



Australian Government
Department of the Environment

Approval

Development of new natural gas acreage in Surat Basin, Queensland (EPBC 2013/7047)

This decision is made under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Action

person to whom the approval is granted QGC Pty Ltd

proponent's ACN ACN: 089 642 553

action To develop, operate and decommission a coal seam gas field and associated infrastructure approximately 20 kilometres west of Wandoan, Queensland referred under the EPBC Act on 1 November 2013 and as described in the final Preliminary Documentation received on 22 September 2014.

Approval Decision

Controlling Provision

Decision

Listed threatened species and communities (sections 18 and 18A) Approved

A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E) Approved

conditions of approval

This approval is subject to the conditions specified below.

expiry date of approval

This approval has effect until 31 December 2045

Decision-maker

name and position Deb Callister
Assistant Secretary
Queensland and Sea Dumping Assessment Branch

signature

date of decision 17 December 2014

Conditions of approval

1. The **Minister** may determine that a plan, strategy or program approved by the Queensland Government satisfies a plan, strategy or program required under these conditions.

Project area

2. For the purpose of the action, the **approval holder** must not take any action outside the **project area**.

Disturbance Limits

3. The action is limited to a maximum of 400 coal seam gas production wells and associated infrastructure.
4. The **approval holder** must not exceed the maximum disturbance limits in Table 1.

Table 1: Whole of project maximum disturbance limits

Threatened Fauna Species	Maximum disturbance (hectares) to core habitat known and core habitat potential
South-eastern Long-eared Bat (<i>Nyctophilus corbeni</i>)	105.9
Koala (<i>Phascolarctos cinereus</i>) (combined populations of Queensland, New South Wales and the Australian Capital Territory)	71.7
Yakka Skink (<i>Egernia rugosa</i>)	59.3
Threatened Flora Species	Maximum disturbance (hectares)
Belson's Panic Grass (<i>Homopholis belsonii</i>)	47.5
Ooline (<i>Cadellia pentastylis</i>)	4
Threatened Ecological Communities	Maximum disturbance (hectares)
Brigalow (<i>Acacia harpophylla</i> dominant and co-dominant)	15
Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	4
Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	2

Pre-clearance surveys

5. The **approval holder** must undertake **pre-clearance surveys** of proposed disturbance areas.
6. **Pre-clearance surveys** must be supervised by a **suitably qualified person** and undertaken in accordance with the **Department's survey guidelines** in effect at the time of the survey or other survey methodology endorsed by the **Department** in writing.
7. All pre clearance survey reports must be published on the approval holder's website within one month of completion and at least 20 business days prior to the clearing of vegetation which is the subject of a **preclearance survey**, and remain published on the website for the life of the project.

Matters of National Environmental Significance Impact Management Plans

8. The **approval holder** must manage impacts to **EPBC Act listed threatened species and communities** that are known or likely to occur in the **project area** in accordance with the **Significant Species Management Plans (SSMP)** included in the QGC Preliminary Documentation Response, Development of Surat Basin Acreage (Volume 2.0, January 2014).
9. Where **EPBC Act listed threatened species** or **EPBC Act listed ecological communities** which do not have a **SSMP** are identified in the development area, the **approval holder** will develop a **SSMP** and submit within 3 months of identifying these **MNES**, a copy of the **SSMP** to the Minister for written approval.
10. The **approval holder** must manage impacts to **EPBC Act listed threatened species and communities** from pest and weed species in accordance with the **Pest and Weed Management Plan** included in the QGC Preliminary Documentation Response, Development of Surat Basin Acreage (Management Plans, Volume 4.0, June 2014).
11. The **approval holder** must implement the **Remediation, Rehabilitation and Recovery Monitoring Plan** included in the QGC Preliminary Documentation Response, Development of Surat Basin Acreage (Management Plans, Volume 4.0, May 2014).
12. The **approval holder** must implement the **Constraints Planning and Field Development Protocol** included in the QGC Preliminary Documentation Response, Development of Surat Basin Acreage (Management Plans, Volume 4.0, April 2014).

