



# Table of Contents

## Introduction

1.1	Introduction.....	2
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## Environmental Planning

2.1	Understanding of Relevant Planning Instruments .....	3
2.2	Electricity Infrastructure Planning and Approvals .....	4
2.2.1	Country Energy .....	4
2.2.2	Transgrid.....	6
2.3	Biodiversity Banking and Offsets.....	7

## Environmental Assessment

3.1	Reviews of Environmental Factors, Development Applications .....	8
3.2	Ecological Assessment.....	9
3.3	Environmental Impact Statements.....	10

## Environmental Management

4.1	Environmental Management Plans.....	11
4.2	Ecological Management Plans .....	11

## Company Details

5.1	Management Philosophy .....	12
5.2	Total Quality Management.....	12
5.3	Company Insurances.....	13

## Project Management

6.1	Client Focus .....	14
6.2	Cost and Time Management through the Project Plan .....	14

# Introduction

## 1.1 Introduction

The Orogen team is focussed on delivering environmental planning, assessment and management outcomes across a range of industry sectors. Orogen has the core skills and experience to deliver customised solutions to clients for development and environmental approvals for projects in the following industry sectors:

- Land Subdivision;
- Residential/Industrial/Commercial Building;
- Transport Infrastructure;
- Energy Utilities Infrastructure;
- Water and Sewer Supply Infrastructure;
- Mining; and
- Extractive Industries.

We undertake projects for both private and public sector clients with a commitment to delivering our services on time and within budget.

Orogen is a vision led, purpose-orientated, values-based organisation. Our vision is being the most acclaimed environmental consultancy in Australia. Orogen's purpose is to deliver innovative solutions for the built and natural environment.

We believe that companies have to live their values. Increasing transparency means that communities know which providers are responsible socially and environmentally and they choose their providers on this basis.

Our values of Talk Straight; Mutual Benefit; Empower and Trust; Continuous Improvement; and Team drive all aspects of our organisation. Underpinning our purpose is a solid business platform designed to deliver excellence across technical capabilities, systems and stakeholder relationships.

# Environmental Planning

## 2.1 Understanding of Relevant Planning Instruments

Orogen's environmental planning staff have detailed working knowledge of Local, State and Commonwealth planning legislation, regulations and policies as related to a wide range of infrastructure development projects.

**In NSW**, the *Environmental Planning and Assessment Act 1979 (EP&A Act)* forms the statutory planning basis for all planning and environmental assessments of projects. In addition, the *Environmental Planning and Assessment Regulation 2000* provides the detail of the controls articulated in the legislation. From this Act, the various State Environmental Planning Policies (SEPPs), Regional Environmental Plans (REPs) and Local Environmental Plans (LEPs) are derived, which convey land use controls that are the basis for land use planning in NSW.

Other relevant legislation that may regularly affect projects, in the context of environmental and planning assessment, includes the *Threatened Species Conservation Act 1995*, *Fisheries Management Act 1994*, *Water Management Act 2000*, *Rivers and Foreshores Improvement Act 1948*, as well as their associated regulations and SEPP's that may be relevant, depending on the nature of the project.

**In Queensland**, the *Integrated Planning Act 1997 (IPA Act)* forms the basis for development planning and environmental planning works. The *IPA Act* ties Local and State Government planning mechanisms together through the Integrated Development Assessment System (IDAS), aiming to provide assessment unity between State and Local regulatory agencies. The Planning Schemes of Local Government control development activities on a local scale, while state planning instruments such as the *South East Queensland Regional Plan (OUM, 2005)*, the Regional Coastal Management Plans of the Environmental Protection Agency (EPA), the *Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016 (EPA, 2006)* and the Department of Natural Resources and Water's (NRW) Concurrence Agency Policies for Material Change of Use and Reconfiguring a Lot are examples of important instruments in guiding regional and state development from an environmental assessment and management perspective.

