

**TASMANIAN  
PLANNING COMMISSION**

**Endorsed**



**Date: 6 September 2022**

# CEMP – SUB-PLAN 11 – WEED, DISEASE AND HYGIENE MANAGEMENT PLAN (WDHMP)

## BRIDGEWATER BRIDGE PROJECT NO: 2024

DOC NO: 2024-MCD-0000-PLA-PRJ-0036 REV B

CLIENT: DEPARTMENT OF STATE GROWTH

PROJECT: NEW BRIDGEWATER BRIDGE PROJECT

LOCATION: BRIDGEWATER, TASMANIA, AUSTRALIA

### Revision History

Rev	Date	Details	Author	Reviewer	Approver
A	10 <sup>th</sup> June 2022	Issued for Review	E Lancaster	DSG / IV	-
B	1 <sup>st</sup> August 2022	Issued with comments incorporated	S Polomka	DSG / IV	-
C	25 <sup>th</sup> August 2022	Issued with comments addressed form reviewers	HY	JC	PF

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## Definitions

Please refer to MMS Definitions (HSEQ-DOC-PRO001-GEN-GRP-ATT 2) plus:

Term/ Acronym	Definition
CEP	Construction Execution Procedure
CMO	HSEQ Compliance Management Organisation (compliance database software)
Contractor	McConnell Dowell
CRAW	Construction Risk Assessment Workshop
D&C	Design and Construct
DCEMP	Design and Construction Management Plan
DNRET	Department of Natural Resources and Environment
DPIPWE	Department of Primary Industries, Parks, Water And Environment
DSG / Client	Department of State Growth
EMS	Environmental Management System
EM	Environmental Manager
EPA	Environment Protection Authority
EPI	Environmental Protection Instruction
GED	General Environmental Duty
GIS	Geographic Information System
HSEQ	Health, Safety, Environment and Quality
IMP	Inspection and Monitoring Plan
JSEA / SWMS	Job Safety and Environment Analyses / Safe Work Method Statement
MCD	McConnell Dowell
MMS	McConnell Dowell Management System
MPIS	Major Project Impact Statement
MPP	Major Project Permit (MPP2201)
NBBP	New Bridgewater Bridge Project
PMP	Project Management Plan
Project Land	Land to which the project has access under MPP2201 Schedule 2 for the purposes defined in the MPP
PSTR	Project Specification and Technical Requirements
PWS	Parks and Wildlife Service
SDS	Safety Data Sheet
SEP	Site Environmental Plan
Subcontractor	Contractors working under MCD

## Weed, Disease and Hygiene Management Plan

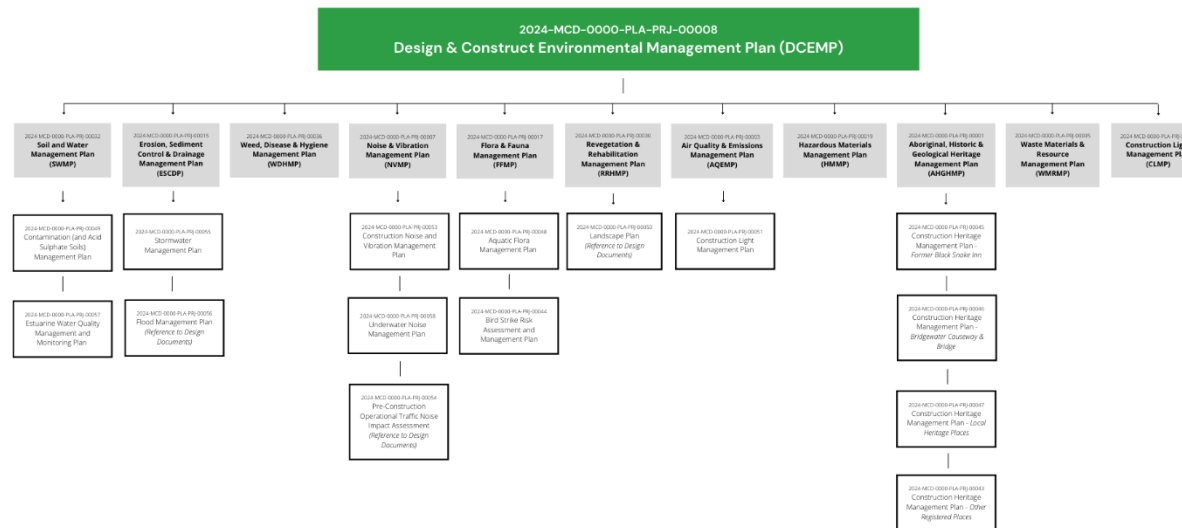
### Overall Objective

*To control declared weeds on the site and prevent the establishment and spread of weeds. Record presence and distribution of weeds and pathogens and ensure compliance with Tasmanian Weed Management Act 1999.*

### Background:

This Plan has been prepared for the Bridgewater Bridge Project by McConnell Dowell, as part of the overarching Design and Construction Environmental Management Plan (DCEMP) and must be read in conjunction with the DCEMP, which contains references to project description, definitions, risk assessment, processes, and governance.

The overarching Environmental Management System is shown in the below figure:



This Plan incorporates the requirements of the Major Project Approval Conditions and the Project Scope & Technical Requirements, identifying management and mitigation actions, monitoring programs and corrective actions.

The Attachments contain related Sub-Plans, Procedures, Reference Documents and Reports, Guidelines, Forms, Registers, and other supporting material.

