

7.5.1 Te mau tonu o te patu kitakita urutā / Sustained Control pest pathogens

7.5.1.1 Dutch elm disease (*Ophiostoma novo-ulmi*)

Dutch elm disease is a fungal pathogen, infecting elm trees (*Ulmus* spp. and *Zelkova* spp.) spread predominantly by elm bark beetles (*Scolytus multistriatus*) but also through human-mediated spread of elm wood. The fungus causes mortality of infected trees, sometimes as rapidly as within a few days. Tāmaki Makaurau / Auckland is estimated to have approximately 30,000 elm trees with a potential for impacts on iconic trees in parks, as well as elms in private gardens.



Objective: over the duration of the plan Auckland Council will sustainably control Dutch elm disease (*Ophiostoma novo-ulmi*) to prevent adverse effects on economic well-being, the environment, human health and enjoyment of the natural environment.

Intermediate outcome: “sustained control” which means to provide for ongoing control of Dutch elm disease, to reduce its impacts and spread to other properties.

Rules:

- 7.5.1.1.1 No person shall distribute, move or release Dutch elm disease in Auckland.
- 7.5.1.1.2 No person shall move any untreated Dutch elm plant material within the Auckland region.
- 7.5.1.1.3 All occupiers of land in the Auckland region must destroy all elm plants on that land that have been identified as being infected with Dutch elm disease, when instructed by an authorised person.
- 7.5.1.1.4 Where Auckland Council has instructed an occupier of land to destroy Dutch elm plants under rule 3, the occupier must mulch the Dutch elm material and the Dutch elm material must not be moved further than 500m from the site of the parent tree for at least three months after mulching
- 7.5.1.1.5 Any vehicle, machinery or other equipment used in connection with untreated Dutch elm plant material must be cleaned with any of the following or equivalent disinfectants, Sterigene, 5% bleach, or 80% ethanol or methylated spirits, prior to removal from the site.

7.5.1.1.6 No person shall store elm wood for firewood or any other purpose within the Auckland region.

The purpose of rule 7.5.1.1.1 is to specify the circumstances in which the pest may be communicated, released, or otherwise spread.

The purpose of rule 7.5.1.1.2 is to regulate the movement of goods that may contain or harbour the pest or otherwise pose a risk of spreading the pest.

The purpose of rule 7.5.1.1.3 is to require the destruction of goods if the goods may contain or harbour the pest or otherwise pose a risk of spreading the pest.

The purpose of rules 7.5.1.1.4 and 7.5.1.1.6 is to regulate the use or disposal of organic material.

The purpose of rule 7.5.1.1.5 is to regulate activities that may affect measures taken to implement the plan.

A breach of these rules is an offence under s154N(19) of the Biosecurity Act.

Principal measures of achievement:

Monitoring and surveillance	Undertake inspections, monitoring and surveillance of known sites, to determine the presence of new incursions and status of existing or historical sites.
Enforcement	Enforce restrictions on the sale, propagation, distribution and exhibition of the pest pathogen. Enforce land occupier obligation to remove infected trees and associated hygiene measures. Enforce restriction on elm firewood.
Education and advice	Provide information and advice on identification and impacts of the pest pathogen, and how to avoid spreading the pest.
Requirement to act	Land occupiers to destroy plants when instructed, and comply with hygiene requirements.

7.5.1.2 Kauri dieback disease (*Phytophthora agathidicida*)

Symptomatic kauri trees infected with kauri dieback disease exhibit root and collar rot, resin-exuding lesions, yellowing of leaf tissue, canopy thinning and mortality. Human-mediated movement of contaminated soil is the main cause of jump-dispersal between kauri forests but it can be spread locally by feral pigs. The disease can be incurably fatal to kauri trees of all ages and, in the absence of effective treatment, has mid to long-term potential to cause functional extinction of kauri as a canopy species. Kauri are ecosystem engineers, with profound effects on soil chemistry, and associated plant and animal communities. Consequently there is a potential for catastrophic loss of associated unique ecosystems.



Objective: over the duration of the plan Auckland Council will sustainably control kauri dieback (*Phytophthora agathidicida*) to prevent adverse effects on economic well-being, the environment, the enjoyment of natural environments and the relationship between Māori, their culture, their traditions and their ancestral lands, waters, sites, wāhi tapu, and taonga.

Intermediate outcome: “sustained control” which means to provide for ongoing control of kauri dieback, to reduce its impacts and spread to other locations.

Rules:

7.5.1.2.1 No person shall distribute, move or release kauri dieback disease in Auckland.

7.5.1.2.2 No person shall move any untreated kauri plant material, soil, or goods contaminated with soil, into or out of an area within three times the drip line of any New Zealand kauri tree, unless the purpose of the movement is to dispose of the material at an Auckland Council approved containment landfill¹.

A breach of these rules is an offence under s154N(19) of the Biosecurity Act.

¹ Approved at time of writing:

1) Ridge Road Quarries, Ridge Road, Bombay (accepts soil only)

2) EnviroWaste Hampton Downs Landfill, 136 Hampton Downs Road, RD2, Te Kauwhata (accepts soil and organic material).

Waste Management's Redvale Landfill, Landfill Access Road, Dairy Flat (the use of a bin liner is required at this landfill) – accepts soil and organic matter. Other facilities may be approved over the lifetime of the plan. Updates, if any, to the list of approved landfills may be obtained on enquiry to Auckland Council.

The purpose of rule 7.5.1.2.1 is to specify the circumstances in which the pest may be communicated, released, or otherwise spread.

The purpose of rule 7.5.1.2.2 is to regulate the movement of goods that may contain or harbour the pest or otherwise pose a risk of spreading the pest.

Principal measures of achievement:

Service delivery	<p>Installation and maintenance of phytosanitary stations at key exit and entry points on parkland, to minimise human-mediated spread of disease.</p> <p>Upgrade and maintain walking tracks on parkland, to minimise human-mediated spread of disease.</p> <p>Manage known vectors, including feral pigs.</p> <p>Priority to be given to Te Wao Nui a Tiriwa / the Waitākere Ranges.</p>
Monitoring and surveillance	<p>Undertake inspections, monitoring and surveillance to determine the presence of new incursions and status of existing or historical sites. Collaborate with other agencies in design of data collection and storage to ensure effective, integrated monitoring and surveillance across kauri lands.</p>
Enforcement	<p>Enforce restrictions on the sale, propagation, distribution and exhibition of the pest pathogen.</p> <p>Enforce restrictions on movement of kauri material, soil and contaminated goods into and out of drip line zones around kauri trees.</p>
Education and advice	<p>Provide information and advice on identification, impacts and how to prevent spread of the pest pathogen, including mitigating impacts of earthworks and treeworks. Encourage nursery industry accreditation to the New Zealand Plant Production Biosecurity Scheme core standard and kauri dieback schedule²</p>
Requirement to act	<p>All persons to take practicable steps to avoid movement and distribution of kauri dieback e.g. ensure all footwear and other equipment are free of soil when exiting areas known to be infected with kauri dieback disease.</p> <p>All persons moving untreated kauri plant material, soil, or goods contaminated with soil, into or out of an area within three times the drip line of any New Zealand kauri tree must ensure that material is moved directly to an Auckland Council approved containment landfill.</p>

² <https://nzppi.co.nz/advocacy/107-696/protecting-our-nurseries-and-industry-from-biosecurity-hazards>

Research and development

Contribute to multi-agency facilitation of research and development in detection and control tools, understanding pathways of spread, and ecology of kauri and kauri dieback disease and other kauri pathogens such as *P. multivora*.