Revised MNES Impact Management Plans

13. The **approval holder** must submit, within 14 months of **commencement**, Revised MNES Impact Management Plans for the written approval of the **Minister**. The Revised MNES Impact Management Plans must include:
 - (a) the results of **pre-clearance surveys** for all areas proposed to be impacted, subject to the **approval holder** being granted appropriate land access to undertake the surveys;
 - (b) any changes in whole of project maximum disturbance limits in Table 1 as a result of these **pre-clearance survey** results; and
 - (c) revisions of the **Pest and Weed Management Plan, Remediation, Rehabilitation and Recovery Monitoring Plan** and the **Constraints Planning and Field Development Protocol** and any other plans altered to take account of new information.
14. The **approval holder** must implement the approved Revised MNES Impact Management Plans.

Note 1: Where Land access is not granted, in sufficient time for **pre clearance surveys** to inform the Revised MNES Impact Management Plans required within 14 months of **commencement**, the approval holder may use an alternate methodology such as Geographic Information System analysis of satellite imagery to assess potentially impacted areas for the purposes of these plans.

15. The **approval holder** must review the approved Revised MNES Impact Management Plans at least once each five years. If the MNES Impact Management Plans require updating to reflect any new information, including from **pre-clearance surveys** or management practice, the **approval holder** must submit the updated plan(s) to the **Minister** within two months of revision, requesting written approval.

Offsets

16. The **approval holder** must ensure that the environmental offsets comply with the principles of the **EPBC Act Environmental Offsets Policy**.
17. To compensate for authorised unavoidable significant residual **impacts** on **Matters of National Environmental Significance**, the **approval holder** must, within 14 months of **commencement**, prepare and submit an Offset Management Plan to the **Minister** for written approval.
18. The Offset Management Plan must include:
 - a) details of the offset site(s) proposed for the residual significant **impacts** for each maximum disturbance limit in Table 1, including, for each proposed offset site, the location, tenure, site description, map of environmental values and **shapefiles**;
 - b) the locations of **EPBC listed threatened species habitat and communities** in the proposed offset areas, including maps in electronic Geographic Information System (GIS) format;
 - c) detailed description of the quality, condition, site context and environmental values of the offset site(s) and include details of connectivity of the offset area with relevant habitats and biodiversity corridors outside the proposed offset areas;
 - d) details of the management measures that will be implemented for the protection of **EPBC Act listed threatened species** and **EPBC Act listed ecological communities**, including a table setting out how the measures proposed have regard to, and are consistent with, the measures in relevant **conservation advice, recovery plans and threat abatement plans**;
 - e) details of how offset sites have been, or will be, **legally secured** and the proposed legal mechanism(s) for securing the offset within the required timeframe specified at Condition 20;
 - f) a monitoring program for the proposed offset site(s) suitable to measure the success of the management measures against stated performance criteria including monitoring locations, parameters and timing;
 - g) a description of the potential risks to the successful implementation of the Offset Management Plan, and details of contingency measures that will be implemented to mitigate these risks; and
 - h) a detailed proposal to offset any significant residual **impacts** on any **EPBC Act listed threatened species** and **EPBC Act listed ecological communities** not identified in Table 1.
19. The **approval holder** must not convey outside the **project area** gas derived from the action unless the **Minister** has approved the Offset Management Plan. The **approval holder** must implement the approved Offset Management Plan.
20. The **approval holder** must **legally secure** the offset areas proposed in the Offset Management Plan approved by the **Minister** within 24 months of **commencement**.

21. The **approval holder** must, within 50 months of **commencement**, submit a Revised Offset Management Plan to the **Minister** for written approval. The Revised Offset Management Plan must constitute a revision of the approved Offset Management Plan, taking account of all new information including the results of all pre-clearance surveys. If the residual **impact** of the project on any **MNES** is greater than that predicted in the approved Offset Management Plan, the **approval holder** must propose in the Revised Offset Management Plan an offset or offsets for the additional residual impact. The **approval holder** must implement the approved Revised Offset Management Plan.
22. The **approval holder** must **legally secure** the offset areas proposed in the Revised Offset Management Plan approved by the **Minister** within 12 months from the date of the **Minister's** approval of this plan.

Note 2: Offsets for some species may be accommodated within ecological communities or overlap State approval requirements or other species habitat requirements, as long as they meet the requirements of these conditions of approval in respect of each individual species and community being offset.

