

Operational policy

Natural Resource Management

Pest plant and pathogen spread prevention

Operational policies provide a framework for consistent application and interpretation of legislation and for the management of non-legislative matters by the Department of Environment and Science. Operational policies are not intended to be applied inflexibly in all circumstances. Individual circumstances may require a modified application of policy.

Purpose

This policy provides guidance for staff of the Department of Environment and Science (DES), Queensland Parks and Wildlife Service (QPWS) on minimising pest plant and pathogen spread into, within and from QPWS managed areas.

Background

Pest plants and pathogens have the potential to cause significant adverse economic, environmental and social impacts on QPWS managed areas. Pest plants and pathogens that invade natural communities can replace native plants and animals and significantly change ecosystems.

Pest plant and pathogen reproductive material can be spread naturally by wind, water or animals but also by human activities such as the movement of vehicles and equipment used by visitors, contractors and employees. Reproductive material can also be carried from one area to another on shoes and clothing. Materials such as soil, mulch or gravel also have the potential to spread pest plant and pathogen reproductive material.

Most persons (including QPWS staff, contractors, persons acting under authorities or permits and visitors) entering QPWS managed areas are unaware that they could inadvertently spread pest plants or pathogens through the movement of vehicles, plant, equipment, boats, persons, livestock and materials.

Definitions

Clean means free from any pest plant and pathogen reproductive material.

For vehicles, plant and equipment, '**clean**' means that no soil and/or, organic matter that may contain pest plant and pathogen reproductive material, is on or in areas that are accessible during cleaning and maintenance work. A vehicle is considered to remain clean if it leaves its point of origin clean and only travels on sealed roads or well-maintained unsealed roads.

For livestock, 'clean' means that animals are internally and externally free of the reproductive material of any declared plant listed in the Land Protection (Pest and Stock Route Management) Regulation 2003. If livestock are suspected to be infested with a declared plant then they should be quarantined within a pest plant free paddock or pen for a 14-day period.

Contractor is any person undertaking work for or on behalf of the chief executive of the QPWS or contractors of other agencies (e.g. Department of Agriculture and Fisheries, DAF) native forest harvesting contractors).

Employee is any person acting for, or on behalf of, the chief executive of the QPWS, including volunteers.

Pathogen includes any disease causing organism such as bacteria, parasites, viruses or fungi.

Pest plant means any plant capable of causing adverse impacts to environmental, economic or social values whether or not it is a declared plant listed in the Land Protection (Pest and Stock Route Management) Regulation 2003, this would include weed species of specific concern to a QPWS managed estate and listed in the local *Level 2 pest management strategy*.

Reproductive material is any part of a pest plant or pathogen that is capable of sexual or asexual reproduction. Examples include, but are not limited to:

- seed;
- spores;
- roots, bulbs, rhizomes, stolons, tubers, or parts thereof;
- stem or leaf pieces; and
- whole plants or fungi.

Transport or utility corridor includes any formed or unformed road or track (gazetted or not), power line or pipeline (regardless of whether an easement exists) and associated access tracks.

Vehicle, plant and equipment includes, but is not restricted to, any car, motorcycle, truck, tractor, grader, tracked earthmoving equipment, boat, vessel, airplane or helicopter.

Visitor is any person who is not an employee that visits QPWS managed areas, for recreational or scientific purposes.

Weed Hygiene Declaration is the written declaration under the legislative requirements of the *Land Protection (Pest and Stock Route Management) Act 2002* that may be required before supplying anything that is, or could be, contaminated with the following Class 2 declared plants:

- parthenium (*Parthenium hysterophorus*)
- prickly acacia (*Acacia nilotica*)
- giant rat's tail grass (*Sporobolus pyramidalis* and *S. natalensis*)
- American rat's tail grass (*Sporobolus jacquemontii*)
- giant Parramatta grass (*Sporobolus fertilis*)
- Parramatta grass (*Sporobolus africanus*).

Policy Statements

All persons (including QPWS employees, contractors, authority holders and employees and contractors of authorities or utility providers) will take all reasonable steps to ensure that all vehicles, plant or equipment, boats, shoes, clothing and livestock are clean and free of reproductive material prior to entering and leaving QPWS managed areas.

