# Botany capability statement



Dr Grant Wells Principal Botanist





Phoenix provides complete botanical survey solutions from well-planned survey design to efficient, HSE-compliant field work; accurate taxonomy; high quality reports and objective, practical advice. Our botany team has survey experience and technical expertise across the majority of WA's bioregions.

#### Phoenix's Botany team is an

accomplished group of scientists with extensive WA field experience, broad botanical knowledge and a reputation for delivering high guality assessments.

## ABOUT FLORA AND VEGETATION SURVEYS

Western Australia is recognised internationally for its incredible diversity of native plants and ecosystems, many of which are locally endemic.

Native flora considered at risk of extinction (Threatened Flora) is protected under state and federal legislation - the *Wildlife Conservation Act 1950* and *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) respectively. The same applies to threatened ecological communities, primarily at the state level. A legal framework also exists to protect native vegetation in WA through the *Environmental Protection Act 1986* (EP Act).

Flora and vegetation surveys are usually required for any development project or activity that is likely to involve clearing of native vegetation or which may adversely impact on native flora or vegetation. The principle aim of these assessments is to determine whether a project will significantly impact important biodiversity values, such as Threatened Flora.

For example, flora and vegetation surveys are a fundamental aspect of baseline studies for environmental impact assessments under the EP Act, the EPBC Act and mining proposals under the *Mining Act 1978*. A botanical survey may also be needed to support an application for a native vegetation clearing permit.

Compliance monitoring of conservation significant flora and vegetation is often a conditional component requested by the EPA preceding development. This strategy ensures proponents are accountable for potential impacts to the environment which may occur during the development, operation and life of a project.

The level of survey effort required for a project is dependent on several factors including the scale of the project and potential impacts, the extent of clearing and degradation within the region, and the potential importance of the botanical values.

















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#### **INDUSTRY ISSUES**

Poor planning and design of flora and vegetation surveys is a common problem that often leads to costly delays in meeting project development timelines. Inadequate reporting can also leave proponents open to unnecessary requests from regulators for further investigation. Correct timing is crucial when undertaking field work and out of season surveys can delay projects for up to a year.

#### **OUR SOLUTION**

Our botany team undertakes detailed, site-specific survey scoping and planning up front to ensure practical management outcomes and solutions to project challenges. Early identification of key objectives, critical paths, timelines and constraints facilitates effective, appropriate and timely surveys.

We offer sound, objective advice tailored to individual projects based on local technical knowledge and detailed understanding of relevant guidance and legislation. Our botany team has the technical expertise and field experience to assess biodiversity values and survey requirements across WA, including thorough knowledge of seasonal conditions and appropriate timing relevant to different bioregions and species. Our metropolitan and regional project experience brings a breadth of skill and innovation to the more challenging surveys, such as species monitoring programs and multi-seasonal studies.

Phoenix' robust quality assurance system and continuous improvement process ensures high quality work standards across field, laboratory and reporting tasks.

#### SERVICES

- Baseline surveys, Level 1 and 2 flora and vegetation surveys
- Targeted Threatened Rare and Priority Flora surveys
- Pre-clearing surveys for exploration and infrastructure development
- Native vegetation clearing permit applications
- Vegetation type and condition mapping
- Groundwater dependent vegetation mapping, monitoring and assessment
- Wetland assessment, reclassification and monitoring
- Mangrove vegetation type and condition mapping
- Threatened Ecological Community determination and floristic analysis
- Invasive species mapping and assessment
- Management plans for significant flora, vegetation, weeds
- Compliance and rehabilitation plans and monitoring
- Taxonomic services

### CONTACT

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