Note 3: The **Minister** may determine that offsets approved by the Queensland Government may satisfy the requirements for offsetting **EPBC Act MNES** so long as any required offsets comply with the principles of the **EPBC Act Environmental Offsets Policy** or an equivalent Queensland Government offsets policy that ensures the maintenance and protection of **MNES**.

Water management and monitoring

CSG Water Monitoring and Management Plan

23. The **approval holder** must submit a Coal Seam Gas Water Monitoring and Management Plan (CSG WMMP) at least two months prior to the extraction of water or coal seam gas, for the written approval of the **Minister** who may seek the advice of an **expert panel**. The CSG WMMP must contain:
- a) parameters and a sampling regime to establish baseline data for surface and groundwater resources that may be impacted by the action, including: surface water quality and quantity in the **project area**, and upstream and downstream of potential **impact areas**; groundwater quality, levels and pressures for each formation that may be **impacted** by the project and for determining connectivity between different formations and between surface water and groundwater that may be **impacted** by the project;
 - b) provide for the early detection of any changes in groundwater quality, levels of pressure in each hydrogeological unit and changes to connectivity between formations or surface/groundwater connectivity;
 - c) monitor relevant formations to determine any changes to hydraulic connectivity and provide for early detection of **impacts**;
 - d) an assessment of potential **impacts** from the action on non-spring based groundwater dependent ecosystems through potential changes to surface-groundwater connectivity and interactions with the sub-surface expression of groundwater, including in areas adjacent to the Dawson River;
 - e) a program to monitor subsidence **impacts** from the action, including trigger thresholds and reporting of monitoring results in annual reporting required by Condition 34;

- f) provisions to make monitoring results publicly available within 6 months of their collection, and retained on the **approval holder's** website for the life of the project, to facilitate a greater understanding of cumulative **impacts**;
- g) a discussion on how the **approval holder** is contributing to the **Joint Industry Plan**, including its periodic review. The **approval holder** must contribute to the **Joint Industry Plan** and comply with any part of the **Joint Industry Plan**, or future iterations of the **Joint Industry Plan**, that applies to the **approval holder**;
- h) early warning indicators, trigger thresholds and their reference values derived from baseline data for each monitoring point, including investigation and/or mitigation activities for both early warning indicators and trigger thresholds:
 - i. for aquatic ecology and aquatic ecosystems; and
 - ii. for groundwater, including groundwater drawdown limits for all aquifers potentially impacted by the action.
- i) details of ongoing monitoring measures that:
 - i. sets out the frequency of monitoring and rationale for the frequency;
 - ii. includes continued collection of data for each monitoring site over the life of the project;
 - iii. outlines the approach to be taken to analyse the results including the methods to determine trends to indicate potential **impacts** and describes the data and evidentiary standards to derive baseline conditions, reference values, triggers, thresholds and limits, and that data and evidentiary standards be included in regular reporting against the approval conditions; and
 - iv. builds on the groundwater early warning system required at Condition h and sets out early warning indicators and trigger thresholds and limits for groundwater and surface water.
- j) a risk based exceedance response plan that details the actions the **approval holder** will take and the timeframes in which those actions will be undertaken if, early warning indicators and trigger threshold values contained in the CSG WMMP are exceeded, or there are any emergency discharges; and
- k) provisions to make monitoring data available to the **Department** and **Queensland Government authorities** (if requested) for inclusion in any cumulative impact assessment, regional water balance model, bioregional assessment or relevant research.

24. The CSG WMMP may refer to relevant sections of the QGC Stage 3 Water Monitoring and Management Plan approved in accordance with EPBC Approval 2008/4398, provided that the above information required in Condition 23 has been met. To avoid doubt, if a condition of another approval, held by the **approval holder**, requires a Water Monitoring and Management Plan, the **approval holder** may submit a single document which satisfies the requirements of each approval.