A weed hygiene declaration form must be given to QPWS by a supplier or contractor before any vehicle, plant and equipment or material (e.g. soil, gravel, sand, supplementary stock feed, mulch) is permitted onto QPWS managed areas.

All QPWS vehicles, plant and equipment used on QPWS managed areas will be maintained in a clean state.

The QPWS Pest Management System and ParkInfo will be used to plan, manage, record and monitor all pest plant and pathogen infestations.

Where required and appropriate QPWS may restrict all access (including by employees, contractors and visitors) into particular QPWS managed areas, or specified parts thereof, to reduce the risk of pest plant and pathogen spread.

Where practical and appropriate pest plant and pathogen management will be planned and implemented cooperatively across the landscape with surrounding land managers, other government departments, local governments and utility providers.

All pest management principles outlined in the *QPWS Operational policy – Good Neighbour Policy* will be followed.

Visitors are encouraged to take all reasonable steps to ensure any vehicles or equipment are clean prior to entering and leaving QPWS managed areas.

Copies of this policy are to be available to all persons who may enter QPWS managed areas.

QPWS staff, and where appropriate volunteers, will undertake training in identification of declared and other serious pest plants and pathogens that may be found in their work area.

Procedures

Planning

Prior to movement of persons, vehicles, plant or equipment into, within or from QPWS managed areas consider:

- Whether the person, vehicle etc. is currently clean of reproductive material (if not it/they should be cleaned),
- Any potential sources of reproductive material along potential routes to the destination,
- The route that will best minimise the potential for pest plant and pathogen spread.

Driving on tracks, poorly maintained roads, paddocks or bushland in wet weather or heavy dew should be minimised, as this increases the likelihood of adhesion of reproductive material onto vehicles etc.

When undertaking management or control of any pest plant or pathogen, QPWS employees and contractors should undertake control operations beginning at the outlying limits of, and/or along any transport or utility corridor within, an infested area. However, there may be sound operational reasons why this cannot occur or be achieved.

Where feasible, work (other than direct pest plant and pathogen management) in a QPWS managed area, such as slashing of firebreaks, is to be undertaken first in areas not subject to pest plant or pathogen infestations, and then in any infested areas. If this is not feasible, vehicles and equipment are to be cleaned prior to entering an un-infested area.

Where long term vehicle or pedestrian movements to and from work sites may result in the spread of reproductive material, the potential sources along any access to the site should be treated prior to the start of any work.

Particular care should be taken to ensure that QPWS machinery used for maintenance or construction work (such as slashing or earthmoving) is maintained in a clean state and is cleaned before moving between work sites.

Where appropriate QPWS employees and contractors shall observe the following when entering non QPWS managed areas (such as neighbouring land):

- contact the landowner or manager prior to entering their property to request conditions of entry including access routes;

- on private land, consider travelling with the land manager in their vehicle. Alternatively, invite them to travel with you in a QPWS vehicle so that they can point out pest plant or pathogen infestations that can be avoided; and
- prior to each and every entry, all vehicles, plant and equipment shall be clean.

Any pest plant or pathogen management or control activities carried out by QPWS employees on transport or utility corridors will be planned and carried out in cooperation with the relevant authority or utility provider. Any local arrangements or agreements, made between QPWS and other relevant agencies, regarding management of pest plants and pathogens along gazetted transport, utility corridors or easements that adjoin or pass through QPWS managed areas must be consistent with, or make reference to, this policy.

Minimising reproductive material spread

Vehicles, plant and equipment

In general all vehicles and equipment (including QPWS vehicles and machinery used for field operations) are to be clean prior to entering and leaving QPWS managed areas.

Special consideration should be given to activities that may result in the spread of aquatic pest plants such as *Mimosa pigra*, *Salvinia molesta*, *Cabomba spp*, water lettuce and water hyacinth. QPWS staff and contractors working on watercourses and storage facilities must ensure boats, trailers and equipment are clean (particularly of plant parts) prior to entering and leaving any watercourse or storage facility.

