

## Capability Statement

QTree Vegetation Assessment was started in 2007 by Derek Johnson. The company was set up to provide a specialist service in vegetation assessment for clients who need short to medium-term help with any issues related to vegetation. This could range from a small lot developer, to a multi-disciplinary consultancy (that cannot justify the in-house expertise of a plant ecologist full-time), to a large mine or a construction company.

The core function of QTree is to ensure that a client can comply with relevant legislation for any area that is subject to vegetation disturbance, primarily by doing any or all of the following:

- Check the accuracy of existing vegetation mapping (e.g. Regional Ecosystem mapping in QLD).
- Assess the likelihood of Threatened flora species and conduct targeted surveys.
- Weed survey, particularly for noxious weeds (Declared Plants in QLD).
- Rehabilitation monitoring.
- Landscape planning.
- Offset recommendations.
- Site contamination assessment.
- Flood level impact assessment.

Assessment has to be made at all necessary relevant tiers of government. This includes:

- Commonwealth.
- State.
- Local council.



### Services

- Vegetation survey using base layer aerial imagery, overlaid with digital vegetation mapping and Threatened species records.
- Production of revised or new vegetation mapping and Threatened species mapping, using in-house GIS (Geographic Information Systems) including ArcGIS and Manifold. Numerous other programs are used to facilitate data processing.
- Data analysis and report writing to the standard required, which might range from a small subdivision, through to the full terrestrial flora chapter for an Environmental Impact Statement.
- Survey of mine sites, gas fields, infrastructure corridors, riparian areas, coastal areas, subdivisions and industrial areas.
- Revision or updating of work by other parties (e.g. map revision, expanded sampling, ongoing monitoring).

### Specific Skills

- Remote area survey on foot and in 4WD.
- Plant identification and vegetation community recognition.
- Mine haul road and pit experience, radio communications, general mine protocols and 4WD recovery.
- Digitising using ArcGIS and other GIS packages.
- Data analysis using GIS, Excel, Access, PATN and other packages.
- Historical aerial photo stereo pair interpretation (e.g. for regrowth).
- Project management (logistics, budgets etc.)
- Stakeholder engagement (land-owners, interest groups).
- Geological knowledge.
- Chemical analysis.

### Certifications

Professional indemnity \$1M.  
Public liability insurance \$20M.  
Dun & Bradstreet rating "D" (= average).

### Standards

Quality assurance manual defining work practices conforming where applicable to ISO 9001 and ISO 14001.

## Director of QTree

The director of QTree is Derek Johnson. He is a plant ecologist with extensive botanical training and experience. His qualifications are:

- Bachelor of Science – University of New England 1990.
- Graduate Diploma in Natural Resources - University of New England 1992.
- Master of Philosophy – University of Queensland 2004.

## Experience

Derek has ten years experience as a botanist with the Queensland Herbarium (part of the former Environmental Protection Agency), mapping vegetation communities over much of the state. He also has nearly ten years of experience in consultancy, with expertise in:

- Vegetation community classification.
- Regional Ecosystems of Queensland.
- Vegetation survey including remote areas.
- Plant identification.
- Vegetation mapping.
- Use of GIS (Geographical Information Systems) and GPS (Global Positioning Systems).
- Impact assessment.
- Environmental reporting.
- Databasing and programming.
- Vegetation and species distribution analysis.

## Additional Training

Regional Ecosystems – “The Queensland Regional Ecosystem Framework and its Application” 2006.

White card (formerly “blue” card) – General Safety Induction (Construction Industry) current (since 2007).

Generic coal mining induction passport current (since 2008, now renewed every 5 years). Now known as Standard 11.

Driver training (since 2008, renewed every 5 years) – Australian 4WD and Advanced Driver Education:

- Operate Light Vehicle (Surface Coal)
- Low Risk Defensive Driving
- Difficult Terrain Using Advanced Techniques

Vehicle Washdown & Inspection – Aust. Ag. College Corp. 2010

Boat licence current.

First aid certificate current.



## Past Projects – examples from over 70 projects

- Vegetation mapping for offset section of Xstrata Rolleston coal mine expansion EIS (client Aecom).
- Mapping of Endangered Ecological Community for Twin Hills silver mine expansion (client EH&S Systems).
- Central QLD Integrated Rail Project (under Terrestria P/L for client Aecom).
- Terrestrial flora chapter for Xstrata Eastern Creek coal mine (Newlands expansion) (client KBR).
- Flora component for EIS (client BMT WBM) for:
  - Landsborough to Nambour rail upgrade.
  - Fitzroy River to Gladstone water pipeline for Gladstone Area Water Board.
  - LNG pipeline near Gladstone for SUN-LNG.
  - Caboolture to Caloundra rail corridor.
- Vegetation surveys and reports for several coal mines for BMA Coal (client Austecology).
- Vegetation surveys and reports for several coal mines including Anglo, and new coal and gas projects (client EH&S Systems).
- Vegetation surveys and reports for Rio Tinto and Anglo coal mines (client Ecotone Environmental Services).
- Vegetation survey for CSG project for Origin Energy (client BAAM).
- Vegetation survey for Copperstring powerline in NQ (client BAAM).
- Environmental contamination impact assessment of alkali mist leak for bauxite processing facility (client BAAM).
- Environmental contamination impact assessment of copper spill for copper mine in NQ (client BAAM).
- Vegetation survey and report for Toowoomba pipeline project (Wivenhoe to Cressbrook) for LinkWater (client 3d Environmental).
- Regional Ecosystem map analysis for gas exploration lease in Galilee Basin (client Comet Ridge).
- Contract as Protected Vegetation Officer for Brisbane City Council, assessing tree removal applications, and enforcing compliance.
- Rare and Threatened flora species survey for sections of the Northern Pipeline Interconnector (client Queensland Fauna Consultancy).