## Weed, Disease and Hygiene Management Plan

	This document will be reviewed on a regular basis in accordance with the requirements in the DCEMP.
Performance Criteria:	<ul style="list-style-type: none"> <li>Zero material regulatory breaches associated with weed,disease or hygiene events</li> <li>Compliance with legal and regulatory requirements pertaining to weed,disease or hygiene events</li> </ul>
Relevant Information:	<p>The Project Land has been found to support several introduced species, with 140 recorded from the general surveys, including 14 species of weeds declared under the Tasmanian Weed Management Act 1999.</p> <p>The declared weeds observed or previously reported in the Brighton area (Zone B) are:</p> <ul style="list-style-type: none"> <li>African boxthorn <i>Lycium ferocissimum</i> – Widespread infestations <a href="https://nre.tas.gov.au/Documents/African-BoxthornWeed-Management-Plan.pdf">https://nre.tas.gov.au/Documents/African-BoxthornWeed-Management-Plan.pdf</a></li> <li>amsinckia <i>Amsinckia calycina</i> – two adjacent clusters found on the causeway, with over 100 plants (eradicated by NBES during the survey) (Plate 17) <a href="#">Amsinckia-Weed-Management-Plan.pdf (nre.tas.gov.au)</a></li> <li>blackberry <i>Rubus fruticosus</i> aggregate – common throughout <a href="#">Blackberry_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>boneseed <i>Chrysanthemoides monilifera</i> - common throughout <a href="#">Boneseed_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>Californian thistle <i>Cirsium arvense</i> – concentrated patches <a href="#">Californian-thistle_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>espartillo <i>Amelichloa caudata</i> – patchy around Bridgewater side of existing bridge <a href="#">Espartillo_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>fennel <i>Foeniculum vulgare</i> (Plates 18a &amp; 18b) – common throughout <a href="#">Fennel_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>gorse <i>Ulex europaeus</i> – occasional throughout <a href="#">Gorse_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>onion weed <i>Asphodelus fistulosus</i>* – past record only, northwest of project land <a href="#">Onion-weed_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>Montpellier/canary broom <i>Genista monspessulana</i> – common throughout <a href="#">Montpellier-broom_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>slender thistle <i>Carduus pycnocephalus</i> – concentrated patches <a href="#">Slender-thistle-pycno_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>tumbleweed <i>Amaranthus albus</i> * – past records around northern end of existing bridge <a href="#">Tumbleweed_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>white horehound <i>Marrubium vulgare</i> – occasional throughout <a href="#">Horehound_WMP_2011.pdf (nre.tas.gov.au)</a></li> <li>willow <i>Salix x fragilis nothovar fragilis</i> – edge of the River Derwent only <a href="#">willow_WMP_2011.pdf (nre.tas.gov.au)</a></li> </ul> <p>There is a statutory requirement to control weeds in accordance with the <i>Weed Management Act</i> 1999 and a statutory weed management plan is in place for each declared weed species on the DNRE (formerly DPIPWE) website.</p> <p>Refer to Attachment 1 for pre-disturbance weed mapping.</p>
Associated Documents:	<ul style="list-style-type: none"> <li>D&amp;C Deed Schedule 18</li> <li>Exhibit A – Initial Project Scope &amp; Technical Requirements: Appendix 8; Appendix 13; Appendix 35 – Requirements for Project Plans</li> <li>Licence for construction works on reserved Crown Land (PWS Conditions) RC1,2,3 and 15</li> <li>Weed and Disease Planning and Hygiene Guidelines – Preventing the spread of weeds and diseases in Tasmania (NRE, 2015)</li> <li>Weed inspection and control during and post operation in accordance with the Quarry Code of Practice 2017</li> <li>Coastal Weeds of Tasmania – A Guide to Coastal and Environmental Weeds of Tasmania</li> <li>Weeds of Southern Tasmania - A Guide to Environmental and Agricultural Weeds of Southern Tasmania</li> <li><i>Weed Management Act 1999</i></li> <li>Statutory Weed Management Plans (see above – relevant information)</li> <li><i>Plant Quarantine Act 1997</i></li> <li>Keeping it clean - A Tasmanian field hygiene manual to prevent the spread of freshwater pests and pathogens (NRE South)</li> </ul>

## Weed, Disease and Hygiene Management Plan

	<ul style="list-style-type: none"> <li>Plant Biosecurity Manual Tasmania 2022 (DPIPWE)</li> <li>Guidelines for Safe and Effective Herbicide Use Near Waterways</li> <li>Invasive Plants, Weeds and Diseases EPI</li> </ul> <p><a href="https://nre.tas.gov.au/Documents/Checklist-for-Boaters,-Fishers-and-Divers-Travelling-to-Tasmania.pdf">https://nre.tas.gov.au/Documents/Checklist-for-Boaters,-Fishers-and-Divers-Travelling-to-Tasmania.pdf</a></p> <ul style="list-style-type: none"> <li>Commonwealth of Australia, 2009. National Bio-fouling Management Guidelines for Non-trading Vessels. April 2009. ISBN 978-1-921575-07-5.</li> </ul> <p><a href="https://www.marinepests.gov.au/sites/default/files/Documents/non-trading-vessel-biofouling-guidelines.pdf">https://www.marinepests.gov.au/sites/default/files/Documents/non-trading-vessel-biofouling-guidelines.pdf</a></p>			
Ref No.	Management and Mitigation Actions	Timing	Records / Evidence	Resp.
<i>Weeds</i>				
WD-A1	Declared weed species identified on the Project land will be either eradicated or contained on site. All areas of the site require protection from the introduction of weeds and diseases.	All phases	Site Environmental Plan	Site Supervisor
WD-A2	All weed, pest and disease management and mitigation used for the site must be in general accordance with the Invasive Plants, Weeds and Diseases EPI and/or the <i>Weed and Disease Planning and Hygiene Guidelines – Preventing the spread of weeds and diseases in Tasmania (NRE, 2015)</i> .	All phases	Washdown Checklists / Log Weekly Inspection	Plant Manager
WD-A3	Weeds, pests, pathogens or disease infested/infected areas (terrestrial and aquatic) must be identified (on ground, in waterways and/or on the SEP) prior to undertaking any ground disturbance activities. MCD will engage a weed contractor to survey and treat the project work area.	Construction	Site Environmental Plan Weed Spray Records	Site Supervisor
WD-A4	Construction plant operating in areas with known weeds, pests or pathogens must be cleaned prior to movement to other areas (including equipment to be used in the aquatic environment).	Construction	Washdown Checklists / Log Weekly Inspection	Site Supervisor
WD-A5	All ground engaging plant and equipment shall be cleaned down of all soil and vegetation material in accordance with the Invasive Plants, Weeds and Diseases EPI and/or the washdown procedures outlined in the <i>Weed and Disease Planning and Hygiene Guidelines – Preventing the spread of weeds and diseases in Tasmania (DPIPWE, 2015)</i> ; a documented inspection of the plant and/or equipment must be completed: <ul style="list-style-type: none"><li>Prior to arrival on site.</li></ul>	Construction	Washdown Checklists / Log Weekly Inspection	Site Supervisor