25. The **approval holder** must revise the CSG WMMP at least every three years including by incorporating changes to measures, parameters and actions reflecting the results of updated **OGIA modelling** and revisions to the **Underground Water Impact Report**. Updated modelling results must reflect actual measurements and monitoring data associated with this action. The revisions of the CSG WMMP may be submitted in accordance with the timing required for the Stage 3 Water Monitoring and Management Plan required under EPBC Approval 2008/4398, unless otherwise determined by the **Minister**.
26. Any revisions to the CSG WMMP must be peer reviewed by a **suitably qualified water resources expert/s** approved by the **Minister** in writing. A peer review must be submitted to the **Minister** together with the CSG WMMP and a statement from the **suitably qualified water resources expert/s** stating that they carried out the peer review and endorse the findings and the content of the CSG WMMP.
27. The **approval holder** must not commence the extraction of water or coal seam gas until the CSG WMMP has been approved by the **Minister** in writing. The approved CSG WMMP must be implemented by the **approval holder**.

Note 4: To ensure efficiency the **approval holder** may prepare and align the CSG WMMP with the requirements of the Queensland Government, as long as the relevant matters under the conditions of this approval are clearly and adequately addressed.

Note 5: The **Minister** may throughout the life of the project life seek advice from experts, or an expert panel. As a consequence specific matters identified through such advice may need to be addressed in the CSG WMMP. Where such advice is sought the **approval holder** will be provided with opportunity to submit information and respond to the specific matters identified, in order to ensure the CSG WMMP is based on the best available information. Review requirements will facilitate adaptive management, align with Queensland Government approval requirements, and account for potential cumulative impacts as new scientific information becomes available over the life of the project.

Well construction and operation

28. The **approval holder** must ensure that gas wells are constructed, operated and decommissioned in accordance with best practice principles in the **Queensland Code of Practice for Construction and Abandoning CSG wells**.
29. The **Minister** may direct in writing that the **approval holder** cease water or gas extraction and/or water discharge or use if an early warning indicator, trigger threshold or limit is exceeded, and if the **Minister** is not satisfied that the action proposed or taken by the **approval holder** will remedy the situation. The **Minister** may direct the **approval holder** to implement alternative action at the expense of the **approval holder**.
30. If the **Minister** has directed in writing that the **approval holder** must cease water or gas extraction and/or water discharge or use pursuant to Condition 29, the **approval holder** must not recommence such activities until the **Minister** has given approval in writing for the recommencement of those activities. Approval to recommence activities may be subject to conditions that the **Minister** considers reasonable.
31. If the **OGIA model** ceases to exist, then the **approval holder** must submit an alternate model to be used for the purpose of these conditions that replaces the **OGIA model** as referred to in these conditions. The alternate model must be approved by the **Minister** in writing.

General

32. Within 20 business days after the **commencement** of the action, the **approval holder** must advise the **Department** in writing of the actual date of **commencement**.
33. The **approval holder** must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans, reports or strategies required by this approval, and make them available upon request to the **Department**. The annual report (Condition 34)

must state all confirmed cases of non-compliance along with details of any remedial actions. Such records may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the **Department's** website. The results of audits may also be publicised through the general media.

34. Within three months of every 12 month anniversary of the **commencement** of the action, the **approval holder** must publish a report on its website for the life of the approval outlining how they have been compliant with the conditions of this approval over the previous 12 months, including the implementation of any management plans, strategies or programs as specified in the conditions. The **approval holder** must also provide in this report:
- a. a reconciliation of actual **impacts** against whole of project maximum disturbance limits for **EPBC Act listed threatened species and communities** listed in Table 1;
 - b. the number and spatial distribution of boreholes where **hydraulic fracturing** is expected to occur and, detailed separately, has occurred; and
 - c. details of constituent components of **hydraulic fracturing** agents used and any other reinjected fluid(s), their toxicity as individual substances and as total effluent toxicity and ecotoxicity.

Note 6: For the purpose of publication of information required under condition 34c, the **approval holder** may, with the written approval of the **Minister**, redact any information that is subject to confidentiality restrictions imposed on the **approval holder** by a third party. However, the **approval holder** must provide an unredacted version of the report to the **Minister** with the request regarding redaction.