Legislation relevant to the environmental planning of Queensland projects includes the *Environmental Protection Act 1994*, *Vegetation Management Act 1999*, *Fisheries Act 1994* and the *Nature Conservation Act 1992*. A number of State Planning Policies (SPP's) may also be relevant to a given project.

**At the Commonwealth level**, the main planning instrument affecting environmental planning is the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. The *EPBC Act* requires that assessment must be performed to determine if approval is required for:

- Actions that have a significant impact on matters of National Environmental Significance (NES);
- Actions that have a significant impact on the environment of Commonwealth land; and
- Actions carried out by the Commonwealth Government.

The *EPBC Act* identifies seven matters of National Environmental Significance:

- World Heritage properties;
- National Heritage Places;
- Ramsar wetlands of international significance;
- Listed threatened species and ecological communities;
- Listed migratory species;
- Commonwealth marine areas; and
- Nuclear actions (including uranium mining).

In addition, this legislation covers all matters that come under Commonwealth jurisdiction, by way of obligations to international treaties, Commonwealth policy and matters that have the potential to impact across State boundaries.

## **2.2 Electricity Infrastructure Planning and Approvals**

### **2.2.1 Country Energy**

Country Energy (CE) in NSW is a significant Orogen client. We provide them a variety of planning and approvals services for projects relating to line route selection, substation site selection, line and substation development approval and various other electricity supply related projects.

Orogen works as a consortium with Clarence Consultants Pty Ltd, a Grafton-based electrical engineering consultancy, on strategic and operational projects for CE. The consortium is a preferred contractor in Country Energy's Line Route Selection Program.

The strategic projects include Line Route Selection and Substation Site Selection and the approvals reports (eg. Review of Environmental Factors and DA's that accompany these works. These are all high voltage projects (11 kV, 33 kV, 66 kV, 132 kV)).

Apart from the strategic assessment of potential line route and substation locations, the works also include preparation of all approval documentation, all landholder negotiations for easements and compensation, survey and registering of the easements. The end product is delivered to CE as a series of survey plans showing registered easements, with associated legal instruments. This allows Country Energy to begin construction works with the confidence that the projects will not be subject to any unforeseen encumbrances, and that the operational needs of the line work will be accommodated by the size and alignment of the easements.

The strength of the consortium is that the electrical engineering constraints are integrated with the environmental and planning constraints at the front of the project planning process, so that when the approvals process is completed (which is primarily a planning and environmental exercise), the end product (*ie.* line route or substation) is buildable, maintainable and the decision to build the asset in a particular location having regard to all the constraints, is defensible in a court of law. Therefore all the electrical engineering constraints are considered before the approval is finalised. For example, when an easement to build 30 km of line is handed to the electricity authority's project manager, not only are all the environmental and planning issues resolved, but more importantly, the line and associated components (pole stays etc.) can all be accommodated within the registered easements.

The consortium has undertaken the following projects under CE's Line Route Selection Program to date:

- Corowa 132 kV Ring Main – Line Route Selection and REF;
- Junction Hill 11 kV Relocation – Line Route Selection and REF;
- Macksville Zone Substation – Site Selection and DA approval and 132 kV Interconnecting line Route Selection and REF;
- Dubbo South Zone Substation - Site Selection and approval and 132 kV Interconnecting line Route Selection and REF;
- Goulburn 66 kV Ring Main REF;
- Koolkhan to Maclean 66 kV Line Route Selection; and
- Forster 66 kV underground Stage 1 and 2 REF.
- REF for Macksville Zone Substation

- REF for Raleigh Zone Substation

Some examples of other environmental planning projects undertaken for Country Energy outside of the LRS Program are listed below:

- Planning review of 30 Country Energy Field Service Centres for UPS and communications facilities upgrades;
- REF for Martins Creek Zone Substation; and
- REF for Dungog Zone Substation.