Clean-down sites

The 'Queensland checklist for clean-down procedures' and Appendix 1 are to be used as guides to clean-down procedures.

Where appropriate public clean-down facilities should be used.

Permanent clean-down facilities may also be constructed in a QPWS managed area where the need is identified and justified as being necessary (see Appendix 2). All facilities constructed must meet the 'Queensland guideline for the construction of vehicle and machinery wash-down facilities'.

Where appropriate, temporary clean-down sites (purpose built or commercially available units) may be used or located on QPWS managed areas where they meet the guidelines given in the 'Queensland checklist for clean-down procedures'. The need for purpose built or commercially available temporary clean-down units must be identified and justified prior to purchase (see Appendix 2).

Clean-down sites should be relatively flat to minimise runoff, and should be well marked (e.g. with a painted post, tree and or a GPS location) so that they can be easily located. Sites must be monitored for pest plant and pathogen outbreaks.

Clean-down sites must not be located within 50m of a watercourse or drain to reduce the potential for reproductive material spread and watercourse pollution.

A clean-down facility is justified where:

1. the consequences of pest plant or pathogen reproductive material spread are certain extinction of any species or significant and irreversible reduction in the numbers of any species or the extent of any Regional Ecosystem;
2. vehicles are considered the most likely vectors/carriers of pest plants and pathogens; and
3. there are no existing wash-down facilities nearby and no alternatives exist.

Personnel

Prior to leaving a site known to be infested with pest plants or pathogens, persons should clean themselves of any reproductive material on, or in, clothing, footwear and camping equipment to prevent the spread of reproductive material beyond the infested area.

Contractors and suppliers of materials

At the time of purchase and before allowing any plant, equipment or material (e.g. soil, gravel, sand, stock feed mulch) onto QPWS managed areas the supplier or contractor should be requested to provide a completed weed hygiene declaration form. The weed hygiene declaration only covers reproductive material of those Class 2 declared plants listed in the definition above and so any supplier or contractor should also ensure that all plant and equipment (including any vehicles used to transport materials) be clean prior to entering any QPWS managed areas.

All contractors undertaking work on QPWS managed areas and suppliers of material such as soil, gravel, sand or mulch are to be given a copy of this policy prior to commencing work or supplying materials.

Materials and products (e.g. soil, gravel, sand, mulch) for use on QPWS managed areas should be stored or stockpiled in locations that are clean and inspected regularly for outbreaks of pest plants.

Authority holders

Where an authority (including authorities to graze stock, keep bees, or for commercial activities) allows a person to bring any vehicle, plant and equipment, livestock or materials onto QPWS managed areas, such authorities will include conditions requiring the authorised person to take reasonable steps to prevent the spread of pest plant and pathogen reproductive material into, within and from the QPWS managed area. These conditions may include, where appropriate, the requirement to supply QPWS with a weed hygiene declaration form for all vehicles, plant and equipment or materials prior to their movement onto QPWS managed areas. It may also be appropriate to require the authorised person to ensure that all vehicles, plant and equipment or materials are clean prior to entry onto QPWS managed areas.

Visitor management

An appropriate information sheet is to be available to all visitors to make them aware of the reasonable steps they may take to prevent the spread of reproductive material into and from QPWS managed areas.

To inform visitors about this policy copies are to be displayed at QPWS offices, on the DES internet site and at appropriate QPWS areas entry points.

Where required visitor access to particular QPWS managed areas, or specified parts thereof, is to be restricted using appropriate signage (which may include a regulatory notice under the *Nature Conservation Act 1992*) and methods. Specific mention of *Phytophthora* and or *Chytrid* fungus may need to be made for relevant areas.

Additional information

For further advice or information about pest plant and pathogen spread prevention on QPWS managed areas QPWS employees may contact the relevant QPWS Regional Pest Management Coordinator, staff of the QPWS Technical Services – Operational Support Pest Management Team, Biosecurity Queensland Land Protection Officers, local NRM organisations or Local Government Weeds Officers.