35. The **approval holder** must provide to the **Minister** a copy of their 'Freshwater Ecotoxicity of Coal Seam Gas Stimulation Fluids' and Stimulation chemicals risk assessment reports.
36. The approval holder must provide documentary evidence to the Department providing proof of the date of publication of the report required under Condition 34 at the same time as the report is published.
37. The **approval holder** must notify the **Department** in writing of potential non-compliance with any condition of this approval as soon as practical and in any event within two business days of becoming aware of the potential non-compliance. The notice provided to the **Department** under this condition must specify:
- a. the condition which the **approval holder** has potentially breached;
 - b. the nature of the potential non-compliance; and
 - c. when and how the **approval holder** became aware of the potential non-compliance.

Within no later than twenty business days of becoming aware of the potential non-compliance, the notice to the **Department** under this condition must also specify:

- d. how the non-compliance will affect the anticipated **impacts** of the approved action, in particular how the non-compliance will affect the **impacts** on the **matters of national environmental significance**;
 - e. the measures the approval holder will take to address the **impacts** of the non-compliance on the **matters of national environmental significance** and rectify the non-compliance; and
 - f. the time by when the **approval holder** will rectify the non-compliance.
38. Upon the direction of the **Minister**, the **approval holder** must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the **Minister**. The audit must not commence unless and until the

Minister has approved the independent auditor and audit criteria. The audit report must address the criteria to the satisfaction of the **Minister**.

39. If the **approval holder** wishes to carry out any activity other than in accordance with the management plans as specified in the conditions, the **approval holder** must submit to the **Department** for the **Minister's** written approval a revised version of that management plan. The approval holder must not **commence** the varied activity until the **Minister** has approved the varied management plan. The **Minister** will not approve a varied management plan unless the revised management plan would result in an equivalent or improved environmental outcome over time. If the **Minister** approves the revised management plan, that management plan must be implemented in place of the management plan originally approved.
40. If the **Minister** believes that it is necessary or convenient for the better protection of EPBC Act listed threatened species, listed migratory species or water resources to do so, the **Minister** may request that the **approval holder** make specified revisions to the management plans specified in the conditions and submit the revised management plan for the **Minister's** written approval. The **approval holder** must comply with any such request within the timeframe specified by the **Minister**. The revised approved management plan must be implemented. Unless the **Minister** has approved the revised management plan, then the person taking the action must continue to implement the management plan originally approved, as specified in the conditions.
41. If, at any time after five years from the date of this approval, the **approval holder** has not **commenced** the action, then the **approval holder** must not **commence** the action without the written agreement of the **Minister**.
42. Unless otherwise agreed to in writing by the **Minister**, the **approval holder** must publish all management plans referred to in these conditions of approval on its website. Each management plan must be published on the website within 1 month of being approved by the **Minister** and remain available on that website for the life of the approval.

Definitions

Approval holder: means the person to whom the approval is granted or any person acting on their behalf, or to whom the approval is transferred under section 145B of the **EPBC Act**.

Commenced/commencement: means any physical disturbance, including clearance of native vegetation, and the establishment of well sites associated with the 'Development of Surat Basin Acreage', the subject of EPBC referral 2013/7047 and this approval.

Commencement does not include:

- a) minor physical disturbance necessary to undertake pre-clearance surveys or establish monitoring programs or geotechnical investigations; or
- b) activities that are critical to commencement that are associated with mobilisation of plant and equipment, materials, machinery and personnel prior to the start of development only if such activities will have no adverse impact on **matters of national environmental significance**.

Conservation advice: means an conservation advice approved by the **Minister** under the **EPBC Act**.

Constraints Planning and Field Development Protocol: means the plan included in the QGC Preliminary Documentation Response, Development of Surat Basin Acreage (Management Plans, Volume 4.0, April 2014).

Core habitat known: means all potential habitat within 1 kilometre of known species records since 1980, confirmed sightings, and remnant regrowth and regrowth vegetation where known sightings have occurred and incorporating any subsequent sightings identified in the **pre-clearance surveys**.

Core habitat potential: means areas of potential habitat where on-site surveys have identified key micro-habitat values based on specific species micro-habitat features and as refined from the indicative habitat mapping for individual species in Appendix B of *QGC Preliminary Documentation (22 September 2014)* and incorporating any results identified in the **pre-clearance surveys**.

CSG produced water: means underground water from coal measures brought to the surface of the earth, or otherwise interfered with, in connection with exploring for or producing coal seam gas.

Department: means the Australian Government Department administering the **EPBC Act**.

