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Engineering Design Services



ED3446 Aberaeron Harbour Dredging

Biosecurity Plan

03/01/2023

Report Prepared for:-

Owen Morgan, Harbour Manager, Highways &
Environmental Services,
Ceredigion County Council

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ED3446 Aberaeron Harbour Dredging Biosecurity Plan

	Name	Signature	Position	Date of Issue	Version
Prepared	George HT Ryley		CCC Highways Ecologist	03/01/2023	1
Approved					

Record of Previous Issue and Amendments

Version	Revision date	Summary of Changes

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1. Introduction

As part of the Marine Licence application to renew the licence for Aberaeron Harbour Maintenance Dredging, Natural Resources Wales (NRW) require a biosecurity plan. This document sets out the procedure that will be followed to prevent the introduction or spread of any invasive non-native species (INNS) when carrying out the dredging.

Movement of vessels, equipment and/or stock can cause both the introduction of new INNS and the spread of INNS already established at a site to new locations. All contractors working on site will be issued a copy of this document.

2. Legal & ecological position on biosecurity

There are a number of pieces of legislation relevant to biosecurity and INNS in the UK, including:

Environmental Protection Act 1990

Covers, amongst others, pollution control, waste and contaminated land. Soil and other material containing viable INNS material is classed as controlled waste under the Act.

Wildlife and Countryside Act 1981 (as amended)

Section 14 of the Act regulates the release of non-native species into the wild and makes it illegal to plant or otherwise cause to grow in the wild any plant listed on Schedule 9 of the Act or, alternatively, release or allow to escape into the wild any animal listed on Schedule 9.

EU Regulation (1143/2014) on invasive alien (non-native) species

This regulation imposes restrictions on a list of species of 'Union concern'.

3. Existing records of INNS

A record search with Aderyn, LERC Wales' Biodiversity Information and Reporting Database, was carried out on 12/12/2022. There are no known records of any INNS associated with the harbour or within 100m of it. The nearest known marine INNS record is of Japanese Wireweed and is located on the shore approximately 700 metres south-west of Aberaeron harbour entrance. It is possible that it is also present closer to Aberaeron harbour. As the name indicates, Aberaeron harbour is situated at the mouth of the river Aeron. Japanese knotweed and Himalayan balsam are known to occur upstream along this river.



Location of Japanese Wireweed record south-west of harbour entrance.

3. Biosecurity risk assessment & resulting method statement

L = Likelihood, S = Severity, R = Rating (= L x S)

<u>Likelihood</u>	<u>Severity</u>	<u>Risk Rating =</u> <u>Likelihood x Severity</u>
1. Very unlikely	1. Insignificant	1 to 4 (Low Risk – acceptable level, may need attention if not as low as reasonably practicable.)
2. Unlikely	2. Minor	
3. Likely	3. Moderate	6 to 9 (Medium Risk – requires attention as soon as possible.)
4. Highly Likely	4. Major	12 to 16 (High Risk – immediately implement controls).

<u>Hazard</u>	<u>'Raw' risk</u>			<u>Control measures</u>	<u>Residual risk</u>		
	L	S	R		L	S	R
1. Introducing species of INNS on dredging machinery or other equipment	2	3	6	• NB: Likelihood is low since dredging will be carried out by land-based machinery, not by specialist dredging vessels and as such, no ballast waters are carried (ballast waters are often the cause of spread of INNS by vessels). • Footwear of all workers, visitors, contractors to be clean on entering site and to be cleaned prior to visiting other sites.	1	3	3
2. Spreading INNS between locations while working on site	3	2	6	• Care will be taken to only move sediment across the site during the dredging operation; any obvious plant / algal material will be left where found or removed to a suitably licensed site by a suitably licensed carrier if suspected to be a species of INNS. • Dredging to be carried out at low tide in suitably calm conditions; machinery will not enter the water.	2	2	4
3. Exporting INNS to other sites	2	3	6	• None of the dredged material is to be taken off site. • All footwear, machinery and equipment to be cleaned and/ or treated as appropriate prior to leaving site.	1	3	3

4. How to identify Japanese Wireweed – crib sheet for contractors

HABITAT – Found in rock pools and shallow subtidal waters, can also tolerate brackish waters. Does not grow well in intertidal areas as it prefers being permanently under water.

DESCRIPTION – A large bushy brown seaweed that can grow over 2m long with long and stringy branches. It has many small, round air bladders on short stalks:



TEXTURE AND COLOUR – Texture is tough and fibrous; colour is dark- to olive-brown.



When pulled from the water, it looks somewhat like laundry hanging on a washing line:



Mitigation measures to prevent the spread of Wireweed

All machinery must be cleaned before use on site to prevent introduction of Wireweed or any other species. Do not disturb the seabed any more than absolutely necessary to carry out the dredging works. If any seaweed that looks like Wireweed is pulled from the water during works, do not return it to the sea. Instead, any suspected Wireweed must be removed to a suitably licensed site by a suitably licensed carrier. The exterior of all machinery must be cleaned again before leaving site.

5. References

Cook, E.J., Macleod, A. Payne, R.D., and Brown, S. (2014) edited by Natural England and Natural Resources Wales (2015). Marine Biosecurity Planning – Guidance for producing site and operation-based plans for preventing the introduction and spread of non-native species in England and Wales.