## Weed, Disease and Hygiene Management Plan

	<ul style="list-style-type: none"> <li>• Prior to movement within the project site from infested/infected areas to non-infested/infected areas<sup>1</sup></li> <li>• Prior to demobilisation from the project site.</li> </ul> <p>Any washdown areas constructed will be signposted as such, with suitable measures in place for sediment collection and consideration of the drainage paths to watercourses.</p>			
WD-A6	<p>All water, soils, sand and gravel or mulch materials brought to the project site must be certified (including documentation) by the supplier as weed-free and disease-free.</p> <ul style="list-style-type: none"> <li>• It must be ensured that there are no declared weeds or significant environmental weeds on the site from where above material is sourced</li> <li>• If a problem is encountered with imported materials carrying weeds or diseases, the source company must be informed immediately, any relevant authorities notified and the appropriate remediation or quarantine measures instigated.</li> </ul>	Construction	Certificate or email from supplier (vendor declaration)	EMR
WD-A7	<p>Soil known to be contaminated with weeds or weed seeds will not be relocated to “weed free” areas of the site.</p> <p>Topsoil from weed free areas must be retained for reuse in site rehabilitation.</p>	Construction	Weekly Inspection	EMR
WD-A8	<p>Prior to applying herbicide or pesticide the product and application methodology must be verified and accepted by the Environmental Manager. The use of herbicides near waterways and wetlands must be in accordance with the 'Guidelines for Safe and Effective Herbicide Use Near Waterways:'</p>	Construction	SDS SWMS / Prestart record	Site Supervisor / EMR
WD-A9	<p>Inspections for emerging weeds on Project Land will be conducted and action for management / removal taken accordingly. Any weed, pest and pathogen infected areas will be appropriately isolated and avoided.</p> <p>Disposal of weeds offsite will be performed under appropriate permits or if retained onsite, containment and deep burial will be undertaken.</p> <p>Any declared weed infestations will be managed in accordance with the Statutory Weed Management Plan for that species.</p>	Construction / Post Construction	<p>Weekly Inspection</p> <p>Statutory Weed Management Plan(s)</p> <p>(Refer links in “Relevant Information”)</p> <p>Treatment Records</p>	Site Supervisor / EMR

## Weed, Disease and Hygiene Management Plan

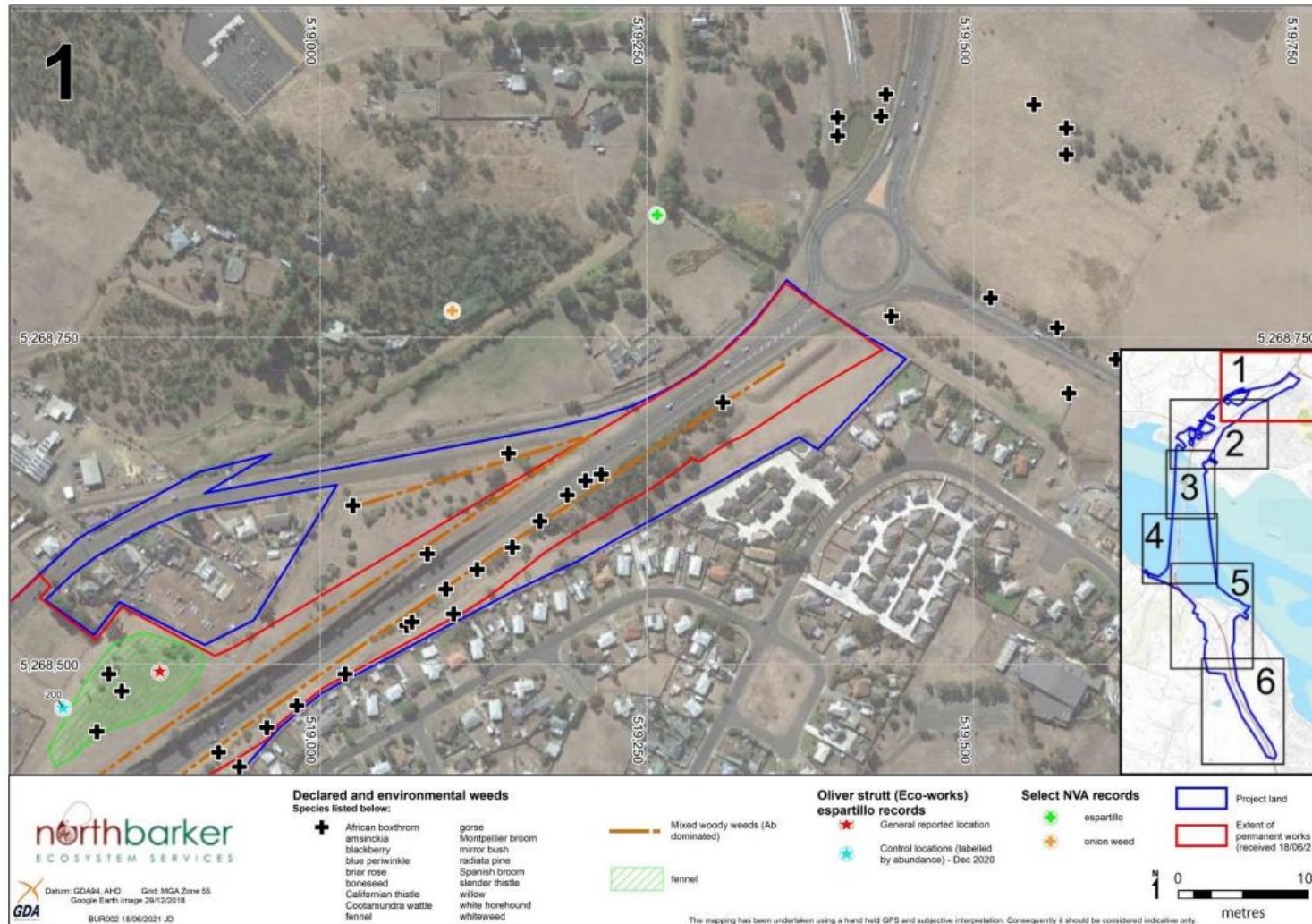
WD-A10	<p>The following must be detailed on the SEP or in an EPI:</p> <ul style="list-style-type: none"> <li>Locations of weed and pest infestations</li> <li>The means of excluding access to areas of pest infestation</li> <li>the locations and design of proposed temporary clean-down bays</li> <li>a weed treatments schedule addressing methods of control, chemicals, locations, and timing of works; and</li> <li>minimum pest control operator qualifications.</li> </ul>	Construction	SEP or EPI	EMR
WD-A11	Detailed post-works survey(s) and control will be undertaken; particularly in relation to the potential germination of <i>Amelichloa caudata</i> , <i>Galenia pubescens</i> and <i>Amsinckia calycina</i> , as well as consideration of <i>Amaranthus albus</i> and <i>Asphodelus fistulosus</i> .	Construction	Post-works survey(s) report	Site Supervisor / EMR
WD-A12	The workforce will be trained in weed identification at prestart sessions periodically throughout the project.	Construction	Daily Prestart	Site Supervisor / EMR
<i>Invasive Marine Flora, Fauna and Pathogens</i>				
WD-A13	Marine vessels and equipment must have all required Introduced Marine Pest (IMP) inspections completed and documentation in place, including a <b>MCD Invasive Marine Pests Risk Assessment</b> Form, prior to mobilisation to the project site. Vessel ballast water must be managed in accordance with the Australian Ballast Water Management Requirements, 2020.	Construction	IMP RA Form	EMR
WD-A14	All floating and submersible plant and equipment to be used for the project must be disinfected and clean, prior to use in an aquatic environment. Vessels entering Tasmanian waters from interstate must complete and submit the DPIPW E “ <b>Protect Tasmania from Aquatic Pests and Diseases</b> ” Declaration. [HOLD - form has not been updated since DPIPW E name change to NRE on the website]	Construction	IMP RA Form	EMR
WD-A5	The management of biofouling hazards associated with vessels and equipment will be in accordance with the <b>National Bio-fouling Management Guidelines for Non-trading Vessels, 2009</b> .	Pre-Construction	IMP RA Form Vessel Biosecurity Management Plan	EMR
<b>Ref No.</b>	<b>Monitoring</b>	<b>Timing</b>	<b>Records / Evidence</b>	<b>Resp.</b>
WD-A16	Quarterly (internal) and annual (external) audits of the CEMP.	Construction	Monthly Report Audit Reports	EMR