Department's survey guidelines: means:

Matters of National Environmental Significance, Significant Impact Guidelines 1.1, Environment Protection and Biodiversity Conservation Act 1999 - <http://www.environment.gov.au/epbc/publications/nes-guidelines.html>.

Survey Guidelines for Australia's Threatened Frogs, Threatened Birds, Threatened Fish, Threatened Mammals, Threatened Reptiles and Threatened Bats: <http://www.environment.gov.au/epbc/guidelines-policies.html>.

EPBC/ EPBC Act: means the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

EPBC Act Environmental Offsets Policy: means the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy* (October 2012) including the Offsets Assessment Guide.

EPBC Act listed ecological community: means an endangered ecological community listed under the **EPBC Act**.

EPBC Act listed threatened species: means a threatened flora or fauna species listed under the **EPBC Act**.

EPBC Act listed threatened species and communities: means **EPBC Act listed threatened species** and **EPBC Act listed ecological communities**.

Expert panel: means an expert panel agreed to by the Minister.

Hydraulic fracturing/fractured: means a well-stimulation technique in which rock is fractured by a hydraulically pressurised liquid.

Impact: is as defined in section 527E of the **EPBC Act**.

Joint Industry Plan: means the *Joint Industry Plan for an Early Warning System for the Monitoring and Protection of EPBC Springs* established with other coal seam gas proponents operating within the Surat Cumulative Management Area.

Legally secure: means to secure a covenant or similar legal agreement in relation to a site, to provide enduring protection for the site against developments incompatible with conservation

Matters of National Environmental Significance (MNES): means matters protected by Division 1 of Part 3 of the **EPBC Act**.

Minister: means the Minister administering the **EPBC Act** and includes a delegate of the Minister.

OGIA: means the Office of Groundwater Impact Assessment or its successor body

OGIA model: means the groundwater model developed by the Office of Groundwater Impact Assessment, or its successor body, for the Surat Cumulative Management Area.

Pest and Weed Management Plan: means the plan included in the *QGC Preliminary Documentation Response, Development of Surat Basin Acreage (Management Plans, Volume 4.0, June 2014)*.

Pre-clearance surveys: means surveys that are undertaken prior to commencement or to removal or disturbance of vegetation that is the subject of the surveys for **EPBC listed threatened species and communities** for all areas of the **project area** that are to be disturbed by project activities.

Project area: means the area identified as the 'referral area' in Attachment A.

Queensland Code of Practice for Construction and Abandoning CSG wells: means the Queensland Department of Natural Resources and Mines' code of practice for constructing and abandoning coal seam gas wells and associated bores in Queensland at <https://mines.industry.qld.gov.au/assets/petroleum-pdf/code-of-practice-csg-wells-and-bores.pdf>, as amended from time to time.

Queensland Government authorities: means authorities which have a role in regulating activities relating to water resources.

Recovery plan: means a recovery plan made or adopted by the **Minister** under the **EPBC Act**.

Remediation, Rehabilitation and Recovery Monitoring Plan: means the plan included in the QGC Preliminary Documentation Response, Development of Surat Basin Acreage (Management Plans, Volume 4.0, May 2014).

Shapefiles: means an ESRI Shapefile containing '.shp', '.shx' and '.dbf' files and other files capturing attributes of an Offset Area, including the shape, EPBC reference ID number and EPBC protected matters present at the relevant site. Attributes should also be captured in '.xls' format.

Significant Species Management Plans (SSMP): means plans to identify and implement management measures to avoid and mitigate impacts to **MNES** that are known or likely to occur, included in the QGC Preliminary Documentation Response, Development of Surat Basin Acreage (Management Plans, Volume 2.0, January 2014).

Suitably qualified person: means a natural person who has professional qualifications, training or skills or experience relevant to the nominated subject matters and can give authoritative assessment, advice and analysis about performance relevant to the subject matters using relevant protocols, standards, methods or literature.

Suitably qualified water resources expert/s: means a natural person with at least a postgraduate degree (or equivalent) in a suitable area (such as hydrology or hydrogeology) and a minimum of 10 (ten) years relevant experience in water resources assessment, including at least one year of experience in Australia.

Threat abatement plan: means a threat abatement plan made or adopted by the **Minister** under the **EPBC Act**.

