

<i>Document version number: (to be completed by marine licensing team)</i>	
<i>Approval date: (to be completed by marine licensing team)</i>	

Marine Invasive Non-native Species Biosecurity Risk Assessment and Management Plan

A Marine Biosecurity Risk Assessment and Management Plan enables marine operators and contractors to understand and minimise the risk of introducing or spreading marine invasive non-native species (INNS). Management of marine INNS is extremely challenging once they are introduced to a new area. Effective biosecurity measures that minimise the risk of introduction or spread are therefore key to effective management.

Filling in this form:

To help you fill in this form, see accompanying document “Guidance for completing NRW’s Biosecurity Risk Assessment and Management Plan”. The accompanying document contains clarification of many key terms and also provides guidance on potential pathways of introduction for INNS (Table 1) and level of risk associated with each pathway (Table 2).

Structure of this form:

You will need to fill in Sections A and C. Fill in sections B1 to B5 when relevant to your activity. For further information on what is included in each section see the accompanying guidance document.

Section A: Activity overview

You should complete this section.

Section B: Risk Assessment

B.1 Assessing the pathway risks associated with vessels

If you are using a vessel (or vessels) as part of your licensed activity you should complete this section. Information on any equipment to be used which can be separated from the vessel should be provided in Section B.4.

B.2 Assessing the pathway risks associated with non-biological materials and water

If your activity involves the use or transfer of non-biological materials (e.g. water, sediment, construction material) you should complete this section.

B.3 Assessing the pathway risks associated with biological material

If your activity involves the use or transfer of biological material (including aquaculture) you should complete this section.

B.4 Assessing the pathway risks associated with equipment

If your activity involves use of equipment which can be separated from their vessel you should complete this section.

B.5 Assessing other pathway risks

This should be filled in if previous sections do not capture aspects of your activity.

Section C: Management Measures

You should complete this section.

Section D: Recommendations

You should consider this section.

Section A: Activity overview

Please fill out the activity details below:

Applicant name:	Western Marinas Dredging Ltd (WMDL)
Short description of activity: <i>(please provide enough detail for NRW to understand the location and the different elements of the project. Links to other documents which describe the project can be provided)</i>	WMDL are proposing to undertake maintenance dredging at Aberystwyth Marina to remove up to 30,000m³ of accumulated sediment to restore the required water depths. The vertical and horizontal extent of the maintenance dredging is the same as previous maintenance dredging campaigns undertaken under marine licences DML 1554 and DML1907. Maintenance dredging will remove sediment from the marina by using water injection dredging (WID) to relocate the sediment from the marina into the downstream reaches of the estuaries of Afon Rheidol and Afon Ystwyth and, potentially, into the coastal waters of Cardigan Bay.
Estimated timings of proposed licensed activities:	Maintenance dredging of the marina is proposed to take place over a series of annual campaigns over the next three years. The initial campaign is expected to take 2-4 weeks, and subsequent campaigns are expected to take 1-2 weeks. Dredging activity will only occur during the period of 1 hour before high tide to 1 hour before low tide on falling tides (i.e., no dredging will take place on rising tides apart from the hour before high water when current velocities have decreased significantly). Dredging is planned for the autumn / winter months to ensure sufficient water depths are in place at the marina for the important spring / summer recreational period. As per the previous marine licence, no dredging will take place between 15 May and 30 September to avoid the bathing water season.

Section B: Risk Assessment

B.1 Assessing the pathway risks associated with vessels

B.1.1. Please list all ports within the UK or overseas that all vessel(s) to be used (both during construction and maintenance) have visited over the 12 months prior to this licensed activity, or since the last out of water period (whichever is most recent).

Please state **N/A** if vessels have not entered any port since the last out of water period.

If you do not yet have the information to complete this section, please state **Unknown**. NRW may ask for this section to be updated when these details are known. The risk should be set as High.