Referee details for Country Energy projects are detailed below:

- Bruce Walsh, Program Director, LRSC, Ballengearry Consulting Pty Ltd – Ph: 0418 461 571;
- Dennis Stanley, Manager, Transmission Line Design and Projects Country Energy Ph: (02) 6589 8777;
- George Schofield, Subtransmission Projects Coordinator, Country Energy Ph: ( 02) 6589 8637;and
- Robyn Down, Network Development Engineer, Country Energy – Ph: (02) 6589 8481.

### **2.2.2 Transgrid**

Orogen is also a member of Transgrid's a panel of environmental consultants for which we have undertaken a variety of projects, some of which are listed below:

- Transmission Line Wollar to Wellington – Easement Survey and Structure Marking as per Specification;
- Planning Reports for Land Affected by Transgrid Easements – various locations;
- Easement for transmission line at Manildra; and
- Environmental Reviews for Wellington & Orange Substation & Orange Depot.

Referee details for Transgrid projects are detailed below:

- Richard Johnson – Ph: 02 9620 0893; and
- Robert Markham – Ph: 02 9284 3173.

## 2.3 Biodiversity Banking and Offsets

Biodiversity Banking legislation is currently being implemented in NSW. Biodiversity Banking is an effective tool that enables development impacts to be offset purchase by biodiversity credits.

Orogen has a detailed understanding of the current legislation in NSW and is currently working with land developers and infrastructure providers in NSW to develop strategies for the implementation and recommendation of their lands under a Biodiversity Banking scheme.

In NSW we operate as a qualified biobanking broker.

In Qld Orogen is at the forefront of Environmental Offsets policy development and changes to existing specific-issue offsets policies including vegetation management offsets and has negotiated a number of offsetting arrangements to the satisfaction of clients and authorities.

Orogen can provided detailed advice and reporting to satisfy the requirements of the legislation and work closely with clients to identify opportunities for developers and infrastructure providers to maximise the benefits of this legislation in the context of their strategic business objectives. Our services include:

- Advice on legislative controls and compliance requirements;
- Identification of offset opportunities including land provision, habitat improvement and species improvement initiatives;
- Determination of habitat value and impact;
- Liaison with regulatory authorities to reach agreement on offsetting for development impact;
- Biobanking broking; and
- Management of vegetation and property improvement as part of agreed offsetting arrangements.

## Environmental Assessment

### 3.1 Reviews of Environmental Factors, Development Applications

Orogen has extensive experience in the preparation of environmental assessments for infrastructure projects in the form of Review of Environmental Factors (REF), having undertaken over 60 REF's in the last four years. In addition we have particular expertise in preparing Statement of Environmental Effects (SEE's) for Development Applications.

All REF's and SEE's are prepared in accordance with relevant legislation and regulations and include all relevant aspects of Government Authorities, landholder, community and other stakeholder consultation. Some recent examples of these projects are provided below:

- Goulburn 66 kV Ring Main REF, Country Energy;
- Macksville 132/66/33/11 kV zone substation site selection and interconnecting line route selection and REF, Country Energy (*in prep.*);
- Dubbo South 132/66/33/11 kV zone substation site selection and interconnecting line route selection - REF and subdivision DA, Country Energy (*in prep.*);
- Corowa 132 kV Ring Main REF, Country Energy;
- Junction Hill Relocation of 66 kV Feeder REF, Country Energy;
- Manildra substation, Manildra – Site subdivision;
- Manildra substation, Manildra – Statement of Environmental Effects;
- Wagga substation Wagga Wagga – Statement of Environmental Effects;
- Jindabyne Substation, Jindabyne – Statement of Environmental Effects;
- Griffith Sub-Station, Griffith – Environmental Assessment;
- Yenda Substation, – Griffith – Statement of Environmental Effects;
- Sale, Kite & Summer Streets, Orange – Creation of Easement over Lot 518 in DP 731824;
- Switching Station, Temora - Environmental Assessment;
- East Tamworth, Tamworth – Fence Upgrade and Tree Screen;
- Goddard Lane, Tamworth – Substation - Submission for Council;

- Cranky Rock Road, Canowindra – Easement Survey; and
- 6/a Manilla Road, Tamworth – Review of Environmental Factors.