Underground Water Impact Report: means the underground water impact report required to be prepared under the *Water Act 2000* (QLD) to manage impacts of underground water extraction by petroleum tenure holders (including coal seam gas tenure holders).

QGC Gas Project Tenements

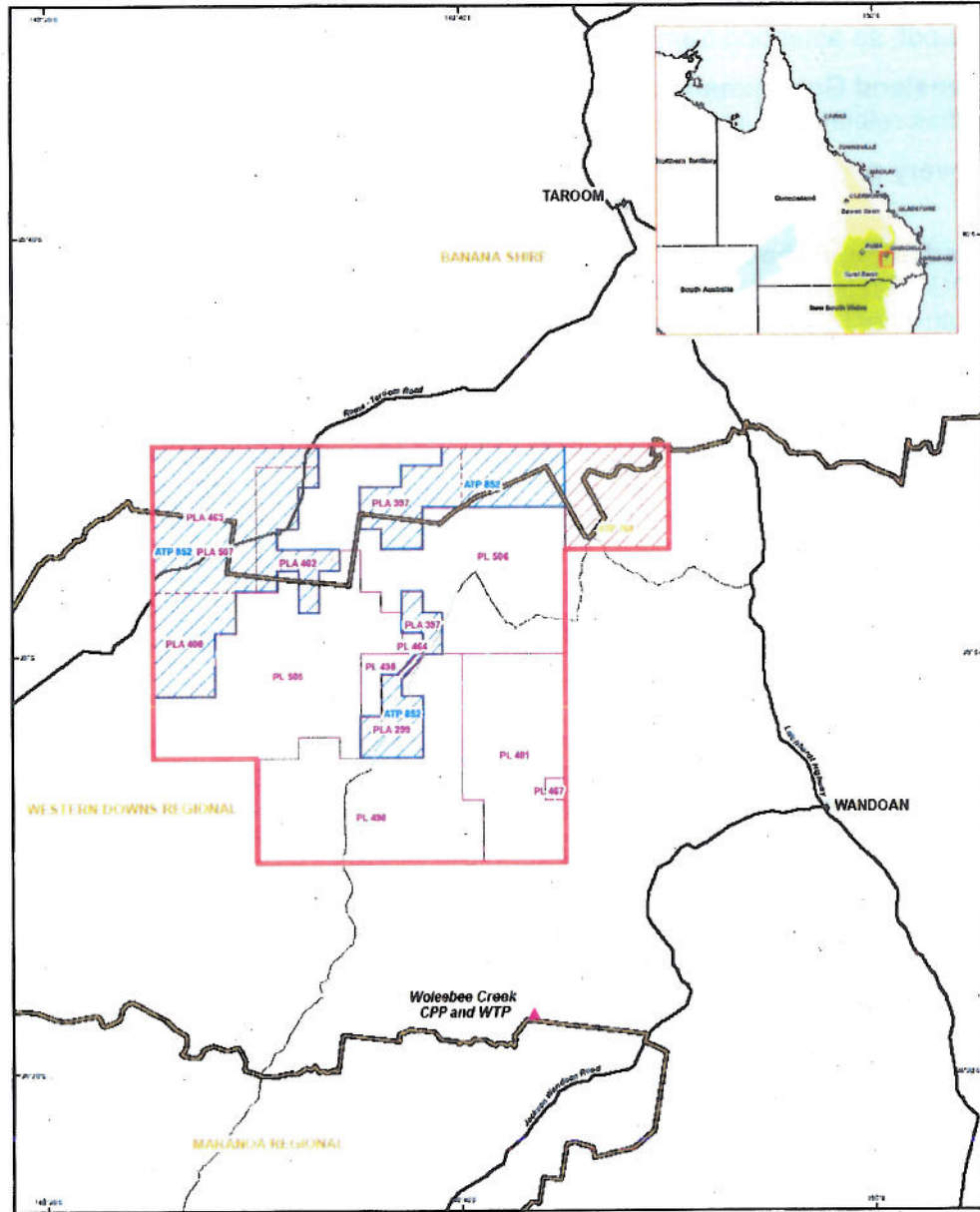


Figure 1.1: Location Overview