Reference materials

Department of Agriculture and Fisheries, Biosecurity Queensland documents:

Queensland Weed Spread Prevention Strategy

Queensland guideline for limiting weed seed spread

Queensland guideline for the construction of vehicle and machinery wash-down facilities

Queensland checklist for clean-down procedures

Disclaimer

While this document has been prepared with care, it contains general information and does not profess to offer legal, professional or commercial advice. The Queensland Government accepts no liability for any external decisions or actions taken on the basis of this document. Persons external to the QPWS should satisfy themselves independently and by consulting their own professional advisors before embarking on any proposed course of action.

Approved By

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Signature

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Date

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Appendix 1

Glove box guide to cleaning vehicles, machinery or equipment

- Read vehicle, machinery or equipment operating manual/s prior to cleaning,
- Place vehicle/machine in a safe, stable and immobile position,
- Stop engine, apply park brake, chock wheels and lower all implements or secure/chock them if they are required to be raised for cleaning (e.g. a slasher),
- Ensure the area is free from obstructions/objects that may cause injury (logs, power lines etc.),
- Examine the item for cleaning to determine the extent of mud, dust and plant material build up,
- Identify any points that require specific attention, eg. behind guards and protective plates, radiators, spare tyres, etc. – these may be difficult to locate and access,
- If easily accessible, remove guards/belly plates to access area for cleaning,
- Wear safety goggles to prevent eye damage,
- Identify areas that may require cleaning with compressed air rather than water. Do any of these first.
- Clean from the top of the vehicle towards the bottom,
- Pay particular attention to the interior of vehicle and plant cabins
- Clean under the guards and underneath machinery/vehicle, and then do the cabin, upper body and implements,
- Toolboxes and storage compartments may also require cleaning,
- Move vehicle/machine with caution. Avoid re-contamination, wash remaining mud etc. on tyres or tracks,
- Carry out final inspection to ensure all areas have been cleaned,
- Refit any guards, (e.g. belly plates) which were removed for cleaning and inspection, prior to moving the machinery.

Further specifications for cleaning, including specific types of vehicles and machinery, are provided in the *'Queensland guideline for the construction of vehicle and machinery wash-down facilities'*.

Appropriate equipment to enable cleaning

- A portable air compressor or industrial vacuum cleaner,
- A mobile water tanker or spray unit,
- A pump to obtain water from a dam or cattle trough tank,
- Portable high-pressure water cleaner,
- Broom and dustpan for cleaning cabins,
- A garden hose.

Appendix 2

Is a wash-down facility (permanent or temporary) necessary?

What is the likelihood of pest plant or pathogen reproductive material spread (i.e. the threat)?

1. Might well be expected
2. Quite possible
3. Unusual, but possible
4. Only remotely possible
5. Conceivable but highly unlikely

What is the exposure to possible movement of pest plant or pathogen reproductive material by vehicles?

1. Continuous; most of the day, most days (>5000/yr)
2. Frequent; hourly during daylight hours (2500 – 5000/yr)
3. Occasional; daily to weekly (50 – 2500/yr)
4. Infrequent; monthly (15 – 50/yr)
5. Rare; a few times per year (1 – 15/yr)
6. Very rare; once per year or less

What are the likely consequences of pest plant or pathogen reproductive material spread?

1. Certain extinction of species
2. Significant damage to Endangered or Vulnerable species or Regional Ecosystems
3. Long term damage to rare species or Regional Ecosystems
4. Temporary damage to Rare species or Regional Ecosystems or long term to Of Concern species or Regional Ecosystems
5. Minimal damage to Of Concern species of Regional Ecosystems or significant long term damage to Not of Concern Species or Regional Ecosystems

What is the risk reduction foreseen by implementing a clean-down facility?

1. 100% (no more pest plant or pathogen reproductive material spread)
2. 75%
3. 50%
4. 25%
5. 0% (no reduction)

Criteria used to make this judgement include:

- there are no existing wash-down facilities nearby;
- vehicles are considered the most likely vectors/carriers of pest plants and pathogens;
- clean-down facilities will minimise the risk of spread of pest plants and pathogens;
- the facility can be managed;
- it is practical and feasible to construct a facility; and
- washing of vehicles can be enforced.