



Government of **Western Australia**
Conservation and Parks Commission

Position Statement No. 7: The threat of Phytophthora dieback to biodiversity values on lands vested in the Conservation and Parks Commission

September 2023

Current from	22 September 2023	For Review	September 2026
Version	2.0	Replaces	Position Statement No. 12 – The threat of Phytophthora dieback to biodiversity values on lands vested in the Conservation Commission of Western Australia
Officer responsible	Executive Officer, CPC		

The Commission's Position

The Conservation and Parks Commission (the Commission) recognises the impact that *Phytophthora* dieback has on biodiversity values, vegetation, flora and fauna habitat in the vulnerable zone (all areas of the south-west land division, west and south of the 400mm rainfall isohyet) (Figure 1).

Mitigating the risk of introducing or spreading *Phytophthora* dieback on *Conservation and Land Management Act 1984* (CALM Act) land managed by the Department of Biodiversity, Conservation and Attractions (DBCA) within the vulnerable zone remains a priority for the Commission. The Commission recognises the severity of the disease's impact and the need for prompt measures to prioritise and ensure the protection of key areas in the medium to long term. Work to maintain populations or germplasm of species most at risk should continue and complement plans for protecting vegetation at a range of scales.

Phytophthora cinnamomi is the main causal agent of *Phytophthora* dieback in Western Australia and the most significant disease threat to the State's unique native flora, ecosystem health and a range of associated values and benefits. A number of other *Phytophthora* species also occur and cause plant death in south-west Western Australia, some likely indigenous and others introduced.

Management measures may differ for different areas, circumstances, and *Phytophthora* species, depending upon the potential impacts and feasibility of mitigating impacts and controlling introduction and spread. Despite resource limitations and the cost associated with these management actions, the Commission acknowledges the Australian Government Threat Abatement Plan and the departmental policy and procedures for dieback management.

Background and context

Phytophthora dieback (dieback) is a plant disease caused by microscopic, soil-borne organisms in the genus *Phytophthora*. The main species of concern is *Phytophthora cinnamomi*, which was introduced into Western Australia in the early 1900s. It has already infested hundreds of thousands of hectares in the south-west of the State.

The impacts of dieback are negative, permanent and irreversible, affecting environmental, social, cultural and economic values. Environmental impacts include reduced biodiversity, biomass and food/shelter for native animals, as well as increased weed invasion and areas of bare soil. Social and cultural values are also impacted through loss of natural heritage values, culturally significant species, and diminished cultural and heritage sites. Economically, the disease increases land management costs and can have a significant impact on tourism when natural attractions are degraded.

More than 60 species of *Phytophthora* have been detected in Western Australia. Almost 40 of these species have been detected in native ecosystems, with the remainder detected in agricultural and horticultural industries.

In WA's south-west bioregion, more than 40 per cent of native plant species are considered susceptible to the disease, including many from the Proteaceae (banksias, hakeas, *Persoonia* spp.), Ericaceae (heaths), Myrtaceae (eucalypts) and Xanthorrhoeaceae (grass-trees) families. Threatened flora are at even greater risk, with around 56 per cent of species being considered susceptible. Many garden, ornamental and horticultural species are also susceptible to *P. cinnamomi*.

Phytophthora spreads long distances in infested soil and organic matter, and locally via water flow and root-to-root plant contact. Dispersal to new areas is most often associated with human activities that result in unintentional (e.g. walking, driving) or intentional (e.g. road construction/maintenance or timber harvesting) soil movement. It can also be spread by the introduction of new planting material, and in association with native and introduced fauna. Planned disturbance activities such as trail and road building, forest harvesting and mining are easier to manage to reduce the risk of spread than those associated with autonomous vectors such as invasive animals. Poorly engaged third-parties and/or stakeholders undertaking high-risk activities outside well-established approval systems in and adjoining conservation lands also remain a risk, especially when these activities intersect with high-value and remote parts of the estate.

Once *Phytophthora* is introduced to an area, dieback management tools are limited. DBCA's major objective is therefore to contain its spread, focusing on mapping dieback occurrence in the landscape and then taking steps to minimise the chances that material (soil and organic matter) from infested areas is transported to uninfested areas. Mitigating dieback impacts in the highest conservation value landscapes and for the most susceptible native species, is also a focus of the department. The department leverages relationships with numerous stakeholders, including proponents of activities, contractors and volunteers undertaking work on CALM Act land, as well as the Dieback Working Group, South Coast Natural Resource Management (NRM) and federal conservation partners to effectively prioritise, resource and deliver *Phytophthora* dieback management on DBCA-managed lands.

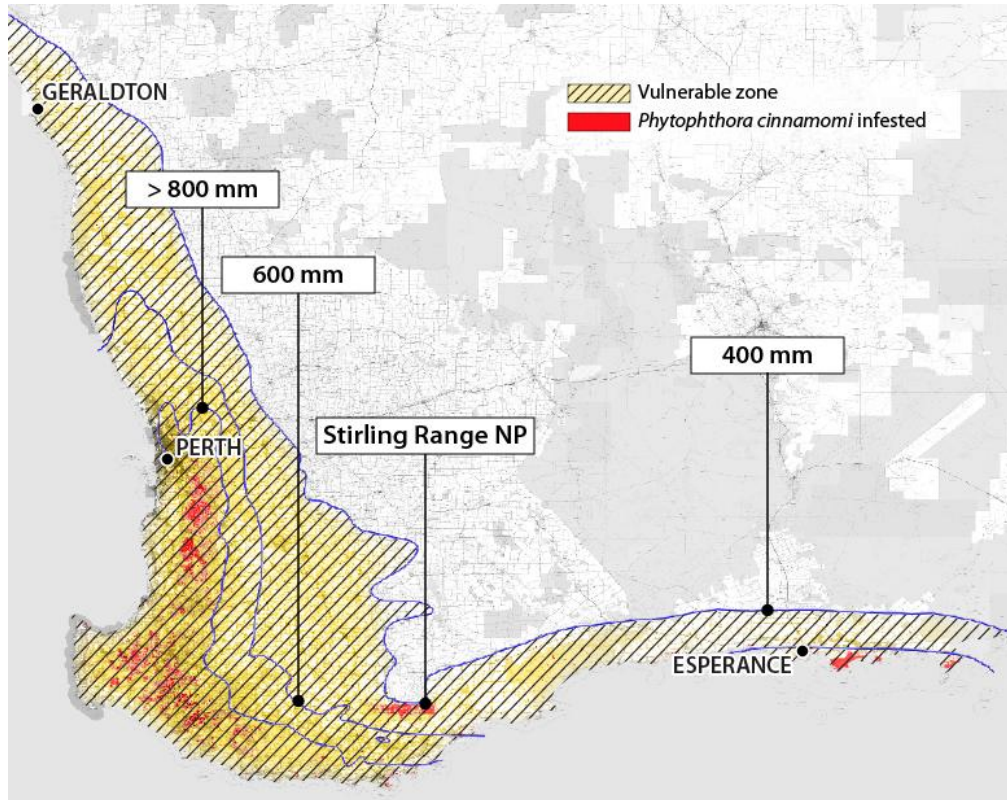


Figure 1. Dieback occurrence and the vulnerable zone