Vessel name	Port / location visited over last 12 months (listed chronologically with dates if known)	Which marine invasive non-native species known to be present at this port(s) / location(s)?	Has the vessel had antifouling? 12 months prior to activity for biocidal coatings, 24 months for biocide-free coatings
WM Innovation	Rye Harbour – March 26	Chinese Mitten Crab	Yes, Biocidal applied Jan 2026
WM Innovation	Bembridge, IOW – April 26	None	
WM Innovation	Hartlepool, May 26	None	
WM Innovation	Cardiff, June 26	None	
WM Innovation	Wisbech, July 26	None	
WM Innovation	Watchet, July 26	None	

Please add more rows if necessary

Please indicate the INNS risk level and justification of the risk below, separately for each vessel based on the locations visited in last 12 months. This should take into account the probability of biofouling and vessel antifouling regime. **Note:** Examples of risk levels are given in Table 2 of the accompanying guidance document and there is further information about this section in the accompanying guidance document.

Vessel name / type	Risk Level (High, Medium, Low)	Justification of risk level
--------------------	--------------------------------	-----------------------------

WM Innovation	Low	Vessel is road transported between all locations and is thoroughly inspected and washed down at each location before and after lifting into the water. Antifoul applied every 12 months. Travel time on road transport means the risk of any INNS surviving the journey is low. Company has thorough risk assessments and RAMS for biosecurity including procedures for wash down of vessel, equipment and crew PPE.

B.1.2 Please provide details of the vessels (identified in Table B.1.1), which have not had antifouling (within the 12 months prior to the licensed activity for biocidal coatings, or 24 months for biocide-free coatings) and if there is an alternative antifouling management regime.

If there are not additional measures or an alternative biofouling management regime, then please put **None**, and the risk level would not change.

Vessel	Alternative biofouling management regime (e.g. different timeframes for antifouling treatment, vessel storage on land etc.)	Risk Level (High, Medium, low)
N/A	N/A	N/A

B.2 Assessing the pathway risks associated with non-biological materials and water

B.2.1: Please provide information about the source and receiving environments for non-biological materials and water transferred through the licensed activity from different pathways (for example hopper water, dredge material, construction material).

Pathway	Location (including Coordinates, WGS84)		Relevant Environmental Conditions for INNS species (e.g. salinity and depth differences between source and receiving environments)	List of INNS known to be present	Risk Level (High, Medium or Low)	Justification of risk level
Relocation of sediment by WID	Source: Aberystwyth Marina	Approximate central point for dredging area within the marina: Easting = 258104, Northing = 281159	The environmental conditions for INNS species are similar at both the source and receptor locations.	Reference to a survey of marine INNS in Welsh marinas (Wood et al., 2015) and reference to the NBN Atlas for Wales (wales-species-inns.nbnatlas.org; accessed 17-06-2026) indicates the presence of (1) modest barnacle (<i>Austrominius modestus</i>) within Aberystwyth Marina.	Low	The principal marine INNS potentially present within the marina is expected to be the modest barnacle. The modest barnacle is typically associated with hard substrata including rocks, stones, shells, other crustaceans and artificial structures, and occupies positions across all levels of the shore but is more common on the mid-shore.
	Receiving: No fixed location downstream of the marina: the lower reaches of the estuaries of Afon Rheidol and Afon Ystwyth and, potentially, the coastal	N/A		Reference to the NBN Atlas for Wales (wales-species-inns.nbnatlas.org; accessed 17-06-2026) indicates the presence of (1) modest barnacle (<i>Austrominius modestus</i>) within Aberystwyth Harbour and the lower reaches of the estuaries of Afon Rheidol and Afon Ystwyth, and along the coastline at Aberystwyth, (2) brown alga		Particle size analysis of the sediment in the marina identifies that the maintenance dredging activity will remove silt material with limited potential to contain larger particles of hard substrate to which the modest barnacle may attach (e.g., rocks, stones and/or shells). Accordingly, there is a low risk that the maintenance dredging activity will spread INNS due to removal and relocation of

	waters of Cardigan Bay			Japanese wireweed (<i>Sargassum muticum</i>) in the rocky intertidal and infralittoral fringe areas of the coastline at Aberystwyth, (3) red alga Bonnemaison's hook weed (<i>Bonnemaisonia hamifera</i>) in the nearshore waters at Aberystwyth, and (4) leathery sea squirt (<i>Styela clava</i>) in the nearshore waters at Aberystwyth.		material to which modest barnacle is attached.
	Source					
	Receiving					
	Source					
	Receiving					

Please add more rows if necessary

B.3 Assessing the pathway risks associated with biological material

B.3.1 Please provide information about the species that will be used or transferred through the licensed activity and the potential for INNS to be contained in the biological material.