The majority of the REF's and SEE's prepared have involved detailed community consultation, including both the general community and affected landholders, where the acquisition of land for easements has been required. This consultation has involved detailed negotiation surrounding easement location, size and land valuation/compensation process. Government Agency consultation is always undertaken for all projects to ensure that all issues are dealt with at the assessment phase of the project, to ensure that no 'show stopper' issues are raised at a late stage of the assessment process.

Orogen has extensive experience in consultation with all types of stakeholders on these projects. Carefully planned and managed consultation is essential to the success of any infrastructure project. Critical pathway analyses of projects indicates that on many occasions, effective and comprehensive consultation is the critical issue that can 'make or break' a project, in particular, where land acquisition for easements is required.

### **3.2 Ecological Assessment**

Orogen has extensive expertise in the provision of ecological assessment and management services to a variety of clients in both the private and public sectors of Queensland and New South Wales. Orogen's team of ecological professionals work closely with other technical disciplines, to ensure that an integrated approach is taken to all projects.

The focus of our ecological services is to provide innovative solutions to achieve the highest level of outcomes for our client, the environment and wider community. Orogen's team of ecologists contributing to ecologically sustainable development through applying scientific rigor and the latest information and technology.

Our ecological assessment services include:

- Comprehensive terrestrial and aquatic flora and fauna surveys and monitoring;
- Targeted Threatened species surveys;
- Macro-invertebrate sampling and monitoring;
- Vegetation community and fauna mapping;
- Section 5A assessments (7 Part Tests) in accordance with the *NSW Environmental Planning and Assessment Act 1979*;
- Flora and fauna Species Impact Statements;

- SEPP 44 *Koala Habitat Protection (NSW) and SEQ Regional Plan Interim Guideline (QLD)* koala assessments and koala management plans;
- Pre-clearing surveys, vegetation clearing management plans and clearing supervision for works approved under the *Native Vegetation Act 2003 (NSW)* and *Vegetation Management Act 1999 (QLD)*;
- Ground-truthing and correction of Remnant Regional Ecosystem mapping (QLD);
- Impact amelioration, site rehabilitation, habitat enhancement and revegetation programs;

The majority of flora and fauna assessments and associated works undertaken are within the context of a larger reporting framework, for example Environmental Impact Statements or Review of Environmental Factors.

### **3.3 Environmental Impact Statements**

Orogen has demonstrated and extensive experience in undertaking Environmental Impact Statements for a range of infrastructure, industrial, residential and natural resource management projects. In addition to drawing on comprehensive in-house expertise across a range of scientific disciplines, the company also has established working partnerships with a number of high-level professionals in specialist fields of assessment.

These capabilities and partnerships enable assessments to be completed to a standard that facilitates informed decision making by consent authorities and also withstands scrutiny from external stakeholders.

# Environmental Management

## 4.1 Environmental Management Plans

Environmental Management Plans (EMP's) are prepared in accordance with relevant Local, State and Commonwealth legislation. These plans can include documented and computer-based protocols for managing maintenance and operational requirements, as well as links to statutory reporting requirements.

Orogen has extensive experience in preparing specialised EMP's for infrastructure projects.

Orogen has prepared numerous Environmental Management Plans for a wide variety of projects. Some examples of EMP's for energy infrastructure projects are:

- Corowa 132 kV Ring Main Line Route Selection – Construction Environmental Management Plan; and
- Junction Hill 66 kV Line Route Selection – Construction Environmental Management Plan.

## 4.2 Ecological Management Plans

In many instances, mitigation strategies are built into a proposed development in order to minimise the impact of the development. Formal documentation of the mitigation strategies in an Ecological Management Plan is an important part of the process, as it formalises the works, procedures and responsibilities required to undertake the mitigation. The Plans also often form part of the Conditions of Consent of the project.