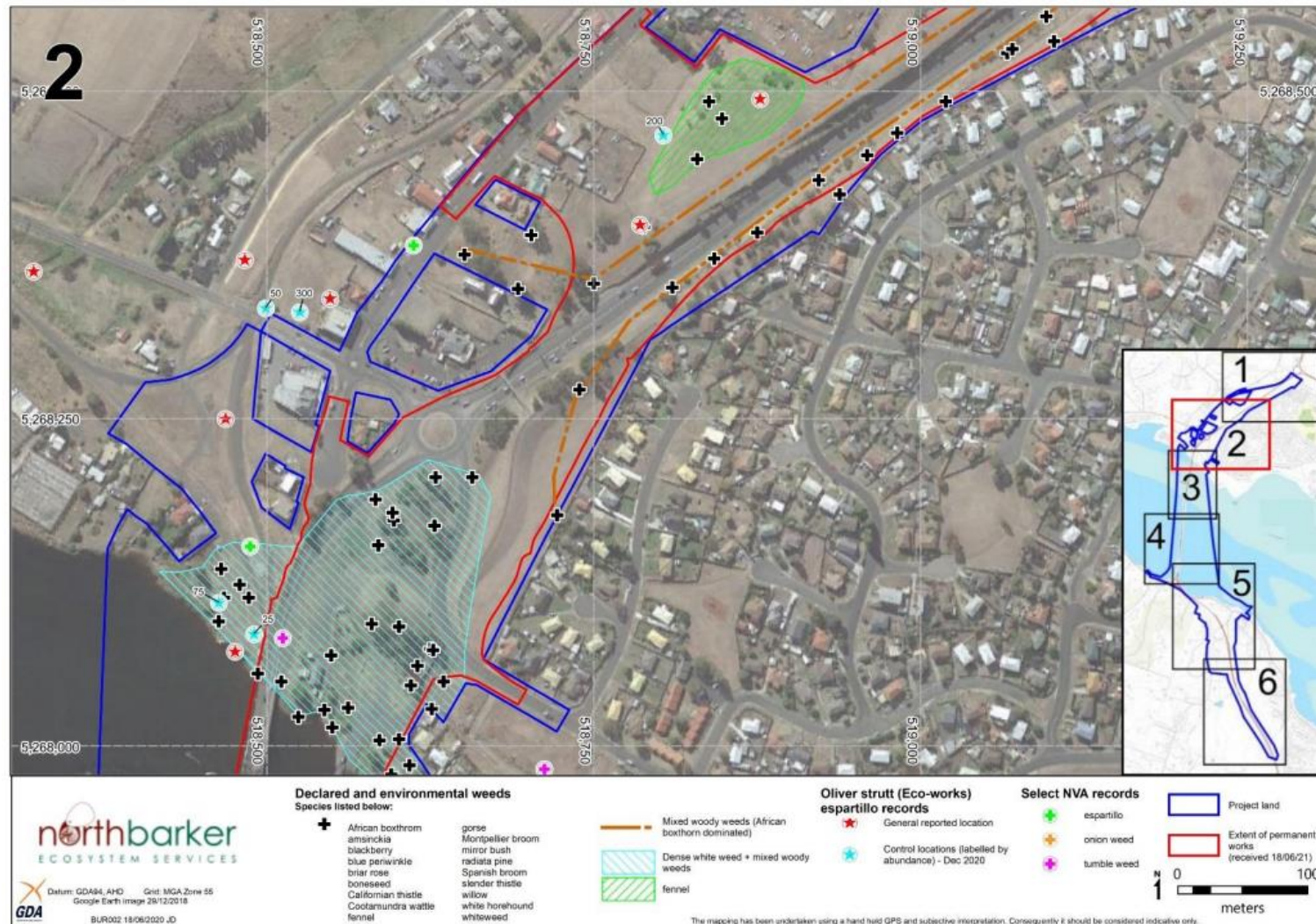
## Weed, Disease and Hygiene Management Plan