N/A

B.3.2: Please provide information about the source and receiving environments for biological material used or transferred through the licensed activity. Pathways include, for example, transfer of seeded ropes with seaweed or shellfish.

Pathway	Location (coordinates, WGS84) and / or name of culture facility		Relevant environmental conditions for INNS species (e.g. salinity and depth differences between source and receiving environments)	List of INNS known to be present in the location or culture facility	Risk Level (High, Medium or Low)	Justification of risk level
N/A	Source					
	Receiving					
	Source					
	Receiving					

Please add more rows if necessary

B.3.3. If a relevant pathway is identified in Table B.3.2, please outline any relevant biosecurity measures or protocols in place to prevent contamination of material by marine INNS, and introduction or spread of marine INNS.

N/A

B.3.4. Does the transfer have the relevant documentation from the Fish Health Inspectorate at CEFAS (Aquaculture Production Business Registration), or follow other relevant codes of conduct for prevention of the introduction or spread of marine INNS? Please place an X in the relevant box.

Yes	No	Don't know	Not relevant
		X	

B.4 Assessing the pathway risks associated with immersible equipment

B.4.1. Please list the immersible equipment expected to be used in this licensed activity in the box below.

The immersible equipment expected to be used in the licensed activity is a component of the vessel identified in Section B.1. The immersible equipment is considered to be the vessel and the associated water injection arm.

B.4.2. Will all the immersible equipment used in this licensed activity undergo washing, rinsing and / or drying as part of routine maintenance at the times described below? Please place an X in the relevant box.

	Yes	No
Immediately prior to departing the <u>port of origin</u> to undertake the licensed activity.	X	
Immediately prior to leaving the licensed activity area on completion of the licensed activity.	X	

B.4.3. Will all the immersible equipment used in this licensed activity undergo washing, rinsing and / or drying between different deployments within the activity area of this licensed activity (e.g. different specific locations of dredging or sampling covered under this marine licence)? Please place an X in the relevant box.

Yes	No (please provide reason)
X	

If you answer No to any of the questions in B.4.2 or B.4.3, then please complete B.4.4 below.

B.4.4. Please provide information on the previous location the equipment will have been used prior to the vessel being used for this licensed activity.

Equipment	Location (Coordinates, WGS84)	Risk Level (High, Medium or Low)	Justification of risk level
N/A			

B.5 Assessing other pathway risks

B.5.1 Please provide any other information on the licensed activity that may produce a risk of the introduction or spread of marine INNS that is not covered in the sections above.

Pathway	Risk Level (High, Medium or Low)	Justification of risk level
None		

Section C: Management Measures

C.1 Management Measures

Enter the management measures for the pathways identified in the sections above.

All **high and medium risk** pathways identified in the previous risk assessment (sections B.1 to B.5) should have some degree of additional control or mitigation measures. Low risk pathways may also need additional control or mitigation measures. You may want to consider keeping a logbook to help demonstrate compliance if this is requested.

Pathway (identified in sections above)	Risk Level (High, Medium or Low)	Risk management measure/s	Risk level after management (High, Medium or Low)
Vessel: WM Innovation	Low	Ensure the antifouling system of the WID plant is applied on schedule. Vessel antifouling applications shall be recorded in an up-to-date logbook, including relevant certificates, declarations and other documentation providing evidence of the historical applications and surveys of antifouling systems. Ensure surfaces including submerged surfaces of WID plant are inspected for biofouling and, if necessary, cleaned before transiting to Aberystwyth. Vessel biofouling inspections and cleaning shall be recorded in an up-to-date logbook.	Low

Non-biological material: relocation of sediment by WID	Low	None	Low

Please add more rows if necessary

Section D. Recommendations

You may want to consider how compliance with the management measures will be recorded, for example in a log book or via photos.

We also recommend that;

- You identify an individual for monitoring and reporting on biosecurity management plan actions (a biosecurity manager)
- All staff involved in the licensed activity are made fully aware of the possibility that INNS may be encountered and understand what measures will be taken to ensure surveillance / monitoring of INNS during the activity
- All relevant staff are adequately trained in the identification and detection of INNS and to report any instances to the biosecurity manager