Orogen has prepared numerous Ecological Management Plans for a wide variety of project. The plans vary in their content and intent depending upon project scope. Some examples of these plans include:

- Flora and Fauna Management Plans;
- Environmental awareness and induction training programs; and
- Feral animal management and monitoring plans/programs.

## Company Details

### 5.1 Management Philosophy

Underpinning our organisational purpose is a solid business platform designed to deliver excellence across technical capabilities, systems and stakeholder relationships. The key elements of the business platform are summarised below.

#### Customer Focus

Orogen is committed to building partnerships with our clients that help them achieve success by delivering outcomes that meet their business needs now and in the future. We do this by seeking to understand our clients' needs and working together with them to develop solutions that will help them to achieve their goals.

#### Technical Support

Orogen has implemented technology-enabled project management and business management systems that enable staff to work remotely while being able to call on the support of Orogen organisational resources.

#### Employer of Choice

Orogen is committed to building motivated and empowered teams who work with our clients to deliver exceptional project outcomes. To attract and retain people who are committed to our purpose and values, we focus on creating a work environment that offers achievement, responsibility and personal growth.

Orogen has comprehensive OH&S policy and procedures in place for all our works. A copy of our OH&S Policy Statement and Table of Contents from our OH&S Manual can be provided upon request.

### 5.2 Total Quality Management

Quality certified to AS/NZS ISO 9001, Orogen has in place a continuous improvement program to ensure that our services are relevant, practical, up to date and sustainable.

Orogen Pty Ltd currently holds third party certification to the level of AS/NZS ISO 9001:2000, provision of environmental consultancy services.

We have fully implemented generic business processes that are used across the entire organisation, such as document and records control and have reorganised our internal business units and management structures to reflect the process driven approach of the new standard.

The Orogen Quality System is a digital system. All documentation is available to staff within our corporate intranet and all Quality Systems records are maintained in an interactive, rather than static, digital format.

### **5.3 Company Insurances**

The following relevant insurance policies are currently held by Orogen:

- Public and Products Liability
- Workers Compensation Insurance
- Professional Indemnity Insurance

Copies of each of the abovementioned policies can be provided upon request.

# Project Management

## 6.1 Client Focus

Orogen recognises the critical needs of our clients for the delivery of projects on time and within budget. Competent project management enables these objectives to be met.

Orogen has adopted a project management system that defines the way our people manage projects. Our project management principles are aligned with the National Competency Standards for Project Management as endorsed by the Australian Institute of Project Management.

In all projects, Orogen develops a close working relationship with the client and sets agreed aims and objectives early in the project. Early client involvement ensures that shared agreement is established around project objectives and critical success factors; risks are properly assessed and responsibilities and resource requirements are agreed. For some projects sub-consultants will be assembled to provide specialist project input with the view of providing a better service to the client. Sub-consultants are required to meet the requirements of our Quality System.

Through our commitment to service and sustainability-based outcomes, we have created ongoing relationships with a number of Government and private organisations. These relationships demonstrate our commitment to client service and the outcomes in terms of approvals.

## 6.2 Cost and Time Management through the Project Plan

The following methodology is used on all Orogen projects, which ensures that our services are delivered to the client on cost and within time constraints.

At the commencement of each project a Project Plan is prepared. The Project Plan outlines the project objectives and expected outcomes and puts the methodology into a working program which details the tasks, resources, timeframe and budget required to complete the project.

Orogen is a team based organisation. On project commencement, the Project Director briefs the Orogen project team members so that they understand the project and their contribution towards the achievement of outcomes. The Project Director allocates the task to the various team members and is then directly responsible for monitoring the progress of the work.

The Project Director provides regular progress reports to our client so that any problems that may affect the project will be identified and resolved early. On project completion the Project Director will seek feedback from the client. Client feedback is then shared with the Project Team for the purpose of acknowledgement of project outcomes and continuous improvement.