WD-A17	A pre-disturbance weed inspection will be completed prior to the commencement of the main clearing works and will be used to inform the treatment and removal activities. Assessment will be completed by an ecologist	Construction	Weed Report Treatment Records	EMR
WD-A18	The project site (terrestrial and aquatic) will be inspected weekly for the emergence of new weed infestations and signs of pest species. Appropriate treatment will be undertaken.	Construction	Weekly Inspection	EMR
<b>Ref No.</b>	<b>Reporting and Records</b>			<b>Resp.</b>
WD-A19	Retain plant washdown checklists on site for review.	Hygiene Register / Folder	Washdown checklists / inspection logs	Site Supervisor
WD-A20	Report any findings and treatment / management of Weeds, Pest, Disease, or IMP to State's Representative.	Event Report	Monthly environmental reporting	EMR

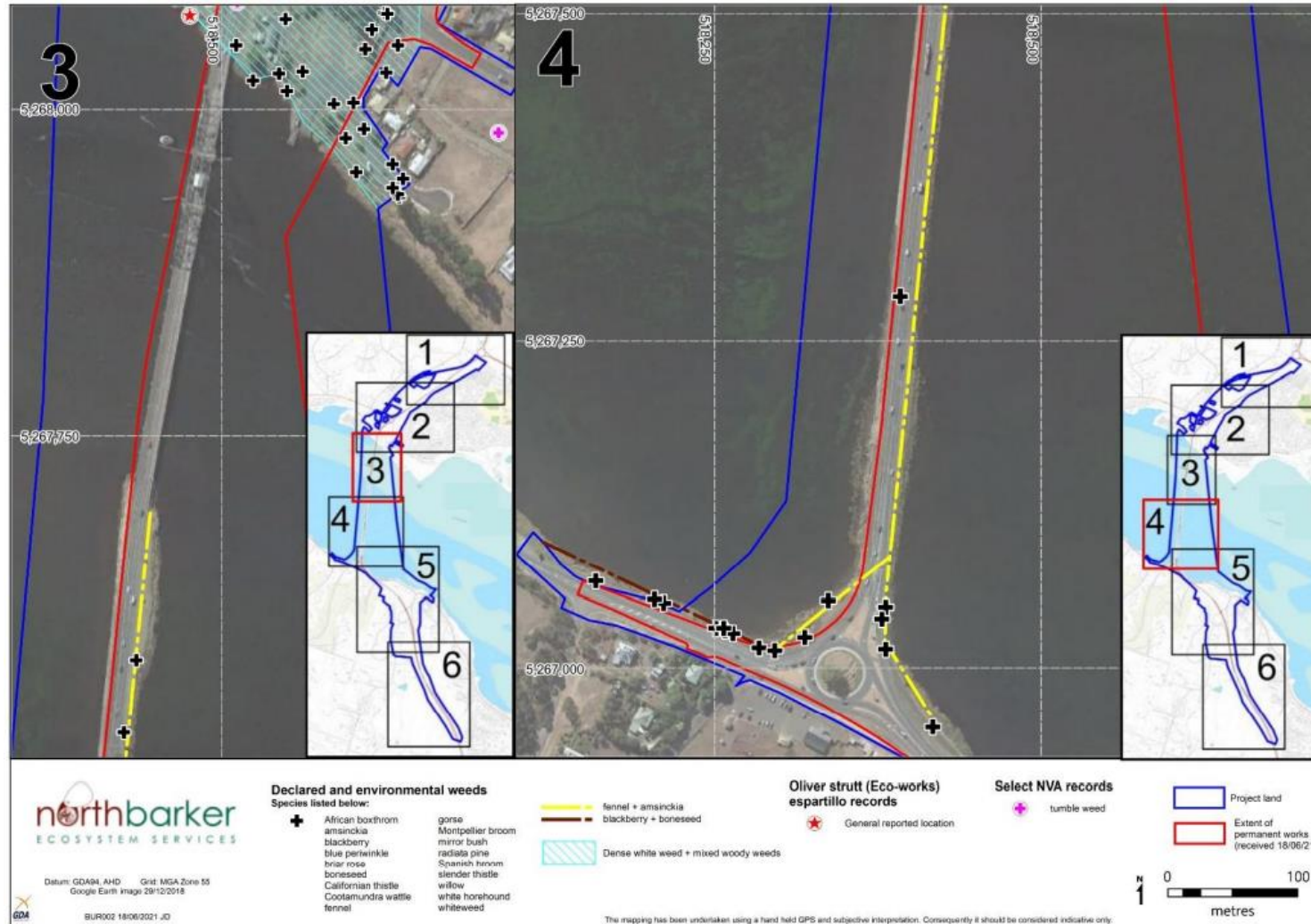


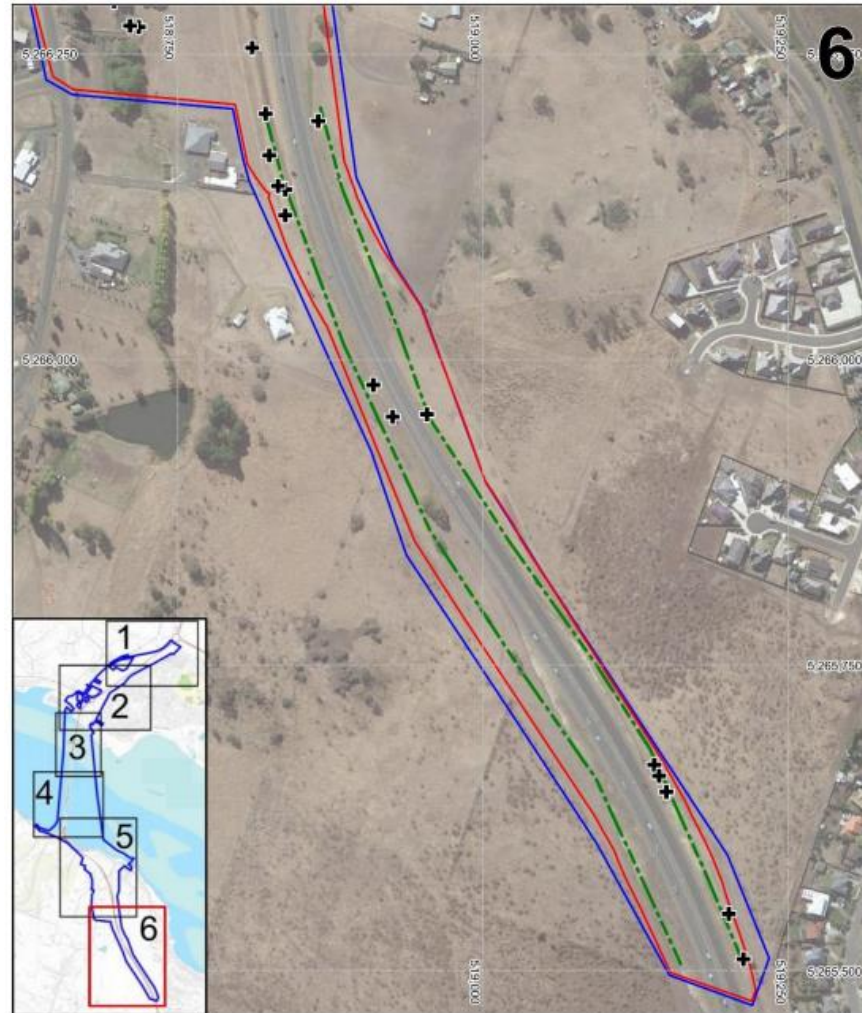
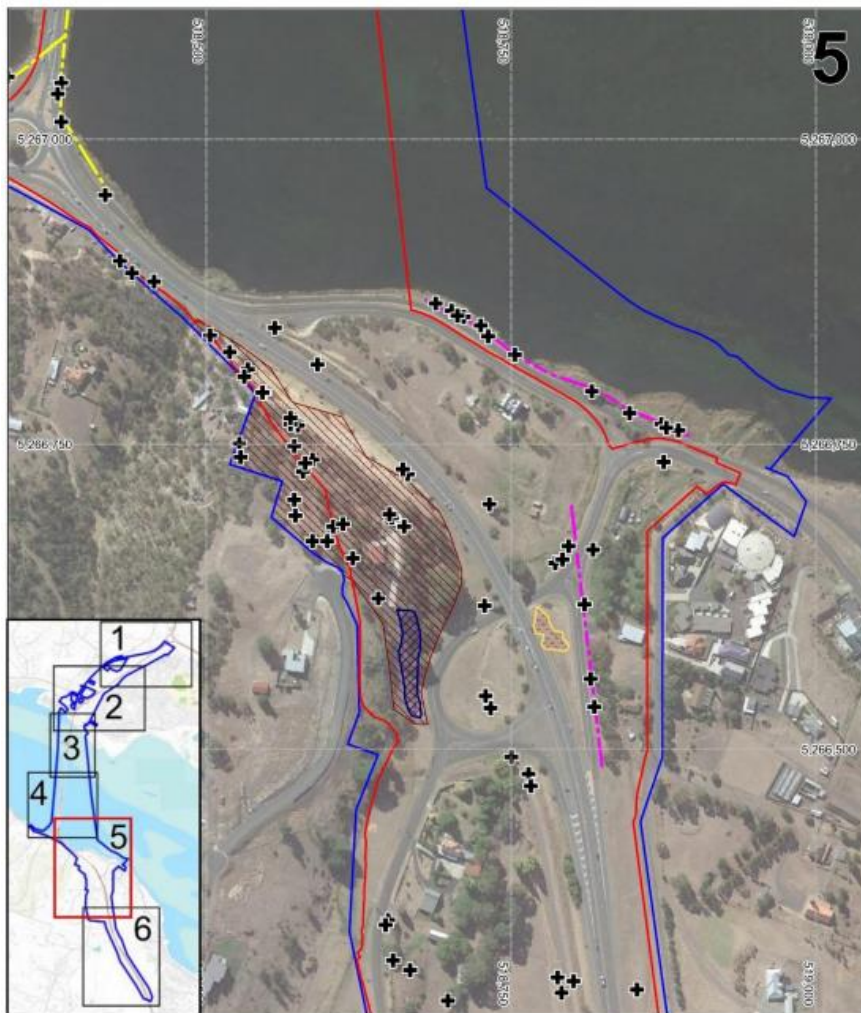
## Attachment 1 – WEED MAPPING











