Consider if your activity:	Yes	No	Biology fish risk issue(s)
Is in an estuary and could affect fish in the estuary, outside the estuary but could delay or prevent fish entering it or could affect fish migrating through the estuary	Continue with questions	Go to next section	Activity is limited and close to Mean High Water Spring Tide Level at the location of the existing linear rock revetment which is being upgraded.
Could 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)	Requires impact assessment	Impact assessment not required	
Could cause entrainment or impingement of fish	Requires impact assessment	Impact assessment not required	

Record the findings for biology habitats and fish and go to section 3: water quality.

Section 3: Water quality

Consider if water quality is at risk from your activity.

Use the water body summary table to find information on phytoplankton status and harmful algae.

Consider if your activity:	**Yes**	**No**	**Water quality risk issue(s)**
Could affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)	Requires impact assessment	Impact assessment not required	NO – Clean sand will be excavated to enable a new toe and apron to be installed along the seaward edge of an existing linear rock revetment. The apron will be installed on the same day that material is excavated. Sand will be place top of the new rock toe in sections as the works progress. Excavation and filling (All Works) will be carried out in the dry when the tide is out.
Is in a water body with a phytoplankton status of moderate, poor or bad	Requires impact assessment	Impact assessment not required	**NO**
Is in a water body with a history of harmful algae	Requires impact assessment	Impact assessment not required	**NO**

Consider if water quality is at risk from your activity through the use, release or disturbance of chemicals.

If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if:	**Yes**	**No**	**Water quality risk issue(s)**
The chemicals are on the Environmental Quality Standards Directive (EQSD) list	Requires impact assessment	Impact assessment not required	NO
It disturbs sediment with contaminants above Cefas Action Level 1	Requires impact assessment	Impact assessment not required	NO

If your activity has a mixing zone (like a discharge pipeline or outfall) consider if:	Yes	No	Water quality risk issue(s)
The chemicals released are on the Environmental Quality Standards Directive (EQSD) list	Requires impact assessment[5]	Impact assessment not required	NO

[5] *Carry out your impact assessment using the Environment Agency's surface water pollution risk assessment guidance, part of Environmental Permitting Regulations guidance.*

Record the findings for water quality go on to section 4: WFD protected areas.

Section 4: WFD protected areas

Consider if WFD protected areas are at risk from your activity. These include:

- special areas of conservation (SAC)
- special protection areas (SPA)
- shellfish waters
- bathing waters
- nutrient sensitive areas

Use Magic maps to find information on the location of protected areas in your water body (and adjacent water bodies) within 2km of your activity.

Consider if your activity is:	Yes	No	Protected areas risk issue(s)
Within 2km of any WFD protected area[6]	Requires impact assessment	Impact assessment not required	No Impact – A small quantity of sand is being temporarily moved and placed high in the upper foreshore (adjacent to the toe) before being replaced in its original position on top of the new rock toe to complete the upgrade of the existing rock revetment. The upper foreshore is sand.

[6] *Note that a regulator can extend the 2km boundary if your activity has an especially high environmental risk.*

Record the findings for WFD protected areas and go to section 5: invasive non-native species.

Section 5: Invasive non-native species (INNS)

Consider if there is a risk your activity could introduce or spread INNS.

Risks of introducing or spreading INNS include:

- materials or equipment that have come from, had use in or travelled through other water bodies
- activities that help spread existing INNS, either within the immediate water body or other water bodies

Consider if your activity could:	Yes	No	INNS risk issue(s)
Introduce or spread INNS	Requires impact assessment	Impact assessment not required	NO – No marine equipment is being used.

Record the findings for INNS and go to the summary section.

Summary

Summarise the results of scoping here.

Receptor	Potential risk to receptor?	Note the risk issue(s) for impact assessment
Hydromorphology	No risk	
Biology: habitats	No risk	
Biology: fish	No risk	
Water quality	No risk	
Protected areas	No risk	
Invasive non-native species	No risk	

If you haven’t identified any receptors at risk during scoping, you don’t need to continue to the impact assessment stage and your WFD assessment is complete.

If you’ve identified one or more receptors at risk during scoping, you should continue to the impact assessment stage.

Include your scoping results in the WFD assessment document you send to your activity’s regulator as part of your application for permission to carry out the activity.