## Attachment 2: MACHINERY, PLANT & VEHICLE CLEAN-DOWN CHECKLIST

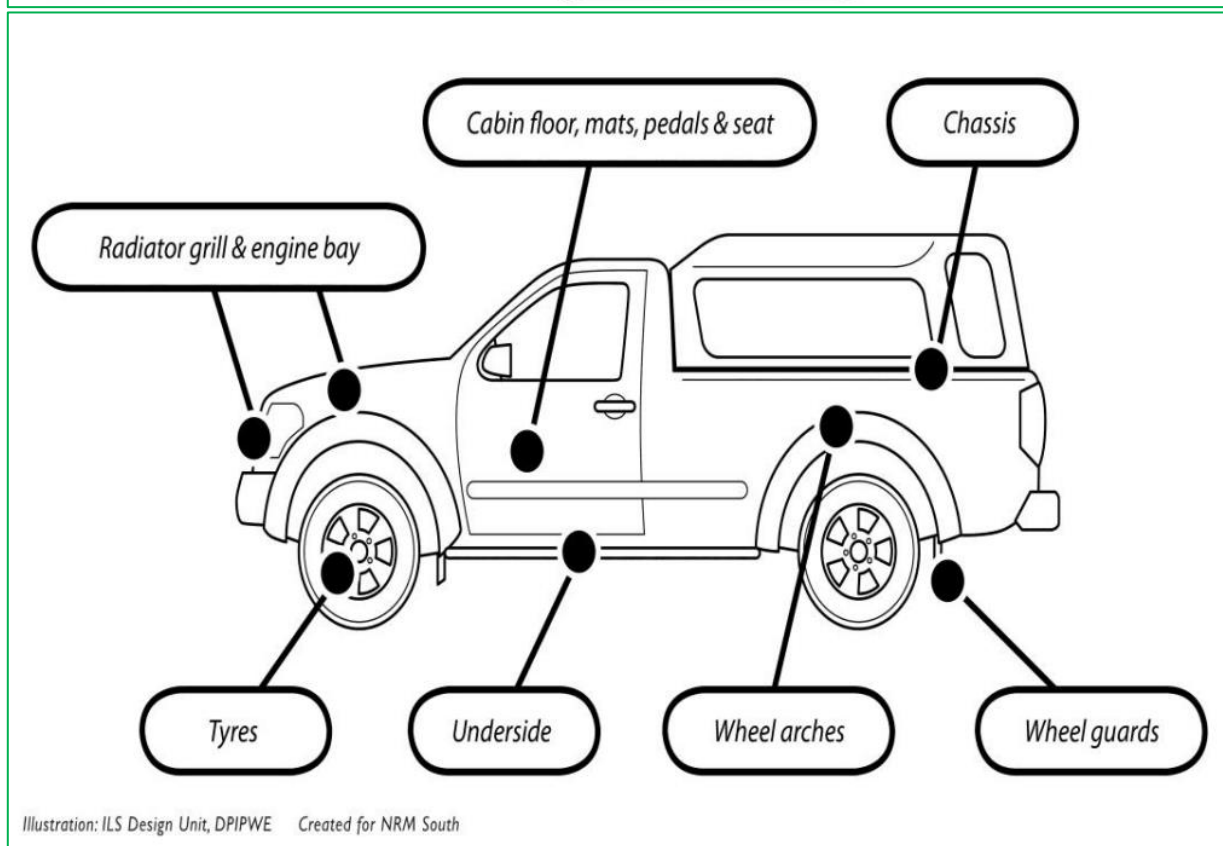
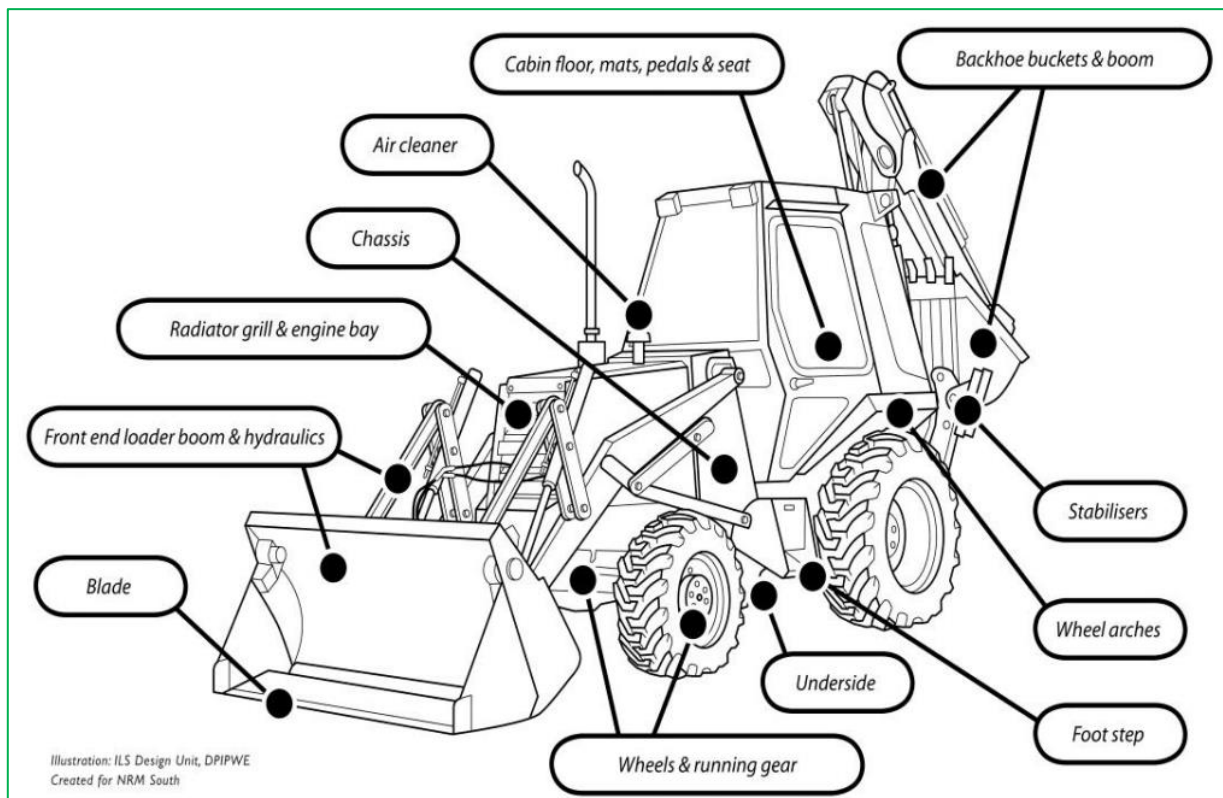
This form must be completed under the following circumstances:

- When any new ground engaging plant or machinery arrives at site or when new light or heavy vehicles move on to site that will potentially move into areas of environmental sensitivity.
- When any ground engaging plant, machinery or vehicles move out of areas of known weed, pest, or disease infestation.

This document is based on the *Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania*.

<b>1. PROJECT DETAILS</b>					
Project No.		2024 NBB			
Project Area					
<b>2. INSPECTION DETAILS</b>					
<b>2.1. MACHINERY/PLANT/VEHICLE DETAILS</b>					
Owner/Operator				Equipment type:	
Proposed work area:				Previous location:	
<b>2.2. EXTERIOR INSPECTION</b> – <i>Cleaning point examples shown in attached figures</i>					
Disinfected prior to arrival?		<input type="checkbox"/> YES <input type="checkbox"/> NO		Pressure cleaned before arrival?	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
Free of vegetation debris? (leaves, grass, seeds, twigs)		<input type="checkbox"/> YES <input type="checkbox"/> NO		Free of soil or mud?	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
Free of animals & insects?		<input type="checkbox"/> YES <input type="checkbox"/> NO		Oil or fuel leaks observed?	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
<b>2.3. INTERIOR INSPECTION</b> – <i>Cleaning point examples shown in attached figures</i>					
Free of soil or mud?		<input type="checkbox"/> YES <input type="checkbox"/> NO		Free of vegetation debris?	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
Free of animals & insects?		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
<b>2.4. COMMENTS/NOTES/ACTIONS</b>					
<b>2.5. INSPECTION APPROVAL</b>					
<i>I confirm that as the Contractor's Authorised Representative/ MCD ENV MANAGER that this machinery, plant, or vehicle has been satisfactorily cleaned in accordance with the requirements of the Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania Guidance.</i>					
Name & Signature		Position		Date	





*Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania* Invasive Species Branch, Department of Natural Resources and Environment (NRE)) Tasmania, 2015.

## Attachment 3: VESSEL AND MARINE EQUIPMENT DECLARATION

Department of Primary Industries, Parks, Water and Environment  
Biosecurity Tasmania  
BIOSECURITY OPERATIONS BRANCH



# PROTECT TASMANIA FROM AQUATIC PESTS AND DISEASES

## Declaration for Boaters, Fishers, Divers and Recreational Aquatic Equipment Users Travelling to Tasmania

Please assist Biosecurity Tasmania to identify items that may need treatment upon arrival in Tasmania. If you have a boat and/or aquatic equipment that are not clean and dry you may be required to wash them on arrival in Tasmania.

### Why is this necessary?

There are three prominent pests or diseases that have been identified as a risk to Tasmanian marine and freshwater environments.

### Abalone Viral Ganglioneuritis (AVG)

A viral disease affecting abalone, AVG was reported in Victoria in January 2006. The disease has affected a number of abalone farms and devastated wild abalone stocks in the western part of Victoria. The spread of the disease is predominantly spread through transfer of mucus and organic materials from one area to another. Tasmania's wild abalone fishery is the largest of its kind in the world and any incursion of this virus would result in great environmental and economic loss.

### Caulerpa taxifolia

Caulerpa has been widely used as a decorative plant in the marine aquarium trade, the invasive nature of Caulerpa has raised concerns as this fast growing seaweed can invade cool temperate waters and has the potential to grow rapidly in Tasmania as Caulerpa can tolerate low temperatures and can survive out of water in moist conditions for up to 10 days.

Caulerpa has been found at depths ranging from less than 1 m to 12 m, it is likely to have been introduced from a marine aquarium release and spread among estuaries by fishing and boating activities. Small fragments can get caught up in fishing gear, diving equipment and boats then can grow into new plants and create large colonies.

### Didymo (Rock Snot)

Didymo is freshwater algae not present in Tasmania, but recently discovered in New Zealand. It can spread quickly; it forms massive blooms in waterways or lake edges and can have a significant impact on the insect life that many species of fish rely on for food. It also affects water quality and can pose a risk to waders and swimmers by making riverbeds slippery.

### What can YOU Do?

- Check** – Check that your equipment is clear of any organic matter
- Clean** – Clean your equipment thoroughly prior to arriving into Tasmania
- Dry** – Where possible dry your equipment prior to arriving into Tasmania

### DECLARATION BY IMPORTER OR AGENT

*I declare the information provided on this form to be true and correct in every respect to the best of my knowledge.*

Name of Importer / Agent .....Signature.....

Contact details - fixed line: (.....).....Mobile.....

Vehicle Registration:..... State:..... Boat Trailer Registration: (if applicable) .....

#### Equipment to clean and dry:

- Boats**

Including hulls, decks, deck equipment, bilge, holding tanks and wet wells

- Diving equipment**

Including wetsuits, fins, masks, weight vests, hookah gear and other abalone harvesting equipment (catch bags, ab Irons and knives etc)

- Fishing gear**

Including rods, reels, waders and bait

- Aquatic recreation gear**

Including surf boards, kayaks, canoes, jet skis, biscuits and skies

- Fish bins and catch bags**

- Gum boots and wet weather pants etc.**

#### Have you got or done the following things with your boating, fishing, diving or aquatic equipment before leaving Victoria?

##### Checklist:

	YES	NO	N/A
Do you have any bait?	<input type="checkbox"/>	<input type="checkbox"/>	
Checked for and removed any fouling or organic matter?	<input type="checkbox"/>	<input type="checkbox"/>	
Washed and cleaned everything?	<input type="checkbox"/>	<input type="checkbox"/>	
Dried everything before packing?	<input type="checkbox"/>	<input type="checkbox"/>	
Is your vehicle free from organic matter and contamination?	<input type="checkbox"/>	<input type="checkbox"/>	
Has your boating, fishing or aquatic equipment been used within the last two weeks:			
In freshwater?	<input type="checkbox"/>	<input type="checkbox"/>	
In salt water?	<input type="checkbox"/>	<input type="checkbox"/>	

##### If you have a boat;

- Are the bungs out to allow the bilge to drain? ☐ ☐ ☐
- Is the bilge free of organic matter? ☐ ☐ ☐
- Are holding tanks or wet wells clean and dry? ☐ ☐ ☐

##### Office use only:

Officer:		Comments:
Date:		Boat <input type="checkbox"/> - Boating Equipment <input type="checkbox"/> - Fishing Equipment <input type="checkbox"/> - Sporting Goods <input type="checkbox"/>
Inspected OK	Yes <input type="checkbox"/> No <input type="checkbox"/> - Unit must be treated	Other <input type="checkbox"/> - Please specify.....
Reason for Treatment and Type:	..... Wash <input type="checkbox"/> - Disinfect <input type="checkbox"/> - Other <input type="checkbox"/>	

##### Privacy statement

The personal information requested in this form is being collected to identify those items of equipment that may need cleaning or treatment upon arrival in Tasmania. DPIWVE will use your personal information for the primary purpose for which it is collected and it will not be disclosed to other agencies or organisations unless the disclosure is required or authorised by law. If you fail to provide the information requested you may be required by a Biosecurity Inspector to clean your boat and gear in Tasmania. Your personal information will be managed in accordance with the Personal Information Protection Act 2004 and may be accessed by the person to whom it relates. You may be charged